TOWN OF DAVIE

COMPREHENSIVE PLAN

JULY 1989
Housing
Traffic Circulation

AUGUST 1997
Future Land Use
Utilities
Recreation & OS
Intergovernmental Coordination
Capital Improvements

AMENDED August, 1998

TOWN OF DAVIE

COMPREHENSIVE PLAN

UPDATED BASED UPON THE 1995 EVALUATION & APPRAISAL REPORT

TOWN COUNCIL

Hon. Harry Venis, Mayor
Kathryn Cox, Vice Mayor
James Bush
Monroe Kiar
Terry Santini

LOCAL PLANNING AGENCY

George Greb, Chairman
Joseph Brill
Tom Gill
Hertz Halperin
Jay Stahl
John Hinden, Board Attorney

Robert F. Flatley, Town Administrator
Robert T. Rawls, Assistant Town Administrator
Michele C. Mellgren, AICP, Development Services Director
Barry S. Webber, Town Attorney

PLAN ELEMENTS ADOPTED AUGUST 20, 1997
Future Land Use Element
Utilities Element
Recreation, Open Space & Conservation Element
Intergovernmental Coordination Element
Capital Improvement Element

PLAN ELEMENTS ADOPTED JULY, 1989
Housing Element
Traffic Circulation Element

ACKNOWLEDGEMENTS

ELEMENT		COORDINATOR*
i	INTRODUCTION	Marsa B. Detscher Research & Development Coordinator
I	FUTURE LAND USE PLAN	Marsa B. Detscher Research & Development Coordinator
II	TRAFFIC CIRCULATION ELEMENT	Robert D. Rawls Town Engineer
III	UTILITIES ELEMENT	Mathew Wood Associate Planner
IV	RECREATION, OPEN SPACE AND CONSERVATION ELEMENT	Marsa B. Detscher Research & Development Coordinator
V	HOUSING ELEMENT	Elizabeth Mumby Associate Planner
VI	INTERGOVERNMENTAL COORDINATION ELEMENT	Deborah Viveros Assistant Planner
VII	CAPITAL IMPROVEMENT ELEMENT	Marsa B. Detscher Research & Development Coordinator

*Primary staff member responsible for preparation of 1989 Elements which were updated by the 1995 EAR

PRIMARY STAFF RESPONSIBLE FOR 1995 EAR
Sean M. Connolly, Assistant Planner
Michele Mellgren, Development Services Director
Matt Wood, Town Planner
Gayle Easterling, Town Planner

STAFF RESPONSIBLE FOR THE 1997 COMPREHENSIVE PLAN UPDATE BASED UPON THE 1995 EAR:
Jeff Katims, AICP, Planner II
Rick Figley, Temporary Secretary
Gretel Rety, Clerk/Typist

Preparation of portions of this document was aided through financial assistance received from the State of Florida under the Local Government Comprehensive Planning Assistance Program authorized by Chapter 86-167, Laws of Florida, and administered by the Florida Department of Community Affairs.

STATE OF FLORIDA
DEPARTMENT OF COMMUNITY AFFAIRS
NOTICE OF INTENT TO FIND THE
TOWN OF DAVIE
COMPREHENSIVE PLAN AMENDMENTS IN COMPLIANCE
DOCKET NO. 97-2ER-NOI-0606-(A)-(I)

The Department gives notice of its intent to find the Amendments to the Comprehensive Plan for the Town of Davie adopted by Ordinance No. 97- 47 on August 20, 1997, IN COMPLIANCE, pursuant to Sections 163.3184, 163.3187 and 163.3189, F.S.

The adopted Town of Davie Comprehensive Plan Amendments and the Department's Objections, Recommendations and Comments Report, (if any), are available for public inspection Monday through Friday, except for legal holidays, during normal business hours, at the Town of Davie Town Hall, 6591 Orange Drive, Davie, Florida 33314-3399.

Any affected person, as defined in Section 163.3184, F.S., has a right to petition for an administrative hearing to challenge the proposed agency determination that the Amendments to the Town of Davie Comprehensive Plan are In Compliance, as defined in Subsection 163.3184(1), F.S. The petition must be filed within twenty-one (21) days after publication of this notice, and must include all of the information and contents described in Rule 9J-11.012(7), F.A.C. The petition must be filed with the Agency Clerk, Department of Community Affairs, 2555 Shumard Oak Boulevard, Tallahassee, Florida 32399-2100, and a copy mailed or delivered to the local government. Failure to timely file a petition shall constitute a waiver of any right to request an administrative proceeding as a petitioner under Section 120.57, F.S. If a petition is filed, the purpose of the administrative hearing will be to present evidence and testimony and forward a recommended order to the Department. If no petition is filed, this Notice of Intent shall become final agency action.

If a petition is filed, other affected persons may petition for leave to intervene in the proceeding. A petition for intervention must be filed at least five (5) days before the final hearing and must include all of the information and contents described in Rule 60Q-2.010, F.A.C. A petition for leave to intervene shall be filed at the Division of Administrative Hearings, Department of Management Services, 1230 Apalachee Parkway, Tallahassee, Florida 32399-1550. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such a person has to request a hearing under Section 120.57, F.S., or to participate in the administrative hearing.

After an administrative hearing petition is timely filed, mediation is available pursuant to Subsection 163.3189(3)(a), F.S., to any affected person who is made a party to the proceeding by filing that request with the administrative law judge assigned by the Division of Administrative Hearings. The choice of mediation shall not affect a party's right to an administrative hearing.

Charles Pattison

Charles G. Pattison, Director
Department of Community Affairs
Division of Resource Planning
and Management
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

ORDINANCE 97-47

AN ORDINANCE OF THE TOWN OF DAVIE, FLORIDA, APPROVING APPLICATION LA 97-2 (TXT/EAR), AMENDING THE TOWN OF DAVIE COMPREHENSIVE PLAN BY ADDING PERMITTED USES TO THE COMMERCE/OFFICE DESIGNATION AND UPDATING TEXT, DATA, GRAPHICS, OBJECTIVES AND POLICIES BASED UPON THE 1995 EVALUATION AND APPRAISAL REPORT OF THE COMPREHENSIVE PLAN; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Local Government Comprehensive Planning and Land Development Regulation Act provides for regular five year evaluations and updates of adopted comprehensive plans; and

WHEREAS, the five year evaluation of the Town of Davie Comprehensive Plan was accomplished by the 1995 Evaluation and Appraisal Report (EAR) of the Comprehensive Plan; and

WHEREAS, the Town Council of the Town of Davie wishes to amend the Comprehensive Plan based on the recommendations of the adopted EAR, found "sufficient" by the Florida Department of Community Affairs on September 6, 1996, pursuant to Rule 9J-5.003, F.A.C.; and,

WHEREAS, the Local Planning Agency held public hearings on the proposed plan amendments on February 26 and July 30, 1997, and submitted its recommendations to the Town Council; and

WHEREAS, the Town Council of the Town of Davie held public hearings on March 5, 1997, August 6, 1997 and on the effective date of this Ordinance to consider the proposed plan amendments; and

WHEREAS, the required public hearings were noticed in accordance with the requirements of the Code of Ordinances of the Town of Davie, and Chapters 163 and 166 F.S.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF DAVIE FLORIDA:

SECTION 1. The Comprehensive Plan be and the same is hereby amended and changed as shown in Exhibit "A," attached hereto and made a part hereof.

SECTION 2. All Ordinances or parts of Ordinances in conflict herewith are to the extent of such conflict hereby repealed.

SECTION 3. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is, for any reason, held invalid or unconstitutional by any Court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portion of this Ordinance.

SECTION 4. This Ordinance shall take effect immediately upon its passage and adoption.

PASSED ON FIRST READING THIS 6th DAY OF AUGUST, 1997.

PASSED ON SECOND READING THIS 20th DAY OF AUGUST, 1997.

MAYOR/COUNCILMEMBER

ATTEST:

TOWN CLERK

APPROVED THIS 20th DAY OF AUGUST, 1997

TABLE OF CONTENTS

INTRODUCTION

AUTHORITY i - 1
PLANNING TIMEFRAMES i - 2
PLAN IMPLEMENTATION i - 2
MONITORING AND EVALUATION REQUIREMENTS i - 2
PUBLIC PARTICIPATION i - 3
GEOGRAPHY i- 4
HISTORY i - 5
POPULATION i - 6
EVALUATION AND APPRAISAL REPORT OF THE TOWN OF DAVIE COMPREHENSIVE PLAN i - 7

FUTURE LAND USE PLAN ELEMENT:

TABLE OF CONTENTS I - i
LIST OF TABLES AND FIGURES I - ii
INTRODUCTION I - 1
ANALYSIS OF EXISTING CONDITIONS I - 2
GOALS, OBJECTIVES AND POLICIES I - 21
MONITORING AND EVALUATION I - 39
PLAN IMPLEMENTATION I - 41
GLOSSARY I - 65

TRAFFIC CIRCULATION ELEMENT:

TABLE OF CONTENTS II - i
LIST OF TABLES AND FIGURES II - ii
INTRODUCTION II - 1
ANALYSIS OF EXISTING CONDITIONS II - 2
NEEDS ANALYSIS II - 14
GOALS, OBJECTIVES AND POLICIES II - 28
PLAN IMPLEMENTATION II - 37
MONITORING AND EVALUATION PROCEDURES II - 38
GLOSSARY II - 40
LIST OF APPENDICES II - 42

UTILITIES ELEMENT:

TABLE OF CONTENTS III - i
LIST OF TABLES AND FIGURES III - ii
INTRODUCTION III - 1
ANALYSIS OF EXISTING CONDITIONS III - 2
NEEDS ANALYSIS III - 25
GOALS, OBJECTIVES AND POLICIES III - 37
PLAN IMPLEMENTATION III - 46
MONITORING AND EVALUATION PROCEDURES III - 46
GLOSSARY III - 48

RECREATION, OPEN SPACE AND CONSERVATION ELEMENT:

TABLE OF CONTENTS	IV - i
LIST OF TABLES AND FIGURES	IV - ii
INTRODUCTION	IV - 1
RECREATION AND OPEN SPACE SUB-ELEMENT: ANALYSIS OF EXISTING CONDITIONS	IV - 2
RECREATION AND OPEN SPACE SUB-ELEMENT: NEEDS ANALYSIS	IV - 13
CONSERVATION SUB-ELEMENT: ANALYSIS OF EXISTING CONDITIONS	IV - 14
GOALS, OBJECTIVES AND POLICIES	IV - 22
PLAN IMPLEMENTATION	IV - 27
MONITORING AND EVALUATION	IV - 28
GLOSSARY	IV - 29
LIST OF APPENDICES	IV - 34

HOUSING ELEMENT:

TABLE OF CONTENTS	V - i
LIST OF TABLES AND FIGURES	V - ii
INTRODUCTION	V - 1
ANALYSIS OF EXISTING CONDITIONS	V - 2
NEEDS ANALYSIS	V - 15
GOALS, OBJECTIVES AND POLICIES	V - 24
PLAN IMPLEMENTATION	V - 26
MONITORING AND EVALUATION PROCEDURES	V - 27
GLOSSARY	V - 28

INTERGOVERNMENTAL COORDINATION ELEMENT:

TABLE OF CONTENTS	VI - i
INTRODUCTION	VI - 1
EXISTING CONDITIONS	VI - 2
MATRIX	VI - 12
SUMMARY OF EXISTING MECHANISMS	VI - 19
GOALS, OBJECTIVES AND POLICIES	VI - 20
PLAN IMPLEMENTATION	VI - 22
MONITORING AND EVALUATION PROCEDURES	VI - 23

CAPITAL IMPROVEMENTS ELEMENT:

TABLE OF CONTENTS	VII - i
LIST OF TABLES AND FIGURES	VII - ii
INTRODUCTION	VII - 1
ANALYSIS OF EXISTING CONDITIONS	VII - 2
NEEDS ASSESSMENT	VII - 11
GOALS, OBJECTIVES AND POLICIES	VII - 15
PLAN IMPLEMENTATION	VII - 19
GLOSSARY	VII - 20

RECREATION, OPEN SPACE AND CONSERVATION ELEMENT:

TABLES

IV - 1	Existing Park & Recreation Sites Owned by Town of Davie	IV - 3
IV - 2	Existing Park & Recreation Sites Leased by Town of Davie	IV - 4
IV - 3	Existing Park & Recreation Sites Owned by State or County	IV - 4
IV - 4	Existing Park & Recreation Sites that are Privately Owned	IV - 5
IV - 5	Open Space Properties Owned by the Town of Davie	IV - 5
IV - 6	Projected Need for Recreation and Open Space Acreage	IV - 12

FIGURES

IV - 1	Town of Davie Recreational Trail Master Plan & Public Parks	IV - 7
IV - 2	Commercial Recreation Sites	IV - 8
IV - 3	Lakes & Canals	IV - 16
IV - 4	General Minerals Map	IV - 19
IV - 5	General Soils Map	IV - 20
IV - 6	Natural Reservations	IV - 21

HOUSING ELEMENT

TABLES

V - 1	Types of Housing Units	V - 2
V - 2.1	Tenure of Owners	V - 4
V - 2.2	Tenure of Renters	V - 4
V - 3	Age of Housing Stock	V - 5
V - 4	Contract Rent	V - 5
V - 5.1	Monthly Owner Costs with a Mortgage	V - 6
V - 5.2	Monthly Gross Rent	V - 6
V - 6	Housing Value	V - 7
V - 7.1	Owner Costs as Percentage of Income	V - 8
V - 7.2	Renter Costs as Percentage of Income	V - 9
V - 8	Number & Percentage of Housing Units Having Interior Substandard Housing Conditions	V - 10
V - 9	Housing Unit Inventory	V - 14
V - 10	Number of Existing & Projected Households by Household Size for the Town of Davie	V - 15
V - 11	Number of Additional Households by Household Size Anticipated for 1989-2000	V - 15
V - 12	Anticipated Number of Households by Income	V - 16
V - 13	Projected Single-Family Housing Need in Town: 1989, 1994, 2000	V - 17
V - 14	Projected Multi-Family Housing Need in Town: 1989, 1994, 2000	V - 18
V - 15	Housing Construction Needs, 1989-1994 and 1994-2000	V - 19
V - 16	Amount of Vacant Land by Land Use Plan Designation & Maximum Gross Density	V - 19

FIGURE

V - 2	Location of Group Home Facilities	V - 3

CAPITAL IMPROVEMENTS ELEMENT:

TABLES

VII - 1	Public Schools within Town of Davie	VII - 3
VII - 2	Traffic Circulation Needs, 1995-2000	VII - 4
VII - 3	Parks & Recreation Improvement Program, 1995-2000	VII - 7
VII - 4	Budget Summary for Town of Davie, F.Y. 1995	VII - 9
VII - 5	General Fund Budget Summary for Town of Davie, 1995	VII - 10
VII - 6	Capital Improvements Needs 1994 - 2000	VII - 13
VII - 7	Revenue and Expenditure Projections, FY 1995-2000	VII - 14

LIST OF TABLES AND FIGURES

FUTURE LAND USE PLAN ELEMENT:

TABLES

I - 1	Existing Land Uses	I - 11
I - 2	Analysis of Vacant Acreage	I - 12
I - 3	Land Use Distribution at Buildout	I - 13
I - 4	Town of Davie Population Estimates 1995	I - 14
I -5	Population Projections by Residential Use: 2010	I - 15

FIGURES

I - 1	Flexibility Zones	I - 4
I - 2	Planning Areas	I - 5
I - 3	General Soils Map	I - 17
I - 4	General Minerals Map	I - 18
I - 5	Town of Davie Trafficways Plan	I - 20

TRAFFIC CIRCULATION ELEMENT:

TABLES

II-1	Level of Service Standards	II - 3
II-2	Capacity Analysis of Existing Roadway System	II - 7
II-3	Programmed Roadway Improvements	II - 15
II-4	Vehicular Accident Data	II - 16
II-5	Town of Davie Trafficways Plan	II - 17
II-6	Year 1994 LOS "D" Needs Analysis	II - 19
II-7	Year 2010 LOS "D" Needs Analysis	II - 22

FIGURES

II-1	Existing Traffic Circulation Map - Roadway Functional Classifications	II - 4
II-2	Existing Traffic Circulation Map - Number of Roadway Lanes	II - 5
II-3	Year 2010 Traffic Circulation Map - Number of Roadway Lanes	II - 39

UTILITIES ELEMENT:

TABLES

III - 1	System II Water and Wastewater Treatment Plant Chronology and Estimated Costs	III - 16
III - 2	Projected Capacity Surplus For Wastewater and Water Facilities	III - 27
III - 3	Service Area Population Projections & Level of Service	III - 27
III - 4	Solid Waste Generation Projections	III - 34

FIGURES

III - 1	Utility Service Areas	III - 4
III - 2	Drainage District Service Area Map	III - 5
III - 2A	Canal Network	III - 6
III - 3	Major Water Facilities Map	III - 8
III - 4	Wastewater Facilities Map	III -10
III - 5	General Soils Map	III - 19
III - 6	General Broward Drainage District Sub Areas	III - 21
III - 7	General Location of Wellfields Areas	III - 24
III - 8	Projected Water Facility Capacity	III - 29
III - 9	Projected Wastewater Facility Capacity	III - 29
III - 10	Projected Water Level of Service	III - 30
III - 11	Projected Wastewater Level of Service	III - 30

FIGURES

VII - 1	Hospital Districts	VII - 5
VII - 2	Utility Service Areas	VII - 6

INTRODUCTION

INTRODUCTION

AUTHORITY.....i-1

PLANNING TIMEFRAMES.....i-2

PLAN IMPLEMENTATION.....i-2

MONITORING AND EVALUATION REQUIREMENTS.....i-2

PUBLIC PARTICIPATION.....i-3

BACKGROUND: TOWN OF DAVIE

GEOGRAPHY.....i-4

HISTORY.....i-5

POPULATION.....i-6

EVALUATION AND APPRAISAL REPORT
OF THE TOWN OF DAVIE COMPREHENSIVE PLAN.....i-7

Introduction

Authority

The Local Government Comprehensive Planning and Land Development Regulation Act, Chapter 163 of the Florida Statutes, mandates the establishment and implementation of comprehensive planning programs to guide and control future development. The Act directs local governments to "preserve and enhance present advantages; encourage the most appropriate use of land, water, and resources, consistent with the public interest; overcome present handicaps; and deal effectively with future problems that may result from the use and development of land within their jurisdictions."[1]

To that end, the Town must prepare and adopt a Comprehensive Plan that contains the following elements: future land use, including future land use plan map and text; traffic circulation, including a traffic circulation map; utilities, including sanitary sewer, solid waste, drainage, potable water, and natural groundwater aquifer recharge; conservation; recreation and open space; housing; intergovernmental coordination; and capital improvements. The Town has elected to combine the recreation and open space, and conservation elements in this Comprehensive Plan. Further, the Plan must contain implementation programs and procedures for monitoring and evaluating the implementation of the Plan. A primary focus of the Act is to insure that development is concurrent with the provision of adequate essential services to accommodate that development, and that the jurisdiction has the capability, through its capital improvements element, to fund and provide such essential services.

Broward is a charter county. Article VI of the Charter addresses the planning function and stipulates that the Broward County Land Use Plan is the effective land use plan for all jurisdictions until such time as the city has its own Land Use Plan that is certified by the Broward County Planning Council. A local land use plan is certified if such plan is in substantial conformity with the Broward County Land Use Plan. Upon certification and final adoption, the local land use plan is the effective plan for that jurisdiction.

Pursuant to Sec. 163.3174, F.S., the Town of Davie designated the Planning and Zoning Board as its Local Planning Agency,[2] responsible for preparing the Comprehensive Plan for the Town Council. Beginning in November 1987, the Local Planning Agency and Town Council conducted more than two dozen public hearings on all or portions of the Comprehensive Plan, culminating in the final adoption of the Plan in July 1989.

Additional public hearings were conducted during the 1995 Evaluation and Appraisal Report (EAR) preparation and adoption, and again for transmittal and adoption of the EAR-based amendments.

[1] Sec. 163.3161(3), F.S.
[2] Ord. No. 76-20, adopted June 16, 1976.

Planning Timeframes

The Comprehensive Plan must be prepared with at least two planning periods, pursuant to Rule 9J-5.005(4), Florida Administrative Code. Accordingly, the Comprehensive Plan provides two planning periods: 2000 and 2005. Individual elements may address additional timeframes; in that event, the element so states.

Plan Implementation Procedures

Implementation of the Comprehensive Plan shall be required of all agencies and departments of the Town having jurisdiction to facilitate the plan goals, objectives and policies. All such departments shall receive a copy of the goals, objectives and policies of all elements of the Plan, and shall report to the Town Administrator, or designee, on a regular basis as to the progress towards Plan implementation. Capital improvements programming shall be directly related to the goals, objectives and policies of the Comprehensive Plan, with priority given to projects that implement programs mandated by the plan. Department programming shall use the goals, objectives and policies as a framework during the annual budget preparation process.

Monitoring and Evaluation Requirements

The Town of Davie is required to evaluate and assess the overall performance of the Comprehensive Plan at least every five years, pursuant to Chapter 163.3191, F. S. The Evaluation and Appraisal Report shall assess the Town's progress towards achieving the goals and objectives stated in the Comprehensive Plan, and offer recommendations based on the criteria set forth in the legislation. The report is to assess each element of the comprehensive plan utilizing the following criteria:

(a) The major problems of development, physical deterioration, and the location of land uses and the social and economic effects of such uses in the area.

(b) The condition of each element in the comprehensive plan at the time of adoption and at date of report.

(c) The comprehensive plan objectives as compared with actual results at date of report.

(d) The extent to which unanticipated and unforeseen problems and opportunities occurred between date of adoption and date of report.

Citizen participation shall provide invaluable information as to the residents' perception of the Plan and the Town's performance with regard to the Plan goals and objectives.

Public Participation

Chapter 163 of the Florida Statutes specifically encourages the involvement of the public in the comprehensive planning process. To that end, the Town adopted procedures and guidelines to insure that the public participate in the comprehensive planning process to the fullest extent possible. Pursuant to Section 163.3181, F.S. and Rule 9J-5.004, F.A.C., the Town's procedures set forth in Resolution R88-66 require advertised regular meetings and workshops held by the Local Planning Agency; written and verbal status reports on the plan preparation; opportunity for written and verbal input from the public; and public hearings held by the Local Planning Agency and Town Council for transmittal and final adoption of the Comprehensive Plan (see Appendix i).

Background: Town of Davie

Geography

The Town of Davie is centrally located within Broward County, approximately 5 miles from the Atlantic Ocean, 5 miles from the Everglades or Conservation Area, and almost 16 miles from both Miami and Boca Raton. Davie's neighboring cities to the north include Plantation and Sunrise, with Cooper City, Hollywood and Pembroke Pines to the south. Arvida's Weston development, incorporated in 1996, lies west of Davie.

The strategic nature of Davie's location is enhanced by several interstates, turnpike and other primary transportation corridors that bound or traverse the Town. Interstate 595 follows the Town's northern boundary and links Davie with the west coast of Florida via Interstate 75, and the Fort Lauderdale-Hollywood International Airport and Port Everglades to the east. Interstate 75 bounds Davie on the west, and extends south into Dade County and north into the Sawgrass Expressway linking Davie with both Dade and Palm Beach counties. The Florida Turnpike runs along the Town's eastern limits, again providing convenient access to Dade County and north-central Florida. Other primary corridors include U.S. 441 (State Road 7) in the eastern portion of the Town, Davie Road and University Drive, both centrally located north/south business arteries, and Pine Island and Flamingo Roads to the west. State Road 84, Stirling Road, and the Griffin Road/Orange Drive corridors provide east/west continuity throughout the Town. There are planned improvements to the above (and additional) roadway corridors described in the Transportation Element of this Comprehensive Plan.

A sandy, wooded natural ridge formation meanders through the Town, primarily evident east and west of Pine Island Road, in the Rolling Hills and Forest Ridge developments respectively, to west of Southwest 130 Avenue, on the Kapok Tree property. This ridge system is referred to as Pine Island Ridge in the east, and Spooners Ridge and Long Key Ridge in the west. The ridges are archaeologically, historically, and naturally significant, playing an important role in the Town's Open Space Program and as the highest natural elevation in Broward County in an area that historically consisted of wetlands.

The C-11 Canal and North New River Canal, components of the primary drainage system maintained by the South Florida Water Management District, serve as geographic boundaries of the Town. Along the northern Town limits, the North New River Canal generally separates Davie from the cities of Sunrise and Plantation. The C-11 Canal runs east/west through the Town, sandwiched between Orange Drive and Griffin Road. Canal crossings are limited, thus directing traffic to major intersections.

The Florida Power and Light Company maintains approximately 11 miles of transmission easements throughout the Town. These easements range in width from 180 to 255 feet and run north/south through the western portion of the Town and east/west through the southern portion of the Town.

Man-made geographic features include numerous lakes and rock-pits, excavated to provide fill for building purposes. The Broward County Landfill, currently closed and undergoing cleanup and redevelopment for open space/park use, ranges up to 90 feet in height. Finally, several primary transportation corridors, as discussed above, serve as formidable geographic features. The I-75 flyover to I-595, the University Drive intersection at I-595, and the State Road 84/I-595 intersection with U.S. 441 and the Florida Turnpike range from 50 to just under 100 feet in height.

History

The history of the Town of Davie dates to the early 1900s when the construction of irrigation and drainage canals began. The area was divided into small parcels and was marketed as the "First Improved Town in the Everglades." In 1906, R.P. Davie, associated with the Everglades Sugar and Land Company, purchased approximately 27,500 acres at $2.00 per acre.

The first permanent settlers arrived in 1909 and, comparing this swampy area to their former home in Panama Canal Zone, named the community "Zona." The community was renamed in 1916, in recognition of R.P. Davie's presence in the settlement.

Davie was incorporated in 1925, and dissolved during the following legislative session; Frank Stirling was the first mayor. Taxation, an unanticipated result of incorporation, was responsible for this short-lived status. In June 1926, the first Code of the Town of Davie was passed, in an effort to deal with the early growth of the settlement.

The hurricanes of September 1926 and May 1947 proved to be milestones in the development of Davie. The earlier storm's devastation drove many from the area. Those that remained changed their construction methods and materials from lumber and tar paper to cement block. The 1947 hurricane brought the Army Corps of Engineers to the area, to develop the present Water Management Control system.

During the 1950s and 1960s, agricultural activities thrived. The flood control measures implemented by the Army Corps drained the rich land for new groves, cattle ranching, produce and sod farms. For example, in 1959 approximately 5,000 acres were developed as productive groves valued at $5 million.[3]

[3] The History of Davie and its Dilemma, by Victoria Wagner.

In 1960, the Town of Davie, consisting of less than 2,000 residents, incorporated. Population trends, as shown in the table below, reflect the growth and development of the community.

POPULATION: Town of Davie
1970 to 1995

Year	Population
1970	5,859
1972	6,517
1973	7,763
1974	9,769
1975	12,570
1976	14,964
1977	16,777
1978	17,413
1979	18,054
1980	20,515
1981	22,756
1982	30,006
1983	32,502
1984	33,816
1985	35,183
1986	35,654
1987	37,393
1988	38,980
1990	47,217
1995	53,081

Source: Univ. of Fla., Bureau of Econ. Research (1970-1974)
Broward County Office of Planning (1975-1988)

Different concerns arose as a result of the rapid growth of the Town, and with respect to the unique character Davie was assuming. Equestrian interests, while still strong, have waned over the past decade. The citrus influence, once a principle factor in the Town's economy and way of life, is reduced substantially in acreage and economic importance. The construction of primary transportation corridors has brought the Town to the focus of attention in Broward as a burgeoning area for commerce and industry. And, the unique character associated with Davie has developed into a representation of lifestyle much desired throughout the region. Efforts to address

these changes associated with Davie's "coming of age" include maintenance of the pattern of development which preserves a substantial area devoted to low-density residential use, open space planning and land acquisition programs, and recognition of the diverse and unique concerns in the Town such as equestrian interests.

Evaluation and Appraisal Report of the Town of Davie Comprehensive Plan

Introduction

The Town Council of the Town of Davie adopted its Comprehensive Plan in February 1980, 1989 and again in 1997 pursuant to the requirements of the Local Government Comprehensive Planning Acts of 1975 and 1985, respectively. The Plan was prepared and adopted to facilitate the orderly and balanced future economic, social, physical, environmental, and fiscal development of the Town.

The Local Government Comprehensive Planning Act requires periodic evaluations of the Comprehensive Plan to insure that the planning program is a continuing and ongoing process. Evaluation and Appraisal Reports reflect the concerns raised during the workshops, and includes issues raised by the public, the Local Planning Agency and Development Services Department staff. The information obtained during these workshops was supplemented by the data gathered, analysis of the original adopted plan, and by the public hearings held during the 1988-89 and 1994-95 updates of the Davie Comprehensive Plan.

Chapter 163.3191, F.S., requires that the local planning agency report on the plan to the governing body at least every five years after plan adoption. The report is to assess each element of the comprehensive plan utilizing the following criteria:

(a) The major problems of development, physical deterioration, and the location of land uses and the social and economic effects of such uses in the area.

(b) The condition of each element in the comprehensive plan at the time of adoption and at date of report.

(c) The comprehensive plan objectives as compared with actual results at date of report.

(d) The extent to which unanticipated and unforeseen problems and opportunities occurred between date of adoption and date of report.

The following summary of the 1984, 1988-89 and 1995 EARs illustrates key trends occuring in Davie since 1980.

The Future Land Use Element, as adopted in 1980, provides for the continuation of

Davie as a low density community. The original plan expresses the opinion that Davie will not assume a significant role as a regional commercial or business center within Broward County. During the past 15 years, the Town has implemented an aggressive annexation program, and has merged into the Town the Village of Hacienda Village. This growth program has dramatically altered the character of the Town to the extent that Davie currently figures prominently in the future industrial and commercial development of Broward County. The construction of I-595 and I-75 has increased Davie's visibility and accessibility, and has enhanced residential and non-residential development opportunities in the Town. Below, three key Comprehensive Plan goals are evaluated to provide a context for development and change since the 1980 plan.

> **Goal - To develop Davie as an attractive community while maintaining its rural character and protecting the health, safety, and welfare of its residents.**

Two objectives relating to this goal, to "maintain an overall low density community" and "preserve and enhance the Town's rural character" are insured by strict adherence to the Land Use Plan map. The Future Land Use Element describes Pine Island Road as the "principle line of demarcation between rural estate uses in the western part of the Town and the more intensive urban development to the east." Additionally, the area south of the C-ll Canal was contemplated as a low intensity area predominantly designated for estate development. Despite the Town's growth through annexation and merger, this pattern of development essentially has continued with minimal deviation.

After a comprehensive study during which a building moratorium along University Drive was imposed, the Town adopted the University Drive Review District (U.D.R.D.). The U.D.R.D. is an overlay district which imposes strict regulations governing site design and landscaping for development along University Drive. A similar overlay district was adopted for the State Road 84/I-595 corridor (State Road 84 Review District).

A Western Theme District was created, establishing architectural and landscaping design criteria for development within the District. The District encompasses downtown Davie and the area around the Davie Road intersection with Orange Drive and Griffin Road, but at one time extended to Strirling Road, where several shopping centers and freestanding businesses are designed in accordance with the western theme.

> **Goal - To provide safe, sanitary, and sound housing for all residents.**

The Town's efforts towards rehabilitation and/or redevelopment of deteriorated residential areas is evidenced in the Potter Park Target Area improvements. The area identified as the Potter Park neighborhood was designated a Community Development Block Grant (C.D.B.G.) Target Area. This area has been subject to major infrastructure improvements including the installation of water and sewer lines, and reconstruction of existing local roads. The Potter Park facility itself has been

renovated to provide enhanced recreational facilities to the neighborhood. A Community Redevelopment Agency was created in 1988 to redirect tax revenues to housing and business improvements within the CRA boundaries, centering on downtown. Davie became an entitlement community for purposes of distributing CDBG monies. The Eastside Neighborhood Special Zoning District (ENSZD) was implemented just east of downtown to address the specific needs of the Davie Little Ranches Neighborhood. Close intergovernmental coordination with county housing agencies insure that funding assistance to qualified applicants is made available.

Goal - To provide park, recreation, and open space areas for existing and future residents.

The 1980 Level of Service Standard for parks, recreation and open space land was clearly inadequate for Davie's needs, therefore, the LOS Standard was increased from 3 to 10 acres per 1,000 population, with at least 3 acres per 1,000 population for actual recreational land. Several of the Town's existing facilities were identified as requiring renovation. Both Potter Park and Berman Park are intensely used parks that were rebuilt. Additional recreational equipment was installed at Lange Park, in response to residents' needs. The Town's Sports Complex (A. D. Griffin Park) is a million dollar facility; additionally, the Town renovated the Rodeo Arena, adding a roof and accessory buildings. The "Huck Lyle property," consisting of the 7 acres adjacent to the Town Hall and arena complex, were improved in 1997 to allow access from Davie Road. The Town has entered into long-term lease agreements with the Broward County School Board for use of school facilities to supplement Town-owned/operated facilities and the Town has assumed the responsibility for canal beautification to enhance the recreational use of the C-ll Canal bank. The Open Space Initiative dramatically increased the amount of recreation and open space land in Davie, as Broward County, Davie and the State together purchased over 300 acres of environmentally sensitive and recreational land. Finally, the Open Space Program has established a system of equestrian, pedestrian, and bicycle trails throughout the Town to promotes an image and character of the Town that Davie hopes to protect.

---------- Footnotes ----------

1. Sec.163.3161(3), F.S.
2. Ord. No. 76-20, adopted June 16, 1976.
3. The History of Davie and its Dilemma, by Victoria Wagner.

RESOLUTION NO. R-88-66

A RESOLUTION OF THE TOWN OF DAVIE, FLORIDA, PROVIDING FOR PUBLIC PARTICPATION PROCEDURES PURSUANT TO CHAPTER 9J-5 OF THE FLORIDA ADMINISTRATIVE CODE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, local comprehensive plans must be considered and adopted in accordance with the public participation procedures adopted by the local governing body and local planning agency, pursuant to Section 163.3181, Florida Statutes, and Rule 9J-5.004 of Chapter 9J-5, Florida Administrative-Code; and,

WHEREAS, Section 163.3181, Florida Statutes and Chapter 9J-5, Rule 9J-5.004, Florida Administrative Code establish minimum criteria for public participation and requires the local governing body and the local planning agency to adopt procedures providing and encouraging public participation in the planning process; and,

WHEREAS, it is the desire of the local planning agency and the local governing body to adopt public participation procedures pursuant to Chapter 9J-5, Florida Administrative Code and Chapter 163, Florida Statutes.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF DAVIE, FLORIDA:

SECTION 1. That the following procedures are established to provide for public particpation in the comprehensive planning process:

(1) The Local Planning Agency shall hold meetings and/or public workshops at least once a month.

(2) All Local Planning Agency meetings and/or workshops shall be advertised in a newspaper of general circulation in the Town to assure that real property owners are duly notified of any actions that may affect the use of their property.

(3) The Local Planning Agency shall provide both written and verbal status reports on the progress of plan preparation, and make available executive summaries of research findings when appropriate.

(4) The Local Planning Agency shall provide opportunity for written and verbal comments from the public as well as opportunity to consider and respond to all public comments.

(5) The Local Planning Agency and Town Council shall hold public hearing for the transmittal of the proposed Comprehensive Plan and final adoption of the Comprehensive Plan.

SECTION 2. This resolution shall take effect immediately upon its passage and approval by the Mayor.

PASSED THIS 16th day of March, 1988.

Mayor/Councilman

Attest:

Town Clerk

Approved this 16th day of March, 1988.

D6;3MIN/FORMS;RESO/PPP

FUTURE LAND USE ELEMENT

FUTURE LAND USE PLAN ELEMENT: TABLE OF CONTENTS

TABLE OF CONTENTS.....I-i

LIST OF TABLES AND FIGURES.....I-ii

INTRODUCTION.....I-1

ANALYSIS OF EXISTING CONDITIONS.....I-2

GOALS, OBJECTIVES AND POLICIES.....I-21

MONITORING AND EVALUATION.....I-39

PLAN IMPLEMENTATION.....I-41

GLOSSARY.....I-65

FUTURE LAND USE PLAN ELEMENT: LIST OF TABLES AND FIGURES

TABLES DESCRIPTION

I-1	Existing Land Uses	I-11
I-2	Analysis of Vacant Acreage	I-12
I-3	Land Use Distribution at Buildout	I-13
I-4	Town of Davie Population Estimates 1995	I-14
I-5	Population Projections by Residential Use: 2010	I-15

LIST OF FIGURES

FIGURES DESCRIPTION

I-1	Flexibility Zones	I-4
I-2	Planning Areas	I-5
I-3	General Soils Map	I-17
I-4	General Minerals Map	I-18
I-5	Town of Davie Trafficways Plan	I-20

Future Land Use Plan: Introduction

The Future Land Use Plan is the key element of the Comprehensive Plan as it sets forth the plan for the future development of the Town. The implementation of the plan, through the designation of land according to land use categories, determines the development profile and character of the Town of Davie.

The purpose of this element is to guide future development in a pattern which will afford the Town the ability to manage growth in accord with our community character in an economically balanced manner, and insure the adequate provision of all essential services. The Future Land Use Plan is consistent with and reflective of the other elements of the Comprehensive Plan and, therefore, ties together all elements of the Plan.

Future Land Use Plan: Analysis of Existing Conditions

Planning Areas

The Broward County Land Use Plan provides for the division of all land within the County into smaller geographically defined areas for planning purposes. These planning areas are referred to as "flexibility zones" and are used in the application of flexibility rules, reserve units, and rearrangement of land uses within the parameters of the "flex rules" (see Figure I-1, Flexibility Zone Map). Flexibility Zone boundaries generally follow municipal limits, major geographic features, and primary transportation facilities. All or portions of 12 Flexibility Zones are located within the Town of Davie.

The relationship between the Town's planning areas and Flexibility Zones are as follows:

Planning Area	Flexibility Zone
1	115, 117
2	113
3	113
4	99, 100
5	100
6	58, 77, 81, 97, 99
7	58
8	97, 98, 99
9	102
10	102
11	102

Planning areas generally follow specific development patterns and reflect identifiable characteristics unique to the area (see Figure I - 2, Planning Areas Map).

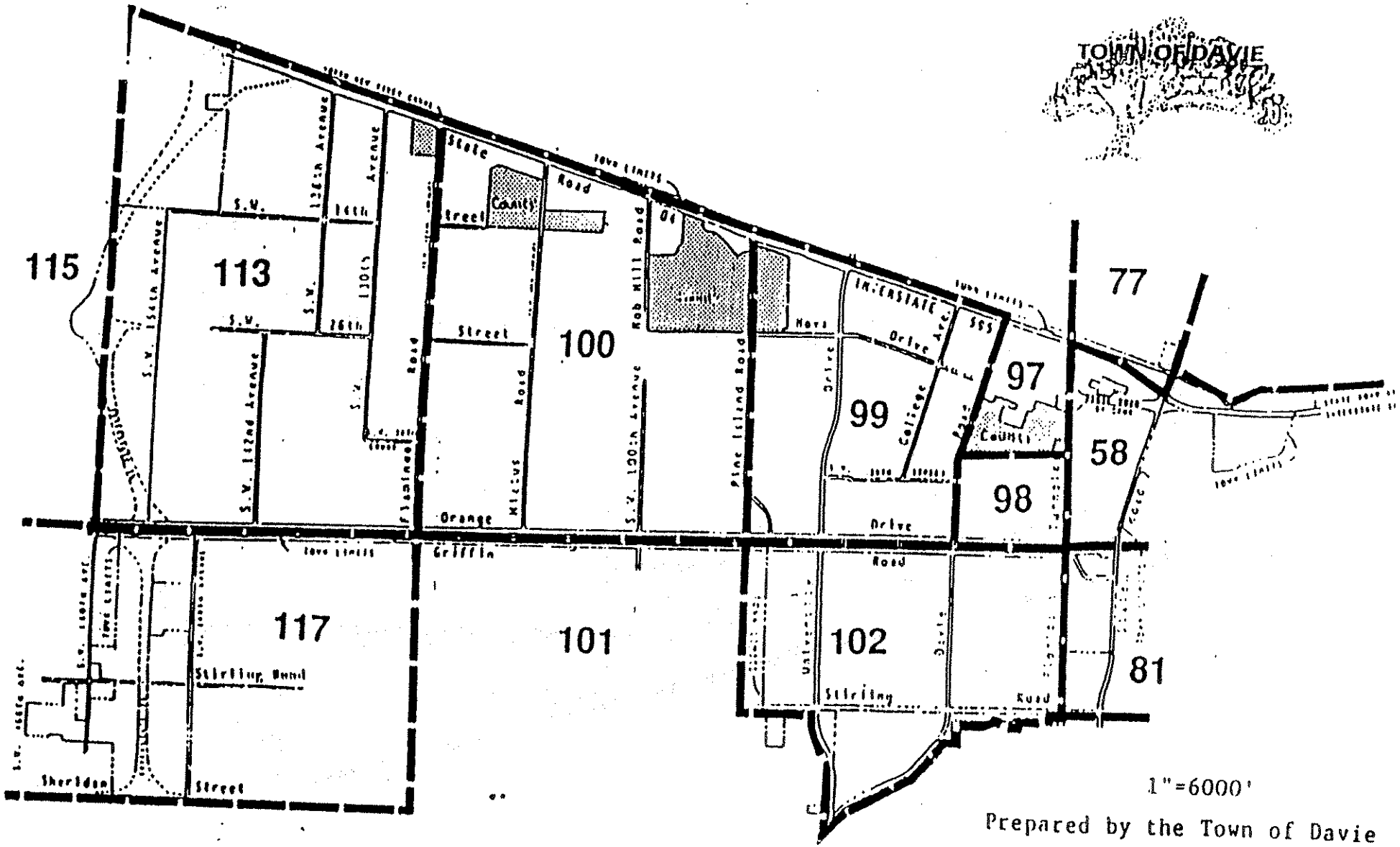
Planning Area 1

This planning area constitutes the southwesternmost portion of the Town, encompassing all of the land south of Griffin Road and west of Southwest 148 Avenue. This planning area is bisected by I-75 which is accessed at Griffin Road and Sheridan Street. The Ivanhoe development constitutes most of this planning area, which is essentially programmed for low density (3 dwellings per acre) residential development. There are parcels designated for commercial use located in the northern and southern ends of the Ivanhoe development at the intersections of I-75 with Sheridan and Griffin Roads, and Orange Drive. Over 100 acres at the northwest intersection of I-75 and Orange Drive are planned for business park development, known as ICW West.

Annexations have expanded the Town's western boundary in this vicinity, to include additional residential lands and property owned by the local drainage district. The Broward County School Board has constructed an elementary school immediately west of the Town's current municipal limit, at the intersection of Southwest 160th Avenue and Stirling Road. Additionally, there is a park site, a community center/fire station under construction, and future park site located within the Ivanhoe development. Development in this planning area shall continue in accordance with the program for the Ivanhoe development.

FLEXIBILITY ZONES

FIGURE I-1



1"=6000'

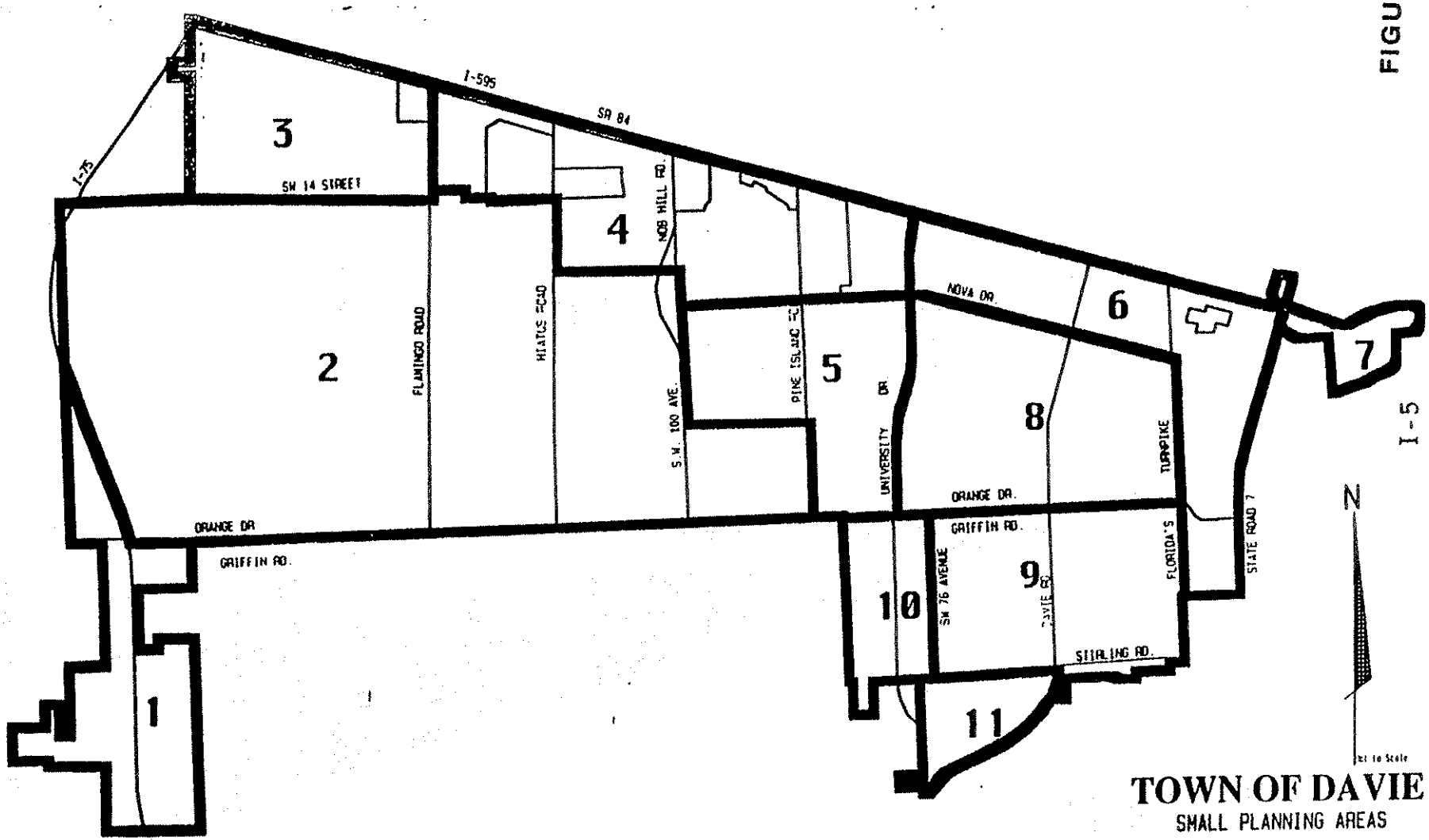
Prepared by the Town of Davie

April, 1989

LEGEND

Distr... undary

FIGURE I-2



TOWN OF DAVIE

SMALL PLANNING AREAS

PREPARED BY TOWN OF DAVIE DIVISION OF PLANNING & ZONING, 1977

Planning Area 2

Planning Area 2 includes the westernmost section of the Town north of Orange Drive and south of SW 14 Street, and bound on the west by Interstate 75 and on the east by Flamingo Road. The predominant existing and planned land use is single-family residential at a density of one dwelling per acre. The Broward County Landfill site, now closed, is programmed for redevelopment as a park site. The Boy Scout Camp is located to the north of the landfill site and is also used for recreational and open space purposes. A major landholding, Imagination Farms, constitutes the last remaining dairy operation in Davie. Development of 400 single-family homes is taking place on approximately half the site. Development of the remainder of the site is imminent. This planning area contains numerous small subdivisions of one-acre lots. Several larger parcels are currently being platted, in preparation for marketing or development as estate residences. It is expected that this trend shall continue as the existing inventory of single-family lots is depleted. A substantial Florida Power and Light transmission corridor exists in this Planning Area as well as Planning Areas 1 and 3. The corridor runs parallel to I-75, through residential land. The corridor crosses I-75 around Southwest 36 Street and connects with the F.P.L. substation on Orange Drive. F.P.L. is attempting to co-locate new transmission lines within the corridor; this attempt has thus far met with resistance from the community and Town insofar as it is incompatible with the existing and proposed residential development of the area.

Planning Area 3

Planning Area 3 is bound by I-595 on the north side, I-75 on the west side, SW 14 Street on the south side and Flamingo Road on the east side. The planning area consists of residential uses developed at a density of 3 to 10 dwellings per acre, including the Shenandoah development, occupying the western half of the planning area, and several mobile home park subdivisions. Additional residential development at a density of between 6 and 7 dwellings per acre is underway between Shenandoah and S.R. 84, to be called Poinciana Parc. Commercial development lines the S.R. 84 corridor.

Planning Area 4

This planning area is bordered by S.R. 84 on its north, University Drive on its east, Flamingo Road on its west, and an irregular border on its south that corresponds to Nova Drive and, SW 14 Street and the Village of Harmony Lakes development. A portion of the University Drive and S.R. 84 commercial corridors are included in this area, as are several planned residential communities typically developed at five dwellings per acre, but in some cases up to ten, including Arrowhead Golf Course and Country Club, Village of Harmony Lakes, Westridge, the Ridgeview Lakes developments, Scarborough, Village at Pine Lakes, and the Pine Island Ridge, Park City and Rexmere Village developments, located within an unincorporated area between Nob Hill Road and Pine Island Road.

Planning Area 5

Planning Area 5 is bound by Nova Drive on the north, University Drive on the east, and Nob Hill Road on the west. The southern limits are SW 36 Street, on the western portion of this planning area, and Orange Drive on the eastern portion. This planning area is comprised of residential uses developed at a density of three to 22 dwelling units per acre and commercial development, existing and proposed, along the University Drive and Orange Drive corridors. The Pine Island Ridge, classified as environmentally sensitive, has been preserved within this planning area by joint efforts with local, county and state jurisdictions. The single-family residential development within this planning area generally falls within larger scale communities such as Forest Ridge, Rolling Hills, Arrowhead Golf and Tennis Club, and Pine Island Bay communities. The multi-family residential development tends to be smaller in scale and includes such developments as The Harvest, Isla Merita, Old Country Manor, Alpine Woods and Reflections. The commercial development along University Drive is upscale in character and comprised of retail stores and office parks. Two vacant commercial parcels exist along the Orange Drive corridor. The first, located on the northeast corner of Orange Drive and University Drive, is approximately 40 acres in area, zoned B-3, Planned Business Center District, and has expanded commercial uses by virtue of a settlement agreement with the Town of Davie. The second, located on the northeast corner of Pine Island Road and Orange Drive, is approximately 20 acres in area and is zoned for B-2, Community Business District. Appropriate measures should be taken upon development of these properties to protect the existing adjacent residential developments.

Planning Area 6

Planning Area 6 includes lands located south of State Road 84, east of University Drive and north of Nova Drive, together with lands located east of the Florida Turnpike and west of State Road 7, south of State Road 84 and north of the south Town limits. The majority of this planning area is industrially zoned and land used plan designated. There are small commercial parcels along the State Road 7 corridor with one large retail center being located on the southeast corner of University Drive and State Road 84. Commercial flex has been applied to industrial land use plan designated lands on both sides of the Davie Road corridor between State toad 84 and Nova Drive. The Town is encouraging development and redevelopment of properties within this area to strengthen the Town's non-residential tax base for the future.

Planning Area 7

This planning area, the smallest of the planning districts, encompasses what was once Hacienda Village. The Town annexed this area in the late 1980's. Bordered on the north by the North New River Canal and on the south by S.R. 84, the area stretches approximately one mile east of S.R. 7. and includes the Hacienda Flores and Pond Apple Slough wetland mitigation sites, owned by Broward County and FDOT respectively. The wetland mitigation sites were required to offset the loss and

degradation of wetlands from the construction of the County resource recovery facility and I-595.

Most of the planning area is designated for conservation use due to the large mitigation site area. A portion of the North New River Canal frontage is designated and used for marine industrial development, part of the state-designated Marina Mile. A trailer park occupies the western 20 acres of the planning area.

Planning Area 7 offers the unique opportunity of extending Marina Mile development further into Davie. The area also poses unique problems relative to provision of public safety services due to its isolated location at the eastern edge of the Town, and difficulty of commercially or industrially developing the area due to the proximity of wetlands and waterfront homes in the Lauderdale Isles subdivision, on the north bank of the North New River Canal.

Planning Area 8

This planning area is the "heart" of Davie, and is the most diverse, characterized by older, small-scale commercial development, older single-family residential neighborhoods, and newer, large-scale multi-family residential developments that serve the rapidly growing South Florida Education Center (SFEC). The SFEC includes Nova Southeastern University, Florida Atlantic University, Broward Community College, Florida International University, and McFatter Vocational School, among others. The planning area also encompasses the downtown Davie Business District, where western-theme architecture is required, the Davie Town Hall and Rodeo Arena, two large mobile home communities recently annexed into the Town, and industrial land.

Planning Area 8 contains the only CBDG redevelopment target area within the Town. Residential development east of the Davie Road corridor is substandard and has been the subject of community redevelopment efforts. The planning area issues include roadway congestion in and around the SFEC and the University Drive/I-595 intersection, Town-SFEC relations as the universities expand, expansion and redevelopment of Davie's original business district, and neighborhood redevelopment.

Planning Area 9

This planning area is south of Griffin Road, generally north of Stirling Road, east of SW 76 Avenue and west of the Florida Turnpike. This area is predominantly agricultural in nature with scattered low-density single-family residential development. Low profile commercial development lines the Griffin Road, Davie Road, and Stirling Road corridors. Properties adjacent to Griffin Road wills soon be affected by widening of that roadway, creating an opportunity for the Town to seek redevelopment of this corridor, potentially enhancing the Town's non-residential tax base. Agricultural uses are expected to diminish in the upcoming years, succumbing to increased residential demands given the enhanced accessibility

provided by the roadway expansion and easy access to the Florida Turnpike. Commercial developments along the south side of Stirling Road are somewhat deteriorated and should be evaluated for potential redevelopment opportunities.

Planning Area 10

This planning area is generally located north of Stirling Road, south of Griffin Road, east of proposed Pine Island Road, and west of SW 76 Avenue. Pine Island Road, a major north/south arterial, is currently under construction on the western limits of this planning area and will provide through access from Griffin Road to Stirling Road. Commercial development of retail centers and office buildings line the west side of the University Drive corridor. The east side of this corridor is predominantly small-scale commercial development, with multifamily residential development (one existing, one proposed) and plant nurseries on the northern half of the corridor, and commerce park development and cattle grazing on commerce park- zoned lands on the southern half. Commercial development also exists along Griffin Road within this planning area. Several small-scale single-family residential communities, two trailer parks totaling approximately 30 acres in area, and an 8 acre industrial park are located within this planning area, together with six parcels zoned for community facilities uses. These include, but are not limited to, a regional library, multiple church uses of varying scales, a girl scout campground facility, and a private school. The Town is optimistic in the potential expansion of commercial uses within this planning area, given the increased accessibility provided by Pine Island Road, and potential development of agricultural lands in the years to come.

Planning Area 11

The boundaries of this planning area are Griffin Road on the north, Davie Road Extension on the southeast, and University Drive on the west. The area is characterized by multi-family residential development on the south side of Stirling Road, ranging from eight to 16 dwellings per acre. There is one single-family residential subdivision, developed at five dwellings per acre. Housing in this area is generally in stable to marginal condition. Small commercial developments line Davie Road Extension. The Town has potable water and wastewater treatment facilities in this planning area. Florida Department of Transportation (FDOT) is in the design stage of widening Davie Road Extension.

Existing Land Use Inventory

In 1987, the Town staff prepared an Existing Land Use Inventory, pursuant to a methodology established by the Broward County Planning Council, the Local Planning Agency for Broward County. This Inventory was required by the Planning Council in the preparation of the Broward County Land Use Plan, and formed the basis for analysis of the Town's Future Land Use Plan map series. Existing land use information was recorded on section sheets and then tabulated according to Traffic Analysis Zones, geographically unique areas which boundaries were established by county staff. Existing uses were determined by review of aerial photographs, site and field inspections, and analysis of permit information. This information was

updated in 1994, during preparation of the Town's 1995 Evaluation and Approval Report (EAR).

Additionally, the staff classified vacant acreage according to developability pursuant to the established land use classifications. This information was based on the Existing Land Use Inventory as subsequently updated in 1988 and 1994 and reflects conditions at that time. The existing land use information is depicted on the Generalized Existing Land Uses map of the Future Land Use Plan Map Series. The following is a summary of existing land uses.

As the Table I-1 indicates, the largest existing land use category within the Town is Vacant/Undeveloped, comprising approximately 31% of the Town, down from over 46% in 1988. The most significant increase in existing land use since 1989 is single-family residential, nearly doubling to 15.3% , representing the third largest land use behind estate residential, which comprises over 16% of the Town, up from 10.9% in 1988. Agricultural lands constitute 6.5% of existing land uses, down from 12.3% in 1988, representing the land use category with the largest decrease in acreage other than Vacant. Significantly, Conservation land increased from .5% in 1989 to 3.1%. Table I - 2 provides an analysis of the vacant acreage, according to land use designation. More than one-half of the vacant acreage is designated and planned for development at one dwelling per acre. Commercially designated land comprises approximately 15.7% of total vacant acreage.

TABLE I-1: Existing Land Uses

Category	Acres	% of Total
Estate (<1 du)	3,267.2	16.1
Single Family (>1 du/<5 du/ac)	3,103.5	15.3
Multi Family (>5du<22 du/ac)	977.4	4.8
Mobile Home	459.0	2.3
Commercial	1,070.8	5.2
Office	12.2	0.1
Industrial	587.8	2.9
Agricultural	1,324.9	6.5
Public Recreation	778.3	3.8
Private Recreation	498.0	2.5
Conservation	625.3	3.1
Utilities	104.7	0.5
Community Facilities	919.3	4.5
Vacant	6,279.8	31.0
Historic	12.1	0.1
Rock Pit	231.9	1.2
Total	**20,252.0**	**100.0**

Source: Town of Davie Geographic Information Systems, 12/31/94

Editor's Note: 1994 Acreage was calculated by computer; 1988 acreage calculated manually, resulting in discrepancy.

TABLE I-2: Analysis of Vacant Acreage

Category	Acreage	% of total
1 du/ac	4116.2	65.6
Single-Family1	761.5	12.1
Multi-Family2	146.9	2.3
Commercial	984.7	15.7
Industrial	231.2	3.7
Community Facilities	15.7	0.2
Conservation	23.6	0.4
Total	**6279.8**	**100.0**

Source: Town of Davie GIS, 12/31/94 and Town of Davie Future Land Use Plan Map: Year 2015, dated 4/89

1Single-Family Residential is > 1 du/ac < 5 du/ac.
2Multiple-Family is > 5du/ac <22 du/ac

Table I-3 indicates that at buildout, almost 43% of the Town's land area will be developed for Estate Residential use at 1 du/ac. Nearly 62% of the Town will be developed with low and low-medium density single-family residential uses. Only 14.2% of the Town will be developed under Commercial, Office or Industrial land use designations. While land designated Agriculture will be insignificant, residential agriculture may continue to thrive.

TABLE I-3.
Land Use Distribution at Buildout

LAND USE	ACREAGE	PCT. OF TOTAL
Estate (1)	8,658.3	42.8
Single Family(2)	3,865.0	19.1
Multi Family(3)	1,124.3	5.5
Mobile Home	459.0	2.3
Commercial	2,055.5	10.1
Office	12.2	0.1
Industrial	819.0	4.0
Agricultural	50.0	0.2
Public Recreation	778.3	3.8
Private Recreation	498.0	3.2
Utilities	104.7	0.5
Community Facilities	935.0	4.6
Historic	12.1	0.1
Rock Pit	231.9	1.2
TOTAL	20,252.2	100.0

(1)Estate density is < 1 du/ac
(2)Single-family is >1 du/ac < 5 du/ac
(3)Multi family is > 5 < 22 du/ac

Source: Town of Davie Geographic Information Systems, 12/31/94 and Town of Davie Future Land Use Plan Map: Year 2015 dated 4/89

TABLE I.4: Town of Davie Population Estimates 1995

RESIDENTIAL LAND USE	NET ACREAGE(1)	UNITS/ ACRE(2)	TOTAL UNITS	PERSONS/ UNIT(3)	TOTAL POP.
Estate(1)	2,613.80	1	2,613	3.30	8,623
Single Family(3)	2,482.80	4	9,931	3.00	29,793
Multi Family	781.20	12	9,374	2.25	21,092
Mobile Home	459.00	n/a	3,070	2.00	6,140
TOTAL POPULATION:					65,648
BROWARD CO. ESTIMATE(4):					53,081

(1) Eighty percent of gross acreage shown on 1989 Existing Land Use Map. The 20 percent reduction allows for roads, waste detention areas, easements and other constraints that reduce gross density.
(2) Average of density ranges in respective residential categories.
(3) Average persons per unit, by type, as shown in Town of Davie Code of Ordinances, Sec. 12-323.
(4) Broward Co. Dept. of Strategic Planning and Growth Management

Davie's 1995 estimated population is 53,081 according to the Broward County Department of Strategic Planning and Growth Management and 65,648 according to Table I.4, below, estimated according to existing residential uses. The Broward County estimated population is considered the more reliable of the two, based on differences in methodology.

Table I.5 illustrates the disparity between the Broward County and Town population projections, the latter based on average occupancy per unit multiplied by future land use plan map densities. Again, the Broward County estimate is considered more reliable, however, it may be considered conservative due to the Town's projection being 23% higher.

TABLE I.5: Population Projections by Residential Use: 2010

RESIDENTIAL LAND USE	NET ACREAGE(1)	UNITS/ ACRE(2)	TOTAL UNITS	PERSONS/ UNIT(3)	TOTAL POP.
Estate	6,927.30	1	6,927	3.30	22,859
Single Family	3,092.00	4	12,368	3.00	37,104
Multi Family	899.00	12	10,793	2.25	24,284
Mobile Home	459.00	n/a	3,070	2.00	6,140
TOTAL POPULATION:					90,387
BROWARD CO. ESTIMATE(4):					69,451

(1) Eighty percent of gross acreage shown on 1989 Existing Land Use Map. The 20 percent reduction allows for roads, waste detention areas, easements and other constraints that reduce gross density.
(2) Average of density ranges in respective residential categories.
(3) Average persons per unit, by type, as shown in Town of Davie Code of Ordinances, Sec. 12-323.
(4) Broward Co. Dept. of Strategic Planning and Growth Management

According to the Soil Survey of Broward County, Eastern Part (USDA, 1984), the predominant soil types in the Town are the Halandale-Margate, Lauderhill-Dania, and Immokalee-Urban land-Pompano associations (see Figure I-3, General Soils Map). This association is described as poorly drained, nearly level, sandy soils that are less than 60 inches deep to hard limestone. This soil association limits development to the extent that special design, significant increases in construction cost, and extra maintenance are required. Essentially, this type soil is generally removed and/or reconditioned, and replaced with clean fill. While this method of mitigating the adverse soil properties is costly, it enhances the water management system in two ways: firstly, it creates a well-drained development area, thus protecting life and property; and secondly, the rock or borrow pits utilized to create the clean fill necessary to condition the site present a drainage or retention opportunity. Compliance with applicable regulations regarding the dredging, filling, and other land development activities necessary for site preparation is monitored and verified through the issuance of site development permits.

There are generally three types of minerals found in the Town: peat, sand shell and marl, and limestone (see Figure I-4, General Minerals Map). Limestone and sand are commercially mined, and provide fill necessary for development and roadway construction. Borrow or rock pits are evident throughout the Town, associated with existing developments and former commercial mines in close proximity to interstates and the turnpike (see Future Land Use Plan Map Series: Generalized Natural and Historical Resources Map).

The topography of Broward County is generally flat, with minimal elevation fluctuations. A natural ridge meanders through the Town, referred to as Pine Island Ridge in the east, and Long Key Ridge and Spooner's Ridge in the west. Collectively, these ridge formations establish the "seven islands" which figured prominently in

Seminole Indian history. The ridges are of historical and archaeological importance, and create a natural amenity that cannot be artificially duplicated.

Wetlands exist in the eastern portions of the Town, along the State Road 84/I-595 corridor. These wetlands include the Pond Apple Slough site, on the south side of the roadway corridor, and the Hacienda Flores site on the north side. Both sites are designated by Broward County as Natural Resource Areas, and are used for mitigation of disturbed wetlands resulting from roadway development and construction of the County's resource recovery facility, located adjacent to the Slough. A third wetland has been reconstructed as a requirement for the commercial development at the intersection of University Drive and State Road 84/I-595. This wetland is located on the grounds of Flamingo Gardens.

Historically significant sites are shown on the Generalized Natural and Historical Resources Map of the Future Land Use Plan Map Series. These sites include the ridges discussed above, the Floyd Wray Museum at Flamingo Gardens, and the Old Davie School. These sites provide the Town with an historical identity that relates to the earlier Indian settlers as well as turn-of-the-century settlers of "Zona".

Broward County Trafficways Plan. The Broward County Trafficways Plan applicable to the Town of Davie is shown in Figure I-5. The Plan shows generalized roadway corridors and reflects several amendments since 1989 including the deletion of Hiatus Rd, 136 and 148 Avenues South of S.W. 14 St and S.W. 36 Street. Right-of-Way width was reduced on Davie Road, South of Nova Drive and on S.W. 14 St and S.W. 148 Avenue (North of S.W. 14 St). Additional discussion regarding the Broward County Trafficways Plan is included in the Traffic Circulation Element of this Plan.

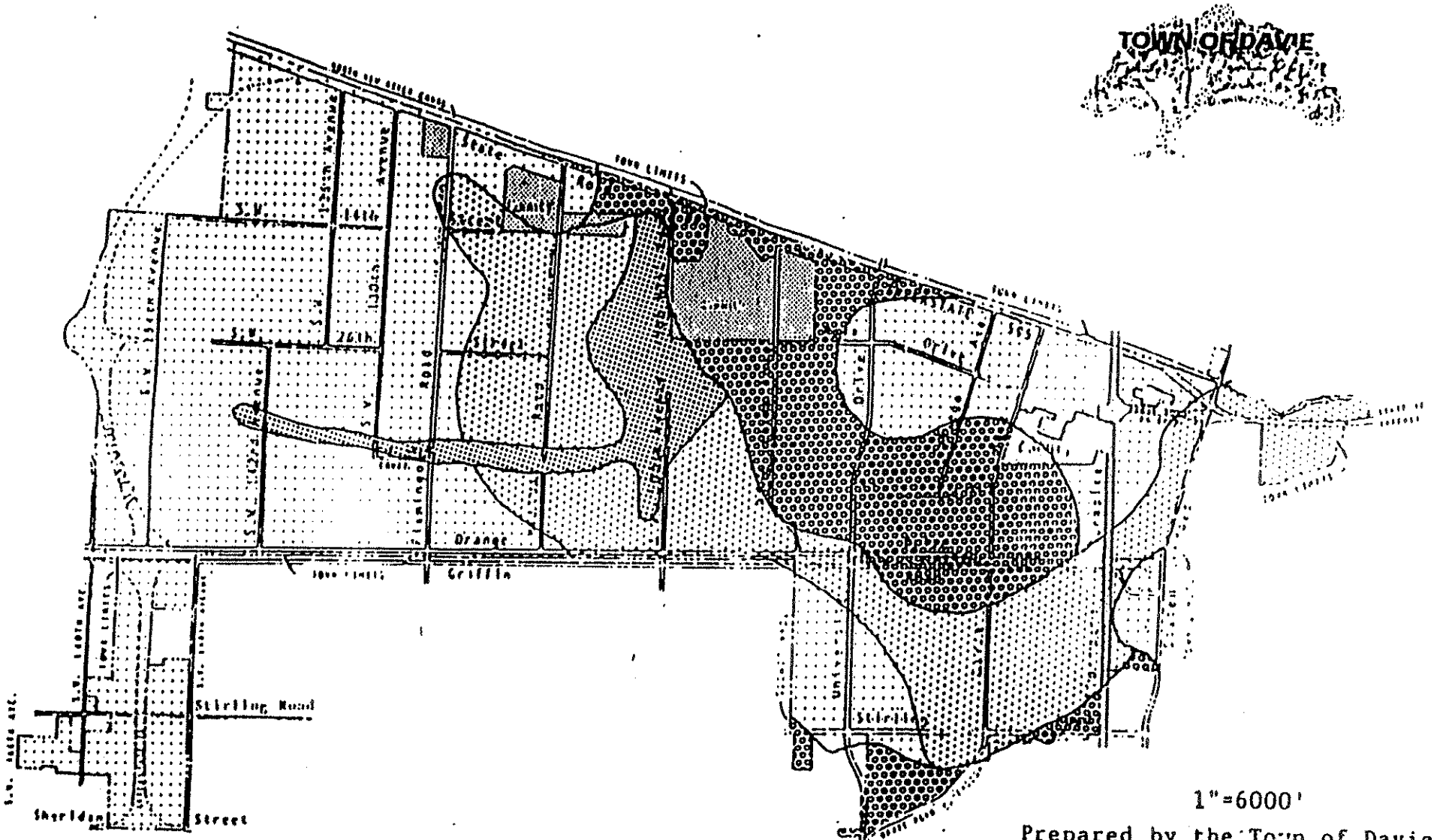
Issues and Opportunities

Broward County Landfill. The Broward Landfill facility, located in the western portion of the Town, is currently undergoing closure and cleanup. This site has been designated as an Environmental Protection Agency "superfund" site, in recognition of its environmental affect on the Biscayne Aquifer and contamination of surrounding properties. Ongoing monitoring functions will provide an assessment of the site's affect on the environment to assure the health, safety and welfare of existing residents in the area. Insofar as there is a concern regarding the viability of new residential development immediately adjacent to the site, the area shall be studied and cleanup activities evaluated as to the future use of surrounding properties.

Community Redevelopment Agency. The Town's Community Redevelopment Agency has undertaken the task of redevelopment and rehabilitation of properties in a portion of the downtown area. The CRA boundaries are shown on the Future Land Use Plan map series. The CRA adopted a revised redevelopment plan and expanded the original CRA boundaries in December, 1994.

GENERAL SOILS MAP

FIGURE 1-3



LEGEND

SOILS OF THE LOW FLATWOODS, SLOUGHS, AND MARSHES

Hallandale-Margate association: Poorly drained, nearly level, sandy soils that are less than 60 inch[illegible] [illegible]p to hard limestone

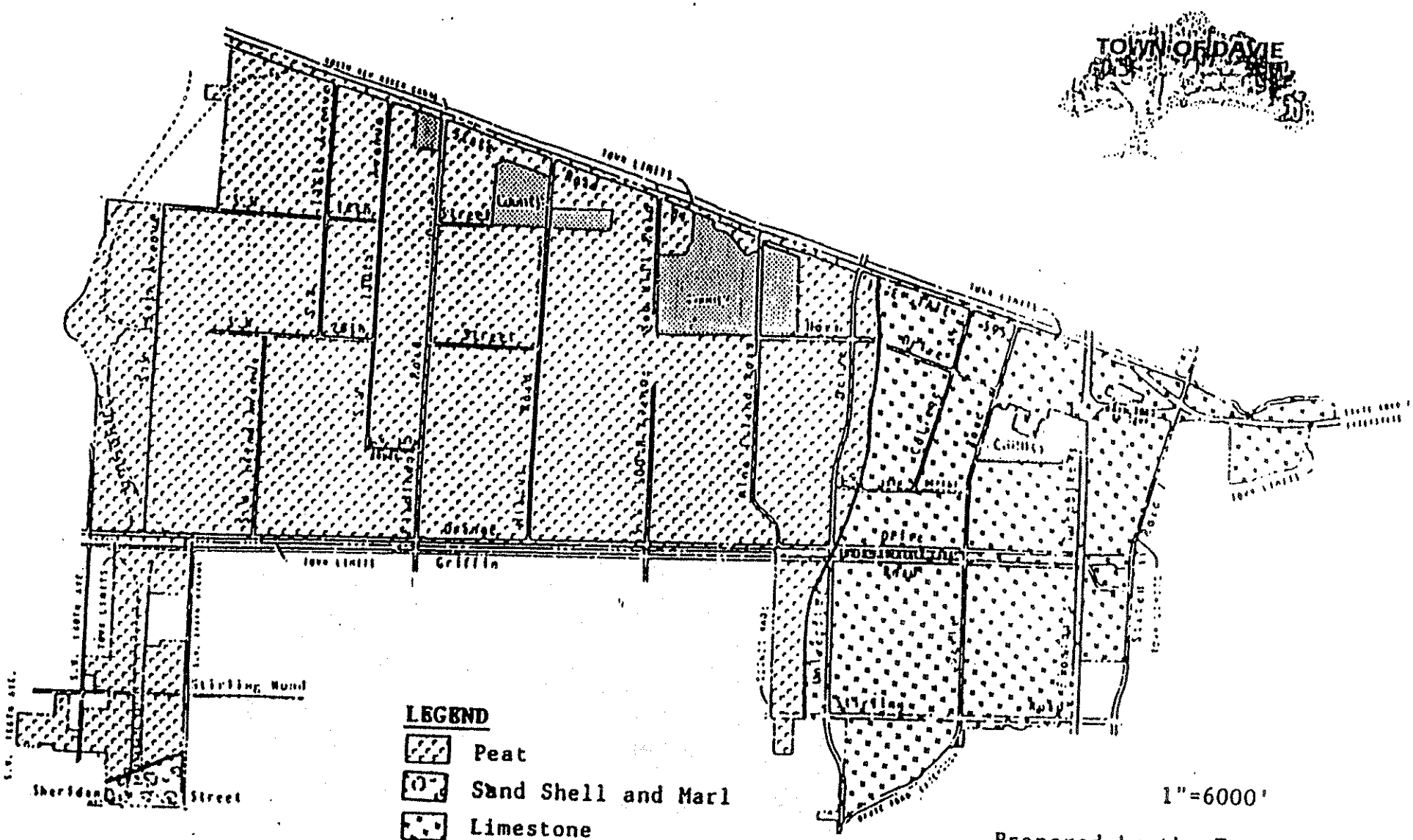
[illegible]-Davie association: Very poorly drained, nearly level, organic soils that [illegible]

SOILS OF THE LOW RIDGES, KNOLLS, AND FLATWOODS

Duette-Urban land-Pumello association: Moderately well drained, nearly level and gently sloping, sandy soils that have a dark subsoil generally more than 50 inches deep; most areas have been modified for urban use

FIGURE 1-4

GENERAL MINERALS MAP



Prepared by the Town of Davie
April, 1989

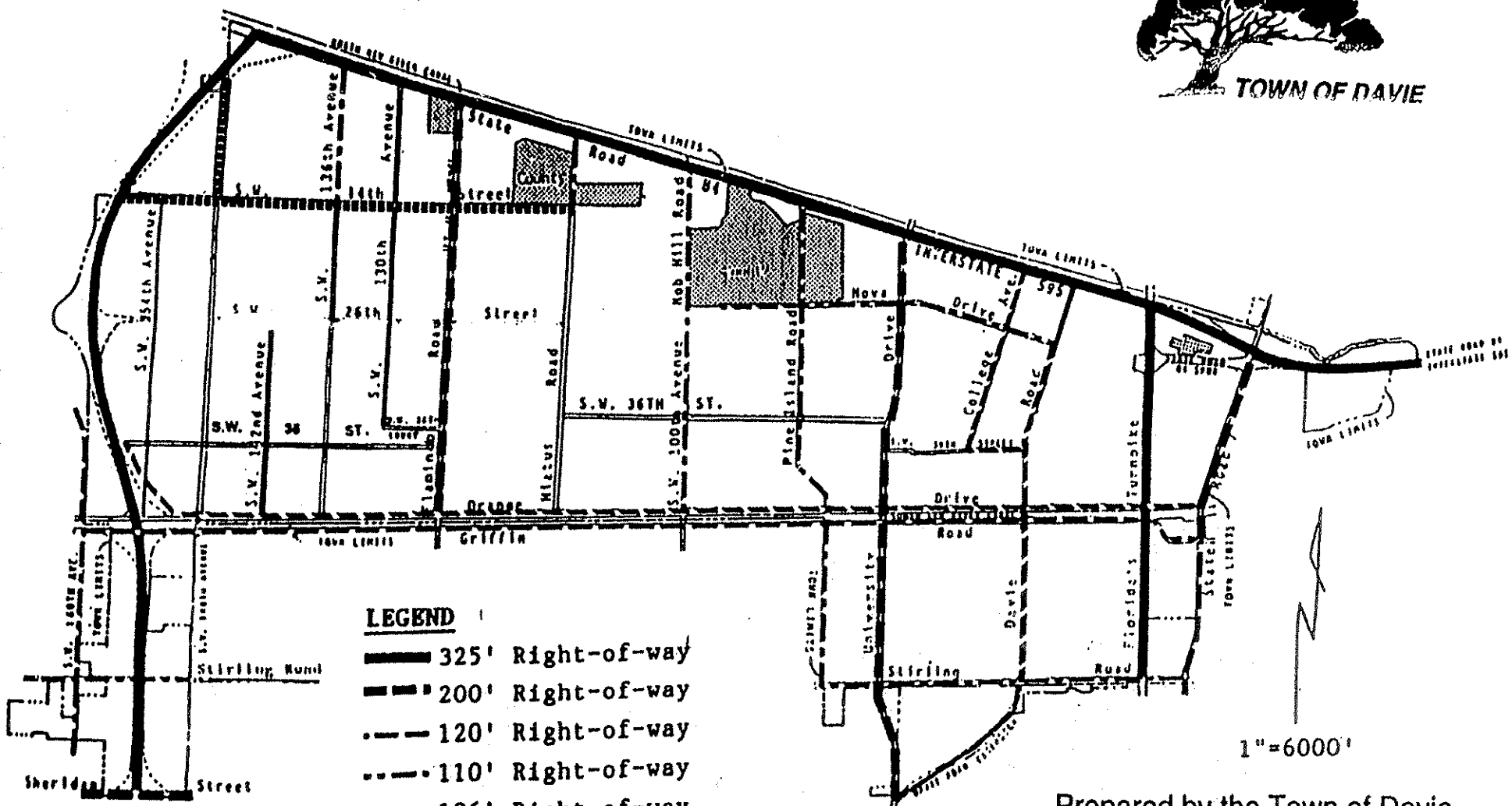
Relationship of Adjacent Uses- The Town of Davie has grown in size as a result of aggressive annexation efforts over the years. In some instances, that has resulted in the juxtaposition of incompatible land uses within the Town. In addition to these changes, major roadway corridors have been developed or brought into the Town, resulting in an alteration of the character of surrounding lands. These include the Interstate 595 corridor, the Florida Turnpike, and the planned expansion of Griffin Road, which is already in the right of way acquisition phase.

Small Area Plans - The adopted Comprehensive Plan of the Town of Davie establishes planning areas that coincide with specific development patterns. These planning areas, although established, are not addressed with small area plans; they are merely defined. The Town of Davie has grown into a large municipality with very diverse characteristics and needs. The central western portion of the Town, for example, is equestrian oriented and rural in character; a lifestyle very important to the residents in that area. In contrast, however, the northeastern corner of the Town is industrial in nature, and bears no resemblance to other areas of the Town, thus illustrating the need for small area plans to address the different issues and opportunities of each planning district.

Land Use Balance and Economic Growth - As cities in Broward County have matured, many are experiencing financial difficulties. This is true particularly among the older cities in the eastern portion of the County. Because Davie is comparatively young, however, there is an opportunity to examine the mix of planned, but not yet developed, land uses and balance them as appropriate to insure the highest possible degree of economic health at the time that Davie achieves full buildout. This can be viewed as a type of asset management, with land uses representing the Town's asset that should be managed and guided, in part, according to the tax revenue stream that could be realized. This must be done in conjunction with an analysis of the proper physical distribution of uses to ensure that conflicts are not created and, in addition, in conjunction with the overall goals and objections of the Town.

TRAFFICWAYS PLAN

FIGURE 1-5



Prepared by the Town of Davie
December, 1996

Future Land Use Plan: Goals, Objectives and Policies

GOAL 1: Maintain a program of growth management that directs development to those areas which have in place, or are programmed to have in place, the land and water resources, fiscal abilities, and service capacity to accommodate growth in an environmentally and aesthetically acceptable manner.

OBJECTIVE 1: **LAND DEVELOPMENT REGULATIONS**

The Town shall continue to maintain and implement land development regulations, including subdivision regulations, that will insure that development may be permitted only after it has been demonstrated that soils, topography, natural resources, historic resources and the availability of essential facilities and services have been accommodate.

- **Policy 1-1:** Land development regulations shall contain minimum criteria that address soil compatibility, topography, drainage and stormwater management, finished floor elevations, parks and open space, on-site parking, signage, internal traffic flow and traffic circulation, with said criteria applied at time of development permit approval.

- **Policy 1-2:** The Town shall maintain and enforce a level of service standard for each public facility located within the boundry for which the Town has authority to issue development orders or development permits pursuant to Rule 9J-5.005(3), Forida Administrative Code.

- **Policy 1-3:** Land development regulations shall incorporate a review process to insure that essential facilities and services shall be provided pursuant to the adopted level of service standards contained in the Comprehensive Plan, and shall include a mechanism to insure that the cumulative impacts of proposed development are identified. Essential facilities and services shall be available, constructed and maintained, concurrent with the impacts of development, pursuant to the adopted level of service standards and criteria for determination of concurrency contained in this Comprehensive Plan.

- **Policy 1-4:** For those portions of the regional road network within the Town's planning jurisdiction, levels of service and concurrency management systems consistent with Broward County's shall be adopted. The highway capacity methodology approved by the Broward County Board of County Commissioners shall be used to determine the capacities and levels of service on the regional roadway network.

- **Policy 1-5:** The grant of development permits shall be consistent with the Plan Implementation Section of this Plan.

- **Policy 1-6:** Platting shall be required, pursuant to the Plan Implementation Section of this Plan.

- **Policy 1-7:** The Town shall utilize Federal Emergency Management Administration (F.E.M.A.) standards in establishing minimum floor elevation of building sites and floodplain protection provisions, and shall address redevelopment where flooding problems exist.

- **Policy 1-8:** South Florida Water Management District (S.F.W.M.D.) design criteria shall be utilized for minimum road crown elevation and public road and parking lot design.

- **Policy 1-9:** Industrial and commercial development shall be serviced by a centralized wastewater treatment system, where financially feasible.

- **Policy 1-10:** Pursuant to the Solid Waste Act of 1988, the Town shall encourage source separation and recycling of waste.

- **Policy 1-11:** Landfills and resource recovery facilities shall be planned to minimize impacts on adjacent existing or planned land uses.

- **Policy 1-12:** New development shall provide water storage capacity pursuant to the water management regulations and plans of the South Florida Water Management District and other applicable water management agency(s).

- **Policy 1-13:** New non-residential development shall provide pre-treatment for stormwater runoff through grassy swales, wetlands filtration, ex-filtration trenches or other means consistent with the Best Management Practices of the South Florida Water Management District.

- **Policy 1-14:** Adopted land development regulations shall address the method(s) for acquiring and developing parks and recreational lands, and protecting such lands from future development.

OBJECTIVE 2: **NATURAL AND HISTORIC RESOURCE PROTECTION**

The Town shall continue to maintain land development regulations that shall require the identification and protection of natural and historic resources, including historically significant structures, unique natural areas, and wetlands.

- **Policy 2-1:** Historically significant sites, as identified on the National Register of Historic Places, by the Florida Department of State's Division of Historical Resources, or by the Davie Town Council, shall be protected from significant alteration or demolition under the provisions of adopted land development regulations and applicable state and federal laws.

- **Policy 2-2:** Consideration shall be given to the impacts of land use plan amendments on historic resources.

- **Policy 2-3:** Archaeologically significant sites shall be identified and preserved/protected under the provisions of adopted land development regulations from unauthorized access, excavation or disruption.

- **Policy 2-4:** Adopted land development regulations shall contain regulations providing for activities that are compatible with and encourage the protection of sites designated Natural Resource Areas or Local Areas of Particular Concern as shown on the Broward County Land Use Plan map and the Davie Future Land Use Plan map.

- **Policy 2-5:** Adopted land development regulations shall contain guidelines and standards designed to promote the use of native vegetation and maintenance of such material in a manner generally accepted in the industry.

- **Policy 2-6:** Development shall be permitted in accordance with the South Florida Water Management District regulations governing the creation, protection and maintenance of surface waters, to minimize direct discharge of stormwater runoff into such bodies.

- **Policy 2-7:** Lake construction shall be in accordance with the South Florida Water Management District regulations and regulations of other applicable water management agency(s) that provide for vegetated shallow water habitat designed to protect natural lake functions and the health, safety, welfare and recreation of Town residents.

- **Policy 2-8:** Adopted land development regulations shall require a mitigation/restoration plan for all dredging and mining sites.

- **Policy 2-9:** The mitigation of wetlands shall be required, when determined to be appropriate by the applicable regulatory agencies.

OBJECTIVE 3: **POTABLE WATER SUPPLY PROTECTION**

The quality and quantity of the potable water supply shall be protected through the regulation of development utilizing

detrimental substances.

- **Policy 3-1:** The Broward County Potable Water Supply Wellfield Protection Ordinance and existing and planned wellfields zones of influence, as depicted on the Future Land Use Plan Map Series, shall regulate the use of potentially detrimental substances.

- **Policy 3-2:** Requests for changes to industrial land use on the Future Land Use Plan Map within wellfield zones of influence shall be evaluated and, as appropriate, discouraged.

- **Policy 3-3:** The use of septic systems shall be permitted, as appropriate, by the Florida Department of Health and Rehabilitative Services through the Broward County Public Health Unit.

- **Policy 3-4:** The Town shall require land uses currently on septic systems to be connected to central wastewater treatment facilities, when deemed to be practical and financially feasible, with priority given to those land uses in proximity to surface waters.

OBJECTIVE 4: **LOCATION AND DISTRIBUTION OF LAND USES**

Pursuant to the adopted Davie Future Land Use Plan map, land uses, intensities and densities shall be distributed and concentrated in such a manner so as to promote an economically sound community and discourage urban sprawl.

- **Policy 4-1:** A request for amendment to the Davie Future Land Use Plan map resulting in a change in density or intensity shall be evaluated based on the availability of existing essential facilities and services. Priority shall be given to requests requiring no increase in capital expenditures, and for proposals not requiring unprogrammed expansion of facilities or services.

- **Policy 4-2:** The extension of essential services shall be prioritized and directed to portions of the Town that already have other services available.

- **Policy 4-3:** Infill shall be encouraged as a means of directing growth to areas already containing essential infrastructure improvements, such as potable water and sanitary sewer services. Priority shall be given to areas suitable for infill development in the extension of infrastructure.

OBJECTIVE 5: **CONSISTENCY OF DEVELOPMENT WITH COMPREHENSIVE PLAN**

All land within the Town of Davie shall contain one or more of the uses specified for the applicable Future Land Use Designation in the Permitted Uses portion of the Implementation Section.

- **Policy 5-1:** The location and distribution of land in each Future Land Use Designation as shown on the Davie Future Land Use Plan map shall be in accordance with the adopted level of service standards as set forth in the Comprehensive Plan.

- **Policy 5-2:** The (re)zoning, (re)platting, and site planning of land shall be in compliance with the density ranges shown on the Davie Future Land Use Plan map and the applicable Future Land Use Designation provisions as contained in the Permitted Uses portion of the Implementation Section.

POLICY GROUP 6: RESIDENTIAL USE

- **Policy 6-1:** Residential development of moderate to high density should be located in close proximity to arterial roadways, available mass transit, and other community amenities, and should generally be located east of Pine Island Road, unless located adjacent to the S.R. 84/I-595 corridor, or I-75 interchanges.

- **Policy 6-2 :** Generally discourage plan amendments or use of flexibility provisions to increase residential densities or permit more intensive uses in areas west of Pine Island Roadand south of SW 14 Street, unless located adjacent to the S.R. 84/I-595 corridor or I-75 interchanges.

- **Policy 6-3:** Residential and mixed-use developments designated as dashed-line areas on the Davie Future Land Use Plan map shall be subject to density and use restrictions as contained in the Dashed-Line Areas discussion under the Residential category in the Permitted Uses portion of the Implementation Section.

- **Policy 6-4:** The location of Special Residential Facilities in areas designated for Residential use is encouraged where such facilities are compatible with and complementary to the surrounding community.

- **Policy 6-5:** Special Residential Facilities, including, but not limited to, ACLF's, group homes and adult day care facilities, shall be designed for maximum compatibility with adjacent residential uses. The Town shall ensure maximum compatibility through the Special Permit and/or site plan review processes.

- **Policy 6-6:** The application of "flexibility units" and "reserve units" shall be in accordance with the provisions as contained in the Flexibility Units and Reserve Units discussions under the Residential category in the Permitted Uses portion of the Implementation Section.

- **Policy 6-7:** Offices and neighborhood retail sales of merchandise or services may be permitted in areas designated for Residential use, pursuant to the limitations and provisions contained in the Permitted Uses portion of the Implementation Section.

POLICY GROUP 7: COMMERCIAL USE

- **Policy 7-1:** The Town shall endeavor to expand its economic base through expansion of the commercial sector of its economy.

- **Policy 7-2:** Zoning regulations for commercial development shall reflect consideration of the parcel size, capacity of the land to accommodate development, and market range, pursuant to the description on Types of Shopping Center Developments as contained under the Commercial category in the Permitted Uses portion of the Implementation Section.

- **Policy 7-3:** Zoning regulations shall provide for varying intensities of commercial development, and direct application of appropriate districts where compatible with adjacent and surrounding residential uses.

- **Policy 7-4:** Commercial land uses shall generally be located with access to primary transportation facilities including interstates, highways and arterials. Commercial uses located on arterials not designated by the Future Land Use Plan Map as commercial corridors should be limited to the intersection of two arterials or arterials and interstates. Consistent with Policy 7-1, vacant land with such access shall be evaluated for potential commercial use.

POLICY GROUP 8: COMMERCE/OFFICE USE

- **Policy 8-1:** The Commerce/Office category shall provide for the suitable location of office complexes and multi-use developments in a campus-like setting consistent with policies directing the location of commercial and industrial land uses.

POLICY GROUP 9: INDUSTRIAL AND EMPLOYMENT CENTER USE

- **Policy 9-1:** The Industrial category shall provide for the development of diversified facilities necessary to promote strong economic and employment bases for the Town.

- **Policy 9-2:** The Town shall endeavor to expand its economic base through expansion of the industrial and manufacturing sectors of its economy.

- **Policy 9-3:** To maximize the Town's limited inventory of Industrial land, non-industrial development of land designated for Industrial use is discouraged and, therefore, is limited pursuant to the Permitted Uses portion of the Implementation Section.

- **Policy 9-4:** Industrial land uses shall be located with access to primary transportation facilities, particularly interstates, highways, rail corridors, commercial airports, and navigable waterways. Consistent with Policy 9-2, vacant land with such access shall be examined for potential industrial development.

- **Policy 9-5:** Zoning regulations shall address the impacts normally associated with industrial development, such as noise, vibration, air pollution, and solid/hazardous wastes.

- **Policy 9-6:** Application of the Employment Center land use designation shall be directed to lands located in close proximity to major transportation features, and is designed to promote tourist-oriented, high technology and service-based activities.

POLICY GROUP 10: REGIONAL ACTIVITY CENTER USE

OBJECTIVE 10: The Town shall maintain, and expand if appropriate, a Regional Activity Center (RAC) designation for the area between University Drive and the Florida Turnpike, and S.R. 84 and Griffin Road.

- **Policy 10-1:** The Regional Activity Center land use designation shall promote and encourage large-scale development and redevelopment as well as small parcel infill development and redevelopment that facilitates a coordinated and balanced mix of land uses, providing for: educational facilities; a wide selection of housing types for all income ranges; shopping opportunities to meet the basic and expanded needs of students, residents, employees and visitors; research, training and other educational support uses; recreation; and, employment opportunities, including the use of mixed residential/nonresidential land uses. Accordingly, the RAC shall observe the following minimum and maximum levels of development:

	Max. Intensity	Min. acreage (%)	Max. acreage (%)
Residential	8,729 d.u.	560 acres (25%)	1120 acres (50%)
Commercial	3,432,528 s.f.	157 acres (0.7%)	450 acres (20%)
Industrial	8,529,000 s.f.	340 acres (15%)	680 acres (30%)
Recreation & OS	(does not apply)	13 acres (0.6%)	340 acres (15%)
Community Facility	12,388,500 s.f.	680 acres (30%)	1350 acres (60%)

- **Policy 10-2:** Expansion of the South Florida Education Center (SFEC) in a well-planned manner, compatible with adjacent land uses, should be encouraged within the RAC.

- **Policy 10-3:** The Town shall work with the SFEC schools and Broward County to develop alternative transportation modes within the RAC, including additional public transportation services, and paths for pedestrians, bicycles and horses that link downtown, the SFEC, existing pathways, and adjacent residential and employment centers.

- **Policy 10-4:** Affordable housing, including housing targeting SFEC Students and employees, shall be encouraged within the RAC.

- **Policy 10-5:** Mixed residential/nonresidential structures and developments receiving increases in density or intensity should be located near existing or future transit routes or alternative transportation corridors.

- **Policy 10-6:** Development activities within the RAC should stimulate quality redevelopment of businesses and dwellings, particularly development requests for increased density or intensity above that permitted by the existing zoning designations of land.

- **Policy 10-7:** Rezoning and variance requests within the RAC shall be evaluated against the comprehensive plan policies relating to the Regional Activity Center designation, and shall further the intent of the RAC, as expressed through plan policies contained herein. Applications for land use change and development within the redevelopment area portion of the RAC shall also be evaluated for consistency with the goals, objectives, policies and standards of the Chapter 163 redevelopment area plan.

- **Policy 10-8:** Compatibility of land uses within the RAC shall be supported by local land development regulations and plans to address the impacts of new development on existing land uses and residents, and by plans to improve community facilities and services.

- **Policy 10-9:** The maximum residential density within the RAC shall be 22 du/ac. Nonresidential intensity shall not exceed a building coverage ratio of 40 percent of net site area, and a height limit of 75 feet for inhabitable structures.

- **Policy 10-10:** New development or redevelopment involving parcels exceeding 25 acres in size, with the exception of land to be used for a community facilities, shall contain a mix of compatible uses which are also compatible with adjacent existing and planned uses. The amount of residential use within the development shall not comprise less than 10 percent, nor more

than 90 percent of the total gross floor area. A development need not incorporate residential use if it is planned to accommodate a balanced mix of at least 3 other types of principal uses from the following categories: retail/service; commercial entertainment; office; industrial an industrial research; educational and related research; cultural; recreation; lodging. Existing annexation agreements,, and existing or future court orders shall take precedence over these mixed-use development requirements.

- **Policy 10-11:** All new development within the RAC shall facilitate alternative modes of transportation to the automobile by providing at least one of the following features:

  a. Incorporate safe, convenient paved pedestrian/recreational pathways and bicycle lock-up facilities connecting to an existing pedestrian network, key destinations, and/or transit stops.

  b. Provide alternative modes of transportation for employees and/or facility users along with incentives for not utilizing automobiles for travel to the facility.

- **Policy 10-12:** All industrial development within wellfield zones of influence shall comply with the appropriate wellfield protection standards of Chapter 27, Article XIII of the Broward County Land Development Code.

POLICY GROUP 11: RECREATION AND OPEN SPACE USE

Abundant open space, including equestrian facilities, is a principal characteristic of The Town of Davie. Open space, equestrian trails and parks compliment the rural and western themes central to Davie's identity. Recreation and Open Space Policies, and land development regulations, are centered around the maintenance of open space and provision of recreation facilities.

- **Policy 11-1:** Regulations governing access to open spaces shall reflect the orientation of the site, and should consider the degree to which access may be permitted.

- **Policy 11-2:** The location and designation of lands for Recreation and Open Space use shall recognize the need for active and passive recreational facilities while preserving open spaces for aesthetic and environmental purposes.

- **Policy 11-3:** Development of unique natural areas shall focus on the resource orientation of the site.

EXHIBIT "A"

POLICY GROUP 10: REGIONAL ACTIVITY CENTER USE

- Policy 10.9: The maximum residential density within the RAC shall be 22 du/ac. Nonresidential intensity shall not exceed a building coverage ratio of 40 percent of net site area, and a height limit of 75 feet for inhabitable structures excluding the Regional Activity Center–Academical Village (RAC-AV) zoning district as defined in the Land Development Code. Within the RAC-AV zoning district the height limit for inhabitable structures shall be regulated by both the Comprehensive Plan and the Land Development Code.

- Policy 10-10: The RAC-AV zoning district, adopted to implement the RAC land use category, addresses compatibly with surrounding uses through setbacks, buffers, landscaping, and building placement. The review of development or redevelopment within the RAC-AV shall be consistent with Policy 10-8 above, the adopted RAC-AV land development regulations, and the following:

  a. Within the RAC-AV zoning district, the maximum building height shall be 150 feet for buildings in the Mixed Use Area, generally located in the western portion of the Nova Southeastern University (NSU) campus; 125 feet in height for buildings in the University Area, generally located in the northern and eastern portions of the NSU campus; and 50 feet in height for buildings in the School Area, generally located in the south-central portion of the NSU campus.

  b. All new development and redevelopment within the RAC-AV that exceeds a height of 50 feet will be reviewed by the Town for compatibility with adjacent existing and planned uses as part of the site plan process.

  c. Any building adjacent to existing single-family neighborhoods shall not exceed 50 feet in height. If a parcel of land identified in the RAC-AV district is directly adjacent to a natural or man made feature 50 feet or greater in width it shall not be considered adjacent for the purpose of this policy.

EXHIBIT "A"

FUTURE LAND USE ELEMENT

POLICY GROUP 10: REGIONAL ACTIVITY CENTER USE

OBJECTIVE 10: The Town shall maintain, and expand if appropriate, a Regional Activity Center (RAC) designation for the area between University Drive and the Florida Turnpike, and S.R. 84 and Griffin Road.

Policy 10-13: The Town of Davie RAC, described in Objective 10, is hereby designated as a Chapter 380 Regional Activity Center under Section 380.06(2)(e), F.S. and as a geographic area suitable for the application of increased development of regional impact thresholds for office, retail and other uses that may be amended under Section 380.0651, F.S.

Policy 10-14: Parcels utilizing the increased DRI thresholds shall undergo review for local impacts by the Town at the time of application review. Any residential development utilizing the increased DRI thresholds shall be required to provide an affordable housing component which meets or exceeds standards established by the Town.

- **Policy 11-4:** Land development regulations shall contain requirements for the preservation of open space in developments, to enhance the working and living environment.

- **Policy 11-5:** The location and development of parks and recreational facilities shall be compatible with the demands and needs as expressed by the Davie population, and shall consists of a minimum of ten (10) acres for every 1,000 existing and projected permanent residents, pursuant to Policy 1.1-1 of the Recreation, Open Space and Conservation Element of this Plan.

- **Policy 11-6:** Town shall continue to maintain and implement, through the Open Space Program and land development regulations, a network depicting bicycle, equestrian and pedestrian pathways and accessory facilities, such as horse hitching posts and bicycle racks.

- **Policy 11-7:** Acquisition and development of land for recreational pathways, including bikepaths, equestrian paths and pedestrian paths, shall be consistent with the Trail System of the Open Space Program.

- **Policy 11-8:** The Open Space Program shall consider lands containing unique natural features and environmental characteristics in setting priorities for land acquisition.

POLICY GROUP 12: CONSERVATION USE

- **Policy 12-1:** The Conservation category shall be used to preserve and protect lands that have been identified as environmentally sensitive or ecologically significant, and that promote the restoration of the Everglades system.

- **Policy 12-2:** Land development regulations shall encourage the acquisition or reservation of significant natural, historical and archaeological sites for the future enjoyment, education and benefit of the Town.

- **Policy 12-3:** The Town shall identify, preserve and protect prime aquifer and groundwater recharge areas.

- **Policy 12-4:** The Town shall protect and conserve areas known as reproduction, feeding and nesting areas for identified endangered or threatened species or species of special concern.

- **Policy 12-5:** The Town shall protect and conserve areas known to contain plant species listed in the Regulated Plant Index for protection by the Florida Department of Agriculture and Consumer Affairs.

- **Policy 12-6:** Adopted land development regulations shall promote and encourage the concept of xeriscape in landscaping.

- **Policy 12-7:** The Town shall protect the minimal seasonal flows and levels of surface watercourses, as established by the South Florida Water Management District or other agency under its authority.

POLICY GROUP 13: COMMUNITY FACILITIES USE

- **Policy 13-1:** The Community Facilities category shall provide for the development of a wide range of activity centers necessary to satisfy the demands of the existing and future Town populations.

- **Policy 13-2:** Community Facilities may be permitted in land use categories other than the Community Facilities category, provided such development is compatible with and does not adversely affect the development of the surrounding land for designated purposes.

- **Policy 13-3:** The location of regional community facilities should be encouraged, as appropriate, in close proximity to primary transportation facilities and in areas where such uses are complementary to surrounding existing and planned uses.

POLICY GROUP 14: UTILITIES USE:

OBJECTIVE 14: The reservation of lands for utilities purposes shall be consistent with the projected needs as outlined in the Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element of the Comprehensive Plan.

- **Policy 14-1:** To facilitate the growing needs of the Town, utilities facilities may be permitted in land use categories other than the Utilities category, provided such development is compatible with and does not adversely affect the development of the surrounding land for designated purposes.

POLICY GROUP 15: TRANSPORTATION USE AND ACCESS

OBJECTIVE 15: Ensure that adequate rights-of-way are secured to accommodate the existing and future needs of the Town of Davie.

- **Policy 15-1:** The designation of lands for Transportation purposes shall insure the preservation of transportation corridors and acquisition of rights-of-way necessary to address future needs.

- **Policy 15-2:** Adopted land development regulations shall incorporate provisions that address access to roadway facilities, on-site traffic circulation, and off-street parking for commercial development. Such regulations shall generally discourage commercial access to local roadways that directly serve low and medium-density residences.

- **Policy 15-3:** Land development regulations shall address and control access to the regional roadway network as depicted on the Broward County Trafficways Plan.

- **Policy 15-4:** Land development regulations shall provide for adequate, convenient and safe on-site circulation and off-street parking facilities.

- **Policy 15-5:** Adopt a local right-of-way map by March, 1999, and maintain and implement the map thereafter.

- **Policy 15-6:** Rights-of-way necessary to satisfy the requirements of the Broward County Trafficways Plan shall be conveyed to the public at the time of plat recordation.

- **Policy 15-7:** Rights-of-way necessary to satisfy the road requirements of the Town shall be conveyed to the Town in conjunction with the issuance of a development permit.

- **Policy 15-8:** The Town shall not issue development permits for construction within transportation corridors identified on the Broward County Trafficways Plan except in conformance with the Transportation land use category.

OBJECTIVE 16: **COMPATIBILITY OF LAND USE AND DEVELOPMENT WITH AIRPORTS**

Identify and reduce incompatible land uses adjacent to existing and proposed airport/heliport facilities.

- **Policy 16-1:** Areas surrounding existing and proposed airports/heliports shall be planned to promote compatible land uses consistent with the affected elements of the Comprehensive Plan.

- **Policy 16-2:** Within areas surrounding existing or committed airports/heliports, the Town shall not issue development permits for land uses or structures that are incompatible with airport/heliport uses, pursuant to the Development Review Requirements subsection of the Plan Implementation Requirements section of the Broward County Land Use Plan.

- **Policy 16-3:** The recommendations of adopted Part 150 Study Technical Reports shall be taken under consideration during land use decisions affecting airports/heliports and their adjacent areas.

- **Policy 16-4:** The Town shall protect from obstruction Federal Aviation Administration approved and locally adopted aircraft corridors.

OBJECTIVE 17: **LAND USE COMPATIBILITY AND COMMUNITY APPEARANCE**

Comprehensive Plan policies and land development regulations shall continue to encourage preservation, enhancement and maintenance of the Town's semi-rural character and western themed downtown business district. elimination of land uses found to be inconsistent with the character of the community and prevention of future incompatible uses.

- **Policy 17-1:** Lands designated for non-residential use shall be located in a manner which facilitates development, but does not adversely impact existing and designated residential areas.

- **Policy 17-2:** No property within the Town shall be rezoned to a zoning district that is not in compliance with the Davie Future Land Use Plan.

- **Policy 17-3:** Each development proposal shall be reviewed with respect to its compatibility with adjacent existing and planned uses.

- **Policy 17-4:** Land development regulations shall address the size, quantity, location and character of on-premises and off-premises signs, to promote community aesthetics and protect the health, safety and welfare of Town residents. The Town shall evaluate and revise the sign regulations as necessary to provide for the elimination of existing signage that is inconsistent with the community character.

- **Policy 17-5:** Land development regulations shall provide for the eventual phasing out of non-conforming uses.

- **Policy 17- 6:** Town land development regulations shall address incompatible land uses through requirements such as buffering and setbacks.

- **Policy 17-7:** Adopted land development regulations shall continue to set forth setbacks or separation regulations, landscaping requirements, and minimum open space criteria to enhance living and working environments.

- **Policy 17- 8:** The Town shall use mechanisms such as code enforcement, Safe Neighborhoods District/neighborhood improvement districts, and public information programs to encourage maintenance of existing residential communities and residential structures.

EXHIBIT "A"

OBJECTIVE 17: **LAND USE COMPATIBILITY AND COMMUNITY APPEARANCE**

Comprehensive Plan policies and land development regulations shall continue to encourage preservation, enhancement and maintenance of the Town's semi-rural character, rural/equestrian lifestyle and western themed downtown business district. The Town shall encourage elimination of land uses found to be inconsistent with the character of the community and prevention of future incompatible uses.

- **Policy 17-10:** The Town shall preserve the environment and character of rural areas using creative land use and planning techniques.

- **Policy 17-11:** The Town shall establish the following Rural Lifestyle Regulations to further the existing rural lifestyle and equestrian lifestyle of the Town:

  a. Scenic Corridor Overlay District – The Town shall establish a Scenic Corridor Overlay District and adopt land development regulations to address landscape requirements and the visual encroachment of buildings and structures along the scenic corridors.

  b. Rural Lifestyle Development Regulations – The Town shall establish zoning regulations to ensure that development is compatible with the surrounding land uses and maintains and enhances the rural character of the Town.

  c. Site Design Regulations – The Town shall establish design standards for residential development in the three residential zones (AG, A-1 and R-1) applicable to the Rural Lifestyle Initiative.

- **Policy 17- 9:** The Town shall maintain or enhance its western theme district and accompanying regulations and design standards.

OBJECTIVE 18: **MIXED USE DEVELOPMENT**

The Town shall continue to maintain land development regulations that accommodate mixed-use projects, planned developments and other types of non-traditional developments to promote a diverse, imaginative and innovative living and working environment.

- **Policy 18 -1:** The Town should encourage mixed-use developments, including residential/commercial mixes, in its downtown area to support downtown businesses and provide additional housing opportunities for students of the nearby colleges and universities. The Town should utilize the flexibility provisions of the Broward County Land Use Plan towards this end.

OBJECTIVE 19: **COMMUNITY REDEVELOPMENT**

The Town shall explore and implement economic incentive programs to facilitate the redevelopment of blighted areas.

- **Policy 19-1:** The Town shall encourage code compliance through code enforcement efforts.
- **Policy 19-2:** The Town shall utilize Federal, state and local programs, such as community development block grants and low-interest loan programs, to the greatest extent possible.
- **Policy 19-3:** Mixed-use residential/commercial development and redevelopment should be encouraged in downtown Davie.

OBJECTIVE 20: **INTERGOVERNMENTAL COORDINATION**

The Town shall promote intergovernmental coordination and public participation in planning efforts.

- **Policy 20-1:** The Town shall consider adjacent land uses in neighboring communities in evaluating changes in land use.
- **Policy 20-2:** The Town shall comply with the procedural requirements of Chapter 163, Florida Statutes, as amended from time to time, in processing amendments to the Comprehensive Plan.
- **Policy 20-3:** The Town shall encourage the informal mediation of conflicts and promote the resolution of differences in an expeditious fashion.

- **Policy 20-4:** Public participation mechanisms shall maximize the opportunity for input during the planning process.

OBJECTIVE 21 **POPULATION PROJECTIONS**

Amendments to the Future Land Use Element shall be consistent with the adopted populations projections contained herein.

- **Policy 21-1:** During each EAR process, the Town shall evaluate the Future Land Use Element for consistency with updated population projections, and shall further amend the Element as necessary to guide future land use decisions based upon the updated population projections.

OBJECTIVE 22: **NEIGHBORHOOD AND CORRIDOR PLANNING**

Prepare, and present to the Town Council, at least one (1) small-area or corridor plan per year for Council endorsement/adoption.

- **Policy 22-1:** By January, 1998, designate and prioritize those areas for which small-area plans will be prepared, with Town Council concurrence.

- **Policy 22-2:** Prepare the first small area plan by February, 1999.

OBJECTIVE 23: **PLANNING STUDIES TO BE COMPLETED**

Complete the following studies, resulting from the 1995 Evaluation and Appraisal Report, within the time frames indicated below:

- **Study #1:** By August, 1998, study and make recommendations, as necessary, regarding the need to incorporate an economic development section into the Future Land Use Element of the Comprehensive Plan.

- **Study #2:** By August, 1998, initiate amendments to the Comprehensive Plan and Future Land Use Map, if deemed necessary after study, to include land use categories consistent with the existing land use designations of unincorporated lands contiguous to the southern boundary of the Town.

- **Study #3:** By August, 1998, coordinate with appropriate agencies to analyze and make recommendations, as necessary, concerning the accuracy of population projections for the Town.

- **Study #4:** By August, 1998, study and make recommendations, as appropriate, on the feasibility and desirability of extending the traffic concurrency exception area.

- **Study #5:** By August, 1999, study and make recommendations, as necessary, regarding the distribution and compatibility of adjacent land uses, particularly in light of changing conditions, and of the success of currently available land use categories. In addition to general examination, specific attention should be given to the location and siting of communication apparatus, school location and siting, and the current land use designations of land areas proximate to existing, planned or programmed major transportation corridors.

GOAL 2: Direct growth to identified Urban Development areas within Davie in order to discourage urban sprawl, reduce development pressures on rural lands, maximize the use of existing public facilities and centralize commercial, governmental, retail, residential and cultural activitis.

OBJECTIVE 24: Identify urban redevelopment area(s) within Davie containing residential and non-residential uses, such as office, retail and community facility uses where public services and facilities are in place.

- Policy 24-1: Criteria and definitions for identifying urban redevelopment area(s) in Davie shall be established with the Future Land Use element of the Davie Land Use Plan.

- Policy 24-2: Geographical boundaries of established urban redevelopment area(s) shall be defined as depicted within the Future Davie Land Use Plan Series.

OBJECTIVE 25: Establish criteria which encourage development within urban redevelopment area(s) to promote economic development, increase housing opportunities, and maximize use of existing public facilities and services.

- Policy 25-1: Continue to seek Community Development Block Grant money to provide low interest loans for housing rehabilitation to home owners in the identified urban redevelopment area(s) within Davie.

- Policy 25-2: Promote conservation and rehabilitation of existing housing in the identified urban redevelopment area(s) within Davie, to improve the quality of life, through continued efforts of the Davie Community Redevelopment Agency, code enforcement, and community awareness efforts.

- Policy 25-3: Promote the construction of new housing units within the identified redevelopment area(s) within Davie through the continued efforts of the Davie Community Redevelopment Agency to qualify for and obtain CDBG funding for new efficient affordable housing units.

- Policy 25-4: Designated urban redevelopment area(s) shall be excepted from transportation facilities concurrency requirements consistent with Chapter 163.3180(5)(b), Florida Statutes.

- Policy 25-5: Integrated transportation systems, mass transit, facilities, bikeways and pedestrian corridors should be encouraged to serve urban redevelopment area(s) to reduce reliance upon automobile travel.

- Policy 25-6: The Davie Comprehensive Plan shall establish standards and motoring procedures for the expansion of mass transit, pedestrian travel and other forms of non-automobile travel within urban redevelopment area(s).

- Policy 25-7: Provide for transportation concurrency exceptions within the established urban redevelopment area(s) within Davie to all land uses and developments through the granting of Development Orders in the absence of compliance with the Town's and County's concurrency monitoring system, provided the development is consistent with all other relevant sections of the Town's codes, ordinances and regulations.

- Policy 25-8: Designated urban redevelopment area(s) must contain residential and non-residential uses, such as office, retail and community facility uses, and must be identified on the Davie Land Use Plan Map Series consistent with the following criteria:

  1) Where any two areas meeting the criteria for designation as urban redevelopment area(s) are contiguous, they may be combined on the Davie Land Use Plan Map Series as one distinct geographical area for the purposes of permitting development pursuant to the goals, objectives and policies of the plan.

  2) Designated areas may be expanded by an amendment to the Davie Land Use Plan provided that the proposed areas meet the criteria set forth below:

  a) The boundaries and approximate acreage of the area must be identified.

  b) Public facilities and services such as sewage treatment systems, schools, and recreation areas must be in place.

  c) There must be availability of transportation facilities and mass transit service within a quarter mile of all areas, providing a headway of thirty minutes or less, and available at least 5 days a week.

  d) There must be an analysis considering the impact of the urban redevelopment area on the Florida Intrastate Highway System

and considering policies / programs to encourage alternatives to automobile travel on the Florida Intrastate Highway System such as, but not limited to, expansion of capacity and ridership on the Tri-Rail including expanded feeder bus service, expansion of bus service, creation of transportation management associations, the provision of local transit service within designated areas such as "trolleys", and / or improvement of pedestrian access to transit passenger facilities.

e) The area must be over 80% built-out, regularly served be mass transit and the subject of a locally approved revitalization / redevelopment plan.

f) Alternatively, in addition to meeting criteria a-e above, the area may be a designated Community Redevelopment Area.

OBJECTIVE 26: The Town shall review development applications within the established urban redevelopment area(s) as to their impact on the local, county, state and Florida Intrastate Highway System so as to encourage alternatives to automobile travel.

- Policy 26-1: The Town shall establish development strategies for the established urban redevelopment area(s) which will encourage the use of safe and convenient access to public transit terminals, sidewalks, boardwalks, and public parking areas.

- Policy 26-2: The Town shall coordinate it's strategies for automobile travel alternatives with the plans and programs of Broward County, the Florida DOT, and appropriate state plans and statutes. A designated Town representative shall interface with the above agencies to coordinate transportation planning alternatives on an annual or more frequent basis as necessary.

POLICY GROUP 27: SCHOOL SITING:

- Policy 27-1: The Town shall continue to permit public schools, which are classified by this Plan as a type of community facility, in the following land use categories:

  a. Residential
  b. Rural Ranches
  c. Residential/Office
  d. Commercial
  e. Commerce/Office
  f. Employment Center
  g. Industrial
  h. Regional Activity Center
  i. Community Facilities

- Policy 27-2: The Town will utilize the following Broward County School

Board land area guidelines for individual school facilities:

a. elementary school: 12 acres
b. middle school: 20 acres
c. high school: 45 acres

• Policy 27-3: Collocation of public schools with other community facilities shall be considered when:

a. New or replacement schools are funded in the School Board's Capital Budget and are adjacent to other existing public facilities;
b. New facilities are funded in the Town's Capital Improvement Element and can be located adjacent to public schools; and/or
c. Joint use projects are created and implemented.

• Policy 27-4: The Town will encourage the collocation of public facilities such as libraries, parks and community centers with public schools to the extent practical and financially feasible. The following criteria shall be considered for colloacting public schools and public facilities:

a. Availability of vacant land of suitable size and dimensions for the collocated public uses;
b. Compatibility of the collocated public uses with the adjacent land uses (ex: noise, odors, glare, debris, dust, traffic, high voltage transmission lines etc.) and the compatibility of the collocated public uses' future land use designation(s) with the future land use designations of adjacent areas;
c. Availability of infrastructure, public services (ie: roadways, public transit, potable water, sanitary sewer, drainage, and aquifer recharge) and utilities (electricity, gas, etc.);
d. Environmental limitations (ex: wetlands, uplands, soil conditions, contaminated sites, potential brownfield sites, etc.);
f. Proximity to residential areas, particularly urban residential areas, and areas of very low, low and moderate income housing; and
e. Access approaches, including roadways, public transit, bikeways, recreational trails and pedestrianways;
g. Demographic base for purposes of encouraging diversity.

• Policy 27-5: The Town shall incorporate provisions in the Land Development Code requiring new development, located adjacent to an existing or planned public school site, to incorporate features such as walls, solid hedges or increased setbacks where such use would be incompatible with the public school.

• Policy 27-6: The Town shall incorporate provisions in the Land

Development Code which provide for safe pedestrian and bicycle access to schools.

Future Land Use Plan: Monitoring and Evaluation

The Town of Davie Planning and Zoning Board, as designated Local Planning Agency, is responsible for the preparation and implementation of the Comprehensive Plan. The LPA shall establish a program and procedures for monitoring and evaluating Plan implementation, to facilitate compliance with the five-year Evaluation and Appraisal Report requirement. At a minimum, the Town shall update base data and information, analyze the major problems encountered during the review period, and assess the success (or failure) of the Plan to address these problems, and evaluate objectives as compared with actual results.

The Town is limited as to the number of annual amendments to the Future Land Use Plan map that can be processed. Pursuant to Section 163.3187(1), amendments may be processed not more than two times during any calendar year, except in the case of small-scale amendments or an emergency. The statute further describes an "emergency" as "any occurrence of threat thereof whether accidental or natural, caused by man, in war or peace, which results or may result in substantial injury or harm to the population or substantial damage to or loss of property or public funds." Developments of Regional Impact (DRIs) are exempt from the processing limitation. Insofar as the Town Future Land Use Plan must be certified and recertified, for each amendment thereto, by the Broward County Planning Council, the Town shall also abide by the regulations established by that agency for the processing of amendments to the Plan.

The Town shall continuously monitor the cumulative effects of Future Land Use Plan amendments, rezonings, and other land development regulations to determine the consistency with Comprehensive Plan goals, objectives, and policies. Evaluation measures for the Future Land Use Element are presented below.

1. Ensure that all amendments to the land development regulations are consistent with this comprehensive plan.

2. Monitor development patterns, rezonings and amendments to the Future Land Use Plan map to evaluate the distribution, densities and intensities of land uses subject to development and ensure that development is consistent with permitted uses, densities, intensities, objectives and policies established herein.

3. Monitor nonconforming uses in order to expedite their elimination or minimize their impact through buffering, etc. where inconsistent with the character of the community or incompatible with adjacent uses.

4. Monitor and influence the availability of grants, programs and planning techniques/opportunities (ex: changes in Broward County flexibility provisions) for community development purposes.

5. Monitor the rezoning and development of residential lands to insure development that is consistent with the Permitted Uses and Densities Monitor land

use decisions in neighboring jurisdictions for their effect on the Town. Conversely, consider the impact that Town land use decisions may have on neighboring jurisdictions, while providing opportunities for extra-jurisdictional public participation in land use decisions.

6. Monitor the rezoning and development of commercial lands to insure development that is consistent with the Permitted Uses and Densities. Monitor progress in completing and implementing the studies and small area plans recommended herein.

7. Monitor development and aesthetic qualities of development as compared to the community character the Town wishes to maintain.

8. Monitor and record the impact of development applications within the established urban redevelopment areas on the local, county and state transportation network.

Future Land Use Plan: Plan Implementation

Permitted Uses and Densities in Future Land Use Plan Categories

This section identifies those uses permitted in the categories shown on the Davie Future Land Use Plan map and contained within this Plan. Zoning as to permitted uses and densities shall be in compliance with the uses enumerated in this section and the Davie Future Land Use Plan map designations. It should be noted that the Town Land Development Regulations, including the zoning ordinance, may further restrict permitted uses. The permitted uses outlined in this section include the potential uses that may be permitted by the Town's zoning ordinance.

Areas designated on the Davie Future Land Use Plan map generally follow property ownership lines, geographic boundaries such as canals, and road rights-of-way. Zoning regulations may permit any or all of the uses enumerated within each category; however, all uses shall be in compliance with the permitted uses and densities of the applicable category. Uses may be permitted outright, or subject to special conditions or exceptions. All land use categories shall permit local roads, water and wastewater lines and electricity distribution lines designed to serve the individual development only.

RESIDENTIAL LAND USE CATEGORY

The Residential land use category is primarily designed to accommodate dwellings, and may include complementary uses supportive of and integral to dwellings.

The permitted uses of the Residential category include the following:

1. Dwelling units, subject to the density limits shown on the Davie Future Land Use Plan map for the particular parcel.

2. Home occupations and other uses accessory to a dwelling unit.

3. Hotels, motels, and similar lodging. The maximum number of hotel, motel or similar lodging units permitted on any parcel designated for Residential use is double the maximum number of dwelling units permitted by the Davie Future Land Use Plan map designation.

4. Parks, golf courses and other outdoor recreational facilities, and recreational, civic, or other cultural buildings ancillary to the primary outdoor recreational use of the site.

5. Community facilities designed to serve the residential area such as schools, day care centers, churches, clinics, nursing homes, rehabilitation centers,

governmental administration, police and fire protection facilities, libraries, and civic centers.

6. Public and private utilities, provided such use does not preclude or adversely affect the future use of the surrounding area for residential purposes. Permitted utilities shall not include power plants, power plant substations, and transmission facilities.

7. Communication facilities, provided such uses do not preclude or adversely affect the future use of the surrounding area for residential purposes.

8. Agriculture.

9. Office and/or retail sales of merchandise or services, subject to the following limitations and provisions:

   a. No more than a total of five percent (5%) of the area designated for residential use on the Davie Future Land Use Plan map within a flexibility zone may be used for offices and/or retail sales of merchandise or services.

   b. No added contiguous area used for offices and/or retail sales of merchandise or services may exceed ten (10) acres. For the purpose of this provision, contiguous is defined as: attached; located within 500 feet; or separated only by streets and highways, canals and rivers, or easements.

   c. Use of "commercial flexibility" is subject to a compatibility review by Broward County as provided by paragraph "g" under "Residential Density", below.

   d. Regardless of the constraints of a. and b. and c. above, space within residential buildings in areas designated for density of at least 25 units per acre may be used for offices and/or retail sales of merchandise or services, as long as no more than 50% of the floor area is used for said purposes.

   e. Regardless of the constraints of a. b. and c. above, space within residential buildings in areas designated for density of at least 16 units per acre may be used for offices, as long as no more than 50% of the floor area is used for offices.

10. Recreational vehicle park sites in the Residential (10), (16) and (22) density ranges. The maximum number of recreational vehicle park sites permitted is:

    a. Equal the maximum number of dwelling units designated for that parcel on the Davie Future Land Use Plan map if the permanent location of recreational vehicles on the site is permitted; or

    b. Double the maximum number of dwelling units designated for that parcel on the Davie Future Land Use Plan map if the permanent location of recreational vehicles on the site is prohibited.

11. Special Residential Facilities; subject to: meeting one of the Category definitions as contained in the Special Residential Facilities Permitted Uses subsection of the Plan Implementation Requirements section of the Davie Future Land Use Plan; meeting density provisions by Category type stated below; and the limitations as expressed by the Davie Future Land Use Plan map; and, if applicable, the provisions regarding the use and allocation of reserve units, flexibility units or bonus sleeping rooms as contained in the "Administrative Rules Document" of the Broward County Planning Council.

    Density Provisions:

    a. Special Residential Facility Category (1) development shall count as one (1) dwelling unit each.

    b. Special Residential Facility Category (2) development shall count as two (2) dwelling units each.

    c. Special Residential Facility Category (3) development shall count as one (1) dwelling unit per every two (2) sleeping rooms regardless of the number of kitchens or baths.

Residential Density

a. Density Standards. Residential areas are shown on the Davie Future Land Use Plan map according to six ranges of density:

- Residential (1) permits up to one (1) dwelling unit per gross acre.
- Residential (3) permits up to three (3) dwelling units per gross acre.
- Residential (5) permits up to five (5) dwelling units per gross acre.
- Residential (10) permits up to ten (10) dwelling units per gross acre.
- Residential (16) permits up to sixteen (16) dwelling units per gross acre.
- Residential (22) permits up to twenty-two (22) dwelling units per gross acre.
- Special Classification permits the maximum density per gross acre as depicted on the Future Land Use Plan Map for the particular parcel.

Other land use categories and land uses are subject to density standards as follows:

- Residential development within the Agriculture land use category is subject to the density standards and provisions contained within the Agriculture land use category of the Permitted Uses subsection.

- Special Residential Facilities are subject to the density standards contained within applicable land use categories in the Permitted Uses subsection.

- Recreational vehicle sites are subject to the density standards contained within applicable land use categories in the Permitted Uses subsection.

- Hotels, motels and similar lodging are subject to the density standards contained within applicable land use categories in the Permitted Uses subsection.

b. Density Calculation. All references to density within the Davie Future Land Use Plan means gross density. Gross density means the number of dwelling units constructed or proposed within an area, divided by the gross acreage of the area. Gross acreage means the total number of acres in an area, including acreage used or proposed for streets, lakes, waterways, and other proposed land uses permitted in residential areas by the Davie Future Land Use Plan.

   Calculations of acreage covered by different land use categories on the Davie Future Land Use Plan map will necessarily be approximate, due to the scale of the map. Where edges of land use categories are close to property lines, streets, transmission lines or other existing boundaries, edges should be construed to follow those boundaries. A lake or canal should be construed as having been assigned the same land use category as that assigned to adjacent unsubmerged land. The New River and the rivers and canals of the primary drainage system as identified within this plan shall not, however, be construed as having credit towards residential density.

c. Arrangement of Dwelling Units. The arrangement or distribution of dwelling units on a particular parcel of land is subject to the Town's Zoning and other Land Development Regulations.

d. Dashed-Line Areas. Selected parcels are identified on the Davie Future Land Use Plan map by dashed lines circumscribing their edges. For each of these areas, the maximum overall density in dwelling units per acre is the number which appears within the dashed line. That number can be multiplied by the number of acres inside the dashed line, including areas not designated for residential use, to ascertain the maximum number of dwelling units allowable within the dashed line area. The dwelling units that are permitted within areas circumscribed by a dashed line may only be applied within the boundaries of the circumscribed area and may not be transferred.

e. Flexibility Units. "Flexibility units" mean the difference between the number of dwelling units permitted within a flexibility zone by the Future Broward County Land Use Plan Map (Series) and the number of dwelling units permitted within the flexibility zone by the Davie Future Land Use Plan map, as certified.

   Since the certified Davie Future Land Use Plan map may be more restrictive than the Future Broward County Land Use Plan Map (Series), available flexibility units may be utilized by the Town to rearrange residential densities. This

rearrangement of densities is accomplished within "flexibility zones", as depicted in this plan. The boundaries of and rules governing the rearrangement of densities therein are pursuant to the Broward County Planning Council's "Administrative Rules Document". However, the total number of dwelling units within any flexibility zone as shown on the Davie Future Land Use Plan map shall not exceed the total number of dwelling units within the corresponding flexibility zone as shown on the Future Broward County Land Use Plan Map (Series). Assignment of flexibility units is subject to the requirements of paragraph "g", below.

f. Reserve Units. "Reserve units" mean additional permitted dwelling units equal up to two percent (2%) of the total number of dwelling units permitted within a flexibility zone by the Future Broward County Land Use Plan Map (Series). Allocation of reserve units will be administered within "flexibility zones" and not require amendment of the Davie Future Land Use Plan. The boundaries of and rules governing the rearrangement of densities therein are pursuant to the Broward County Planning Council's "Administrative Rules Document". The number of reserve units assigned to a parcel designated for residential use on the Davie Future Land Use Plan map may not exceed 100% of the maximum number of dwelling units indicated for the parcel by the Davie Future Land Use Plan map. However, the Davie Future Land Use Plan map, zoning, and other applicable Land Development Regulations shall not permit any density higher than fifty (50) dwelling units per gross acre. Assignment of residential reserve units is subject to the requirements of paragraph "g", below.

g. Utilization of the Broward County Land Use Plan "Flexibility Rules" shall be subject to a determination by the Broward County Commission that such allocation is compatible with adjacent land uses, and that impacts on public school facilities have been adequately considered. Allocations of "flexibility" for "affordable housing" or "special residential facilities", or within "urban infill, urban redevelopment and downtown revitalization areas", shall be exempt from this policy.

SPECIAL RESIDENTIAL FACILITIES

Special Residential Facilities such as group homes, foster care facilities and life care facilities, are not specifically designated on the Davie Future Land Use Plan map as a separate category, but may be permitted, subject to conditions, in areas designated the following: Residential, Commercial, Office Park, Agricultural, and Community Facilities. See the specific land use category for applicable conditions. It is preferable that such residential facilities be included within residential neighborhoods. The Town may allow a maximum of one hundred (100) "bonus" sleeping rooms, consistent with Broward County Ordinance No. 85-92, that are permanently dedicated to Special Residential use without allocating density.

Special Residential Facility, Category (1): a housing facility which is licensed by the State of Florida for no more than eight (8) individuals who require treatment, care, rehabilitation or education. The facility is usually referred to as a group home, and may accommodate the elderly, dependent children, physically disabled, developmentally disabled, or individuals not overtly of harm to themselves or others. There may be more than one kitchen within the housing facility; there may be more than one Category (1) facility on a parcel.

Special Residential Facility, Category (2): a housing facility which is licensed by the State of Florida for nine (9) to sixteen (16) non-elderly individuals who require treatment, care, rehabilitation or education. This includes individuals who are dependent children, physically disabled, developmentally disabled or individuals not overtly of harm to themselves or others. There may be more than one kitchen within the housing facility; there may be more than one Category (2) facility on a parcel.

Special Residential Facility, Category (3):

a. Any housing facility licensed by the State of Florida for more than sixteen (16) non-elderly individuals who require treatment, care, rehabilitation or education. This includes individuals who are dependent children, physically disabled, developmentally disabled or individuals not overtly of harm to themselves or others; or,
b. Any housing facility licensed by the State of Florida for more than eight (8) unrelated elderly individuals; or,
c. Governmentally subsidized housing facilities entirely devoted to the care of the elderly, dependent children, the physically handicapped, developmentally disabled or individuals not overtly of harm to themselves or others; or,
d. Any not-for-profit housing facility for unrelated elderly individuals; or,
e. Any housing facility which provides a life-care environment, including, but not limited to, creation of a life estate in the facility itself and provision of off-site or on-site medical care.

COMMERCIAL LAND USE CATEGORY

The Commercial land use category provides for business, office, retail, service and other related commercial uses which are necessary to accommodate Davie's population.

The permitted uses of the Commercial category include the following:

1. Retail uses and personal services.

2. Office and business uses.

3. Wholesale, storage, light fabricating and warehouse uses.

4. Hotels, motels, and similar lodging.

5. Recreation and open space, cemeteries, and commercial recreation uses.

6. Community facilities and utilities, provided such uses do not preclude or adversely affect the future use of the surrounding area for commercial purposes.

7. a. Special Residential Facility Category (2) development as defined in the Special Residential Facilities Permitted Uses subsection of the Plan Implementation Requirements section of the Davie Future Land Use Plan; subject to the allocation of two (2) reserve or flexibility units in accordance with the Special Residential Facility provisions and policies for the application of these units as contained in the "Administrative Rules Document" of the Broward County Planning Council.

   b. Special Residential Facility Category (3) development as defined in the Special Residential Facilities Permitted Uses subsection of the Plan Implementation Requirements section of the Davie Future Land Use Plan; subject to the allocation of reserve units or flexibility units in accordance with the Special Residential Facility provisions and policies for the application of these units as contained in the "Administrative Rules Document" of the Broward County Planning Council; each flexibility or reserve unit shall permit two (2) sleeping rooms regardless of the number of kitchens or baths.

8. Non-residential agricultural uses.

9. Residential uses are permitted in the same structure as a commercial use provided that flexibility or reserve units are applied to the parcel; and:

a. The residential floor area does not exceed 50% of the total floor area of the building; or

b. The first floor is totally confined to commercial uses.

c. For parcels 5 acres in size or less, free standing multi-family residential uses are permitted; within areas designated as Urban Infill, Urban Redevelopment or Downtown Revitalization Areas, free standing multi-family residential uses are permitted on parcels 10 acres in size or less; and/or

d. For mixed commercial/residential developments greater than 5 acres in size (or 10 acres within areas designated as Urban Infill, Urban Redevelopment or Downtown Revitalization Areas) free standing multi-family residential uses are permitted provided that the gross residential acreage does not exceed 5 acres (10 acres within areas designated as Urban Infill, Urban Redevelopment or Downtown Revitalization Areas) or 40% of the total gross acreage of the commercially designated parcel, whichever is greater, and the entire mixed commercial/residential development be governed by specific zoning regulations that establish criteria to ensure proper integration and compatibility of land uses within and surrounding the development;

e. Residential units within the same structure as commercial uses for the owner, manager or caretaker of the commercial uses may be located in areas designated commercial without the application of flexibility units or reserve units.

10. Recreational vehicle park sites at a maximum density of ten (10) sites per gross acre if permanent location of recreational vehicles on the site is permitted by the Town's Land Development Regulations, or twenty (20) sites per gross acre if such permanent location is prohibited by the Town's Land Development Regulations; subject to allocation by the Town of available flexibility or reserve units.

11. Transportation and communications facilities.

Types of Shopping Center Developments. Shopping centers are usually categorized according to land size, service area and total leasable area, and are referred herein as Neighborhood, Community and Regional shopping centers.

Neighborhood Shopping Centers typically range from 30,000 to 100,000 square feet of gross leasable area for the sale of convenience goods (food, drugs, and sundries) and personal services which meet the daily needs of an immediate neighborhood. Neighborhood shopping centers range in area from approximately 3 to 10 acres and generally require a minimum market support population ranging from 2,500 to 40,000 people.

Community Shopping Centers typically range from approximately 100,000 to 300,000 square feet of gross leasable area and is generally built around one or more junior department store(s) , variety store(s) or "big-box" specialty store(s) and supermarket as the major tenants. Community shopping centers typically range in area from approximately 10 to 30 acres and serve trade areas ranging from an estimated 40,000 to 150,000 people.

Regional Shopping Centers typically range from approximately 300,000 to 1,000,000 square feet or more of gross leasable area and provides a full range of shopping goods, general merchandise, apparel, furniture and home furnishings. Such center is usually built around a full-line department store(s) as the major drawing power. Regional shopping centers are approximately 30 acres in size or larger, and generally require a minimum market support population in excess of 150,000 people and a trade area extending 10 to 16 miles or more modified by such factors as competitive facilities and travel time over access highways.

RESIDENTIAL/OFFICE LAND USE CATEGORY

The Residential/Office category accommodates residential and limited non-residential uses for application in areas where a transition is appropriate.

The permitted uses of the Residential/Office category include the following:

1. Residential dwelling units at a maximum density of five (5) units per acre

2. Home occupations and accessory uses

3. Professional and business offices constructed and maintained to resemble a residential structure.

4. Community Facilities

5. Agriculture

6. Public and private utilities, provided such use does not preclude or adversely affect the future use of the surrounding area for residential/office purposes. Permitted utilities shall not include power plants, power plant substations, and transmission facilities.

COMMERCE/OFFICE LAND USE CATEGORY

The Commerce/Office category is designed to encourage the development of commerce activities and offices for administrative, professional and business purposes in a campus-like setting. While the primary intent of this category is to provide employment generators, a limited amount of area may be devoted to employee services.

The permitted uses of the Commerce/Office category include the following:

1. Professional, business and financial offices and institutions.

2. Educational, scientific and industrial research facilities, research laboratories, and medical or dental laboratories.

3. Restaurants, retail establishments and personal services which shall not consume more than 20 percent of the gross floor area of any single development.

4. Facilities for light fabrication which are operated entirely within an enclosed structure.

5. Wholesale, storage and warehouse uses.

6. Agriculture, until the area is converted to an urban use.

7. Sales and display of automobiles, automotive products.

8. Utilities, not including sanitary landfills, and provided such uses do not preclude or adversely affect the future use of the surrounding area for Commerce/Office purposes.

9. Recreation and Open Space and Community Facilities, provided such uses do not preclude or adversely affect the future use of the surrounding area for Commerce/Office purposes.

10. Communications facilities.

11. Hotels, motels, or similar lodging.

INDUSTRIAL LAND USE CATEGORY

The purpose of the Industrial category is to promote the development of a variety of industrial uses, including employment and business centers, that enhance and expand the economic base of the Town.

The permitted uses of the Industrial category include the following:

1. Light and heavy industrial.

2. Heavy commercial uses including new and used automobile, truck, motorcycle, boat and trailer display, sales, and service; newspaper, magazine, and printing plants; bakeries, carpentry, cabinet shops and other trade shops; motion picture studios; ice houses; propane gas sales and repair; and salvage yards.

3. Educational, scientific and industrial research facilities, research laboratories, and medical or dental laboratories.

4. Office uses.

5. Transportation and communication facilities.

6. Recreation and open space, cemeteries, and commercial recreation uses, as long as the location of these uses does not preclude or adversely affect the future use of surrounding areas for industry.

7. Community facilities and utilities, provided such uses do not preclude or adversely affect the future use of the surrounding area for industrial purposes.

8. Non-residential agricultural uses.

9. Ancillary commercial uses within buildings devoted to primary industrial uses.

10. Wholesaling uses.

11. The following uses may also be permitted with assignment of "commercial flexibility," subject to the requirement for a Broward County compatibility determination consistent with paragraph "g" under "Residential Density" in this Plan Implementation Section, as long as the total area of these uses does not consume more than 20 percent of the industrial land designated on the Davie Future Land Use Plan map within a flexibility zone, and as long as the location of these uses do not preclude or adversely affect the future use of surrounding areas for industrial uses:

    a. Commercial and retail business uses.

    b. Hotel, motel and similar lodging.

EMPLOYMENT CENTER LAND USE CATEGORY

The purpose of the Employment Center category is to encourage non-residential development, compatible with residential and other less intensive land uses, and which would support the tourist-oriented segment of the economy as well as high technology and service-based activities.

The permitted uses of the Employment Center category include the following:

1. Principal Uses:

    a. light manufacturing
    b. office uses
    c. research and assembly
    d. hotels, motels, and similar lodging
    e. restaurants and personal services
    f. community facilities
    g. communication facilities
    h. non-residential agricultural uses
    i. Residential uses are permitted without the need to amend the local land use plan map, provided that the local government entity applies flexibility or reserve units to the parcel in the following manner:

        (1) For parcels 5 acres in size or less, free standing multi-family residential uses are permitted subject to a Broward County compatiblility determination; within areas designated on the County Land Use Plan as Urban Infill, Urban Redevelopment or Downtown Revitalization Areas, free standing multi-family residential uses are permitted on parcels 10 acres in size or less.

        (2) For mixed use developments greater than 5 acres in size (or 10

acres within areas designated on the County Plan as Urban Infill, Urban Redevelopment or Downtown Revitalization areas), free-standing multi-family residential uses are permitted provided that the gross residential acreage does not exceed 5 acres (10 acres within areas designated on the County Plan as Urban Infill, Urban Redevelopment or Downtown Revitalization Areas) or 40% of the total gross acreage of the employment center designated parcel, which ever is greater, and that the entire mixed use development be governed by specific zoning regulations that establish criteria to ensure proper integration and compatibility of land uses within and surrounding the development. Use of "flexibility" provisions may be subject to a compatibility determination, as discussed under "Residential Density," paragraph "g" of this Plan Implementation Section.

2. Accessory Uses (Limited to less than fifty percent [50%] of the site):

   a. transportation and utilities, provided such uses do not preclude or adversely affect the future use of the surrounding area for employment center purposes
   b. storage
   c. retail within buildings devoted to principal uses
   d. recreation and open space uses

3. Commercial and retail business uses may also be permitted by assignment of "commercial flexibility" with the requirement for a Broward County compatibility determination consistent with paragraph "g" under "Residential Density" of this Plan Implementation Section. As long as the total area of these uses does not consume more than 20 percent of the employment center land designated on the Future Broward County Land Use Plan Map (Series) within a flexibility zone, as long as the location of these uses do not preclude or adversely affect the future use of surrounding areas for employment center use.

REGIONAL ACTIVITY CENTERS

The Regional Activity Center land use category is intended to encourage development or redevelopment of regional significance. This category is to facilitate mixed use development, encourage mass transit, reduce the need for automobile travel, provide incentives for quality development and give definition to the urban form. For an area to qualify as a Regional Activity Center, the following criteria must be met:

1. The Regional Activity Center land use category shall not be approved where other land use designations provide sufficient flexibility for the existing or proposed land uses.

2. The density and intensity of land uses permitted within each Regional Activity Center shall be specified within the Davie Future Land Use Plan.

3. Regional Activity Centers shall include mixed land uses of regional significance.

4. Regional Activity Centers shall either be the subject of an Areawide Development of Regional Impact, or provide direct access to existing or proposed airports, ports and rail mass transportation facilities.

5. Each Regional Activity Center shall be a defined geographical area, delineated on the Davie Future Land Use Plan map.

RURAL RANCHES LAND USE CATEGORY

Areas are designated Rural Ranches on the Future Broward County Land Use Plan Map (series) to protect the semi-rural character and life-style of existing low density rural ranch areas. Rural ranch areas are characterized by residential estates, horse ranches and agricultural uses. The maximum permitted density within this category is one unit per two and one half gross acres or one unit per two net acres. Limited community facility and utility uses are permitted for the purposes of serving the rural ranch communities. Application of flexibility/reserve units and commercial flexibility is not permitted within areas designated Rural Ranches. **Due to the replacement of the Agricultural designation with the Rural Ranches designation, the permitted uses and policies associated with the Rural Ranches designation shall apply to parcels designated Agricultural on the Town of Davie Future Land Use Plan Map until such parcels are redesignated.**

Uses Permitted in areas designated Rural Ranches are as follows:

1. A maximum of one unit per two and one half gross acres or one unit per two net acres with no clustering permitted.

2. Home occupations and other uses accessory to a dwelling unit.

3. Open Space and Recreation uses designed to serve the residential area.

4. Community facilities designed to serve the residential area limited to schools, day care centers, churches, clinics governmental administration, police and fire protection facilities, libraries and civic centers not to exceed five acres in size.

5. Public utilities limited to water and wastewater treatment plants, pumping stations, telecommunications facilities electrical substations and electric lines and drainage facilities and structures.

6. Agricultural uses including cultivation of crops, groves, thoroughbred and pleasure horse ranches, private game preserves, fish breeding areas, tree and plant nurseries, cattle ranches and similar activities.

7. Cemeteries.

RECREATION AND OPEN SPACE LAND USE CATEGORY

The Recreation and Open Space category is designed to accommodate recreation and open space uses to serve public recreational needs. Land designated pursuant to this category is generally developed for low intensity uses, and maintain as much of the natural characteristics as possible.

The permitted uses of the Recreation and Open Space category include the following:

1. Passive recreational uses, including, but not limited to: nature centers and trails, scenic areas, wildlife sanctuaries and feeding stations, aquatic preserves, and picnic areas.

2. Golf courses which are intended to remain as permanent open space.

3. Camping grounds and facilities.

4. Cemeteries.

5. Active recreational uses, including, but not limited to: tennis courts, playgrounds, swimming pools, athletic fields and courts, beaches and bikeways.

6. Boat ramps and docks.

7. Outdoor cultural, educational and civic facilities, including, but not limited to: animal exhibits, habitats, bandshells, and outdoor classrooms.

8. Concessions only when accessory to the above uses. Examples include refreshment stands, pro shops, souvenir shops, and rental facilities.

COMMERCIAL RECREATION LAND USE CATEGORY

The Commercial Recreation category is designed to accommodate major facilities that offer recreational opportunities to the Town. Commercial Recreation facilities are generally "for-profit" resources, operated by the private sector.

The permitted uses of the Commercial Recreation category include the following:

1. Outdoor and indoor recreational facilities such as active recreational complexes, marinas, stadiums, bowling alleys, and golf courses.

2. Accessory facilities, including outdoor and indoor recreational facilities, that are determined to be an integral part of and supportive to the primary recreational facilities (excluding residential uses).

3. Hotels, motels and similar lodging ancillary to the primary commercial recreation use.

4. Other active and passive recreation uses.

5. Recreational vehicle park sites at a maximum density of ten (10) sites per gross acre if permanent location of recreational vehicles on the site is permitted by the Town's Land Development Regulations, or twenty (20) sites per gross acre if such permanent location is prohibited by the Town's Land Development Regulations; subject to allocation by the Town of available flexibility or reserve units.

CONSERVATION LAND USE CATEGORY

The Conservation category is used to protect Natural Reservations that are under public ownership and are operated by contractual agreement with or managed by a federal, state, regional, local government, or non-profit agency.

The permitted uses of the Conservation category include the following:

1. Passive outdoor recreational uses such as wildlife sanctuaries and feeding stations, nature centers and trails, outdoor research stations and walkways.

2. Uses which do not impair the natural environment or disturb the natural ecosystem of the area and which are not in conflict with any applicable contractual agreement or management policies of the federal, state, regional, county, municipal or non-profit agency which manages the Natural Reservation.

COMMUNITY FACILITIES LAND USE CATEGORY

The Community Facilities category provides for a variety of educational, religious, governmental, civic and cultural, and medical uses necessary to adequately serve the community and subregion.

Additionally, Community Facilities uses may be permitted in areas designated for the following categories: Residential, Rural Ranches, Residential/Office, Commercial, Commerce/Office, Industrial, Regional Activity Center, and Employment Center.

The permitted uses of the Community Facilities category include the following:

1. Community facilities uses such as schools, churches, hospitals, governmental administration, police and fire stations, libraries, civic centers, prisons and courts, nursing homes, cemeteries, and parks and recreation facilities.
2. a. Special Residential Facility Category (2) development as defined in the "Definitions" subsection of the Plan Implementation Requirements section of the Davie Future Land Use Plan; subject to the allocation of two (2) reserve or flexibility units in accordance with the Special Residential Facilities provisions and policies for application of these units as contained in the "Administrative Rules Document" of the Broward County Planning Council.

   b. Special Residential Facility Category (3) development as defined in the "Definitions" subsection of the Plan Implementation Requirements section of the Davie Future Land Use Plan; subject to the allocation of reserve or flexibility units in accordance with the Special Residential Facilities provisions and policies for application of these units as contained in the "Administrative Rules Document" of the Broward County Planning Council; each flexibility or reserve unit shall permit two (2) sleeping rooms regardless of the number of kitchens or baths.

UTILITIES LAND USE CATEGORY

The purpose of the Utilities category is to provide sufficient acreage to accommodate current and future requirements for utilities facilities. Utilities are also permitted, subject to condition, in areas designated for the following land uses: Residential, Residential/Office, Commercial, Office Park, Industrial, Employment Center, Regional Activity Center, and Agricultural.

The permitted uses of the Utilities category include the following:

1. Utilities such as water and wastewater treatment plants, pumping stations, electrical power plants and substations, solid waste disposal and transfer stations.

2. Other uses determined to be ancillary to the primary uses described in 1. above.

3. Recreation and open space uses, provided the location of these uses does not preclude or adversely affect the future use of the surrounding areas for utility facilities.

4. Non-residential agricultural uses, provided the location of these uses does not preclude or adversely affect the future use of the surrounding areas for utility facilities.

5. Communication facilities, provided the location of these uses does not preclude or adversely affect the future use of the surrounding areas for utility facilities.

TRANSPORTATION LAND USE CATEGORY

The Transportation category reflects transportation facilities such as airports and existing and proposed expressways and turnpikes.

The permitted uses of the Transportation category include the following:

1. Airport Transportation Areas. Airports and related facilities designed primarily to serve the needs of airport users and airport employees, airport and aircraft operation and maintenance facilities, cargo distribution terminals, transit warehousing, other compatible uses, and those land uses, except permanent residences, permitted in the recreation and open space, commercial recreation and agricultural land use categories.

2. Expressways. Uses of an impermanent nature such as agriculture, nurseries, grazing, non-required parking, open storage and parks are permitted in proposed expressway rights-of-way. Such provisions are intended to provide owners of property within proposed expressways with limited uses that do not interfere with the long term public goal of acquiring rights-of-way for expressway purposes. No principal building may be permitted, nor may any land use which impedes the future construction for an expressway be allowed.

   Proposed expressways shall have an underlying residential land use designation unless bordered on both sides by non-residential land use designations. The underlying density credited to the expressway shall be equal to the density of the adjacent residential land use designation. In cases where the proposed expressway is bordered by residential land use designations of different densities, the adjacent density shall apply up to mid-point of the right-of-way. Residential units may not be constructed within the proposed expressway. However, the densities accruing to the proposed expressway may be transferred to adjacent parcels if the owner dedicates the right-of-way to a governmental agency for expressway purposes.

   If a formal determination has been made by the Broward County Board of County Commissioners that the proposed expressway will not be constructed, the land uses permitted within the expressway corridor shall be those permitted by the adjacent land use designation as shown on the Davie Future Land Use Plan map as certified by the Broward County Planning Council.

COMMUNICATIONS FACILITIES

Communication facilities such as television and radio stations, and relay structures and telephone facilities are not specifically designated on the Davie Future Land Use Plan map as a separate category, but may be permitted in areas designated the following: Residential, Commercial, Industrial, Commerce/Office, Employment Center, Agricultural, Regional Activity Center.

LAND DEVELOPMENT REGULATIONS

Land Development Regulations consist of ordinances adopted by the Town for the regulation of any aspect of development, and which are directed to the achievement of goals in the Comprehensive Plan. At a minimum, Land Development Regulations shall address zoning, subdivisions, signage, landscaping and building construction. Further, Town land development regulations shall be consolidated into a single land development code and shall contain specific and detailed provisions necessary or desirable to implement the adopted comprehensive plan and shall as a minimum:

(a) Regulate the subdivision of land;
(b) Regulate the use of land and water for those land use categories included in the land use element and ensure the compatibility of adjacent uses and provide for open space;
(c) Provide for protection of potable water wellfields;
(d) Regulate areas subject to seasonal and periodic flooding and provide for drainage and stormwater management;
(e) Ensure the protection of environmentally sensitive lands designated in the comprehensive plan;
(f) Regulate signage;
(g) Provide that public facilities and services meet or exceed the standards established in the capital improvements element required by s. 163.3177 and are available when needed for the development, or that development orders and permits are conditioned on the availability of these public facilities and services necessary to serve the proposed development. Not later than December 1, 1989, the Town shall not issue a development order or permit which results in a reduction in the level of services for the affected public facilities below the level of services provided in the comprehensive plan. (Sec. 163.3202[2])

Consistent with the requirements of Chapter 163.3202, F.S., and Rule 9J-5, F.A.C., the Davie Future Land Use Plan shall be implemented by the adoption and enforcement of land development regulations. Subsequent to the effective date of this Plan, no land development regulations or amendments thereto shall be adopted by the Town Council until it has been found that the regulation/amendment is consistent with the Davie Comprehensive Plan. Additionally, no development shall be permitted in the Town of Davie that is inconsistent with the adopted and effective land development regulations. Inasmuch as the statute encourages the development and application of innovative land development regulations such as transfer of development rights (TDR),

incentive zoning, and performance zoning, the Town will approach these alternatives as a means of addressing Davie's unique characteristics.

PLATTING REQUIREMENT

a. The Town may not grant an application for a building permit for the construction of a principal building on a parcel of land unless a plat including the parcel or parcels of land has been approved by the Broward County Commission and recorded in the official records of Broward County subsequent to June 4, 1953. This section will not apply to an application for a building permit which meets any of the following criteria:

   (1) construction of one single family dwelling unit or duplex unit on a lot or parcel which lot or parcel was of record as such in the official records of Broward County as of March 1, 1989; or

   (2) construction on any multi-family or non-residential lot or parcel which is less than five acres in size and specifically delineated on a plat recorded on or before June 4, 1953;

provided that in addition to meeting the above criteria, the issuance of the building permit shall be subject to all of the following:

   (1) compliance with the applicable land development regulations; and

   (2) any land within the lot or parcel which is necessary to comply with the Broward County Trafficways Plan has been conveyed to the public by deed or grant of easement.

b. The Broward County Board of County Commissioners shall not approve for recordation in the Official Records any plat of lands that is not in compliance with the certified Davie Future Land Use Plan map or other effective land use plan map.

DEVELOPMENT REVIEW REQUIREMENTS

The procedures for the issuance of all development permits for the development of land within the town are set forth in the Development Review Code, in the Davie code of ordinances. The Development Review Code (DRC) establishes a Development Review Committee whose membership insures that development proposals are evaluated for compliance with the following: the Davie Future Land Use Plan, zoning code, Development Review Code standards, and all applicable provisions of the Town and the South Florida Building Codes. The Town is required to review and amend as necessary its code of ordinances to implement the Comprehensive Plan, pursuant to Section 163.3202, F.S. Therefore, compliance with statutory requirements to insure implementation of the Comprehensive Plan goals, objectives and policies shall be effectuated.

MAINTENANCE OF THE FUTURE LAND USE PLAN

Amendments. The Future Land Use Plan is a planning tool that sets the framework for programming and budgeting for municipal functions, such as the provision of essential services. While it is expected that the Plan survives market shifts, changes in property ownership and political climate, it is also understood that the Plan shall be subject to amendment from time to time. Therefore, the town Code sets forth the procedure for amendment to the Future Land Use Plan, and limits submittals from property owners to a particular filing period. Additionally, the amendment procedure is consistent with Section 163.3187, F.S., which limits the number of times that a local government may amend its Plan each year.

Certification/recertification. The Broward County Planning Council is the appointed body that oversees the planning function for Broward. Article VI of the Broward County Charter establishes the Planning Council as the Local Planning Agency, and provides the authority for the certification process. The Broward County Land Use Plan remains the effective land use plan for a municipality and the unincorporated area until the local plan is certified by the Planning Council as being in substantial conformity with the County Plan. Once certified, the local plan must be recertified each time the local unit of government wants to amend the plan. The recertification process enables the county to insure local plan consistency with regional plans, goals, objectives and policies.

INTERGOVERNMENTAL COORDINATION

During the Comprehensive Planning adoption, amendment and evaluation processes, the Town involves all jurisdictions that may be affected by that process or have expressed an interest in participation. All meetings of the Local Planning Agency, Town Council and its advisory boards are public meetings, duly advertised and posted. All meetings are accessible to the public, and meeting agendas and minutes are available. Intergovernmental coordination, as a form of public participation, is encouraged during all stages of the comprehensive planning process.

EVALUATION AND APPRAISAL REPORT

To insure that the planning function is "a continuous and ongoing process", the Town of Davie is required to evaluate the level of achievement of goals, objectives and policies contained in the Comprehensive Plan at least every five years. This "evaluation and appraisal report" updates the comprehensive plan, and addresses the major problems of development, condition of each element, comprehensive plan objectives as compared with actual results, and the extent to which unanticipated and unforeseen problems and opportunities occurred between plan adoption and the report.

EVALUATION MEASURES

Rule 9J-5, F.A.C. requires the incorporation of a section identifying monitoring and evaluation procedures to be followed in the preparation of the five-year Evaluation and Appraisal Report discussed above. At a minimum, the Town shall follow the criteria listed in Chapter 163.3191, F.S. as to the review of the comprehensive plan.

Future Land Use Plan: Glossary

- **Accessory Use:** a use naturally and customarily incidental, subservient or subordinate to the principal use.

- **Accommodations:** any apartment, condominium or cooperative unit, cabin, lodge, hotel or motel room, campground, or other private or commercial structure which is situated on real property and designed for occupancy or use by one or more individuals.

- **Administrative Commission:** the Governor and the Cabinet of the State of Florida.

- **Administrative Rules Document:** a publication containing rules, guidelines, procedures, and methodologies reviewed, revised, adopted and amended by the Broward County Planning Council and the Broward County Board of County Commissioners for the purpose of providing assistance and guidance to local governmental entities and providing direction to Council staff in implementing the Broward County Land Use Plan.

- **Affected Persons:** the affected local government; persons owning property, residing, or owning or operating a business within the boundaries of the local government whose plan is the subject of the review; and adjoining local governments that can demonstrate that adoption of the plan as proposed would produce substantial impacts on the increased need for publicly funded infrastructure or substantial impacts on areas designated for protection or special treatment within their jurisdictions. Each person, other than an adjoining local government, in order to qualify under this definition, shall also have submitted oral or written objections during the local government review and adoption proceedings.

- **Agricultural Uses:** activities within land areas which are predominantly used for the cultivation of crops and livestock including: cropland; pastureland; orchards; vineyards; nurseries; ornamental horticulture areas; groves; confined feeding operations; specialty farms; and silviculture areas. Agricultural uses are further defined in the Agricultural land use category, as described in the Permitted Uses portion of the Plan Implementation Section.

- **Airport Facility:** any area of land or water improved, maintained or operated for the landing and takeoff of aircraft, including privately owned paved runways of 4,000 or more feet in length, and any appurtenant area which is used for airport buildings, or other airport facilities or rights-of-way.

- **Amendment:** any change to an adopted comprehensive plan with the exception of corrections, updates and modifications of the capital improvements element concerning costs, revenue services, acceptance of facilities or facility construction dates consistent with the plan as provided in Section 163.3177(3)(b), Florida Statutes, and corrections, updates or modifications of current costs in other elements, as provided in Section 163.3187(2), Florida Statutes.

- **Arterial Road:** a roadway providing service which is relatively continuous and of relatively high traffic volume, long trip length, and high operating speed. In addition, every United States numbered highway is an arterial road.

- **Bicycle And Pedestrian Ways:** any road, path or way which is open to bicycle travel and traffic afoot and from which motor vehicles are excluded.

- **Broward County Land Use Plan:** the future land use plan element for all of Broward County adopted by the Broward County Commission in conformance with the requirements of the Broward County Charter and the Local Government Comprehensive Planning and Land Development Regulation Act.

- **Broward County Trafficways Plan:** the plan promulgated by the Broward County Planning Council pursuant to Chapter 59-1154, Laws of Florida, as amended, and the Broward County Charter, which depicts a network of trafficways for Broward County (also known as the Broward County Planning Council Trafficways Plan).

- **Building:** any structure having a roof and used or built for the shelter or enclosure of persons, animals, chattels, or property of any kind.

- **Building Permit:**

  (1) Any permit for the erection or construction of a new building required by Section 301.1 of the South Florida Building Code, 1984, Broward Edition, as amended.
  (2) Any permit for an addition to an existing building which would:
      (a) create one or more additional dwelling units, or
      (b) involve a change in the occupancy of a building as described in Section 104.7 of the South Florida Building Code, 1984, Broward Edition, as amended.
  (3) Any permit which would be required for the nonresidential operations in cluded in Section 301.1(a) of the South Florida Building Code, 1984,Broward Edition, as amended.

- **Capital Budget:** the portion of the local government's budget reflecting capital improvements scheduled for a fiscal year.

- **Capital Improvement:** physical assets constructed or purchased to provide, improve or replace a public facility and which are large scale and high in cost. The cost of a capital improvement is generally nonrecurring and may require multi-year financing. For the purpose of this rule, physical assets which have been identified as existing or projected needs in the individual comprehensive plan elements shall be considered capital improvements.

- **Certified Land Use Plan:** a local land use plan which has been certified by the Broward County Planning Council as being in substantial conformity with the Broward County Land Use Plan and which has been adopted by a unit of local government in conformance with the requirements of the Local Government Comprehensive Planning and Land Development Regulation Act.

- **Collector Road:** a roadway providing service which is of relatively moderate traffic volume, moderate trip length, and moderate operating speed. Collector roads collect and distribute traffic between local roads or arterial roads.

- **Commercial Uses:** activities within land areas which are predominantly connected with the sale, rental and distribution of products, or performance of services. Commercial Uses are further defined in the Commercial land use category, as described in the Permitted Uses portion of the Plan Implementation Section.

- **Comprehensive Plan:** a plan that meets the requirements of Sections 163.3177 and 163.3178, Florida Statutes.

- **Concurrence:** public facilities and services needed to support development shall be available at the same time or coincidental with the impacts of such development.

- **Concurrence Management System:** the provisions in the local government comprehensive plan including implementation regulations, encompassing the restrictions, methods, resources, timing and solutions intended to be compatible with and further compliance with the statutory requirement to provide public facilities and services needed to support development concurrent with the impacts of such development.

- **Cone of Influence (Zone of Influence):** an area around one or more major waterwells, the boundary of which is determined by the government agency having specific statutory authority to make such a determination based on groundwater travel or drawdown depth.

- **Conservation Uses:** activities within land areas designated for the purpose of conserving or protecting natural resources or environmental quality and includes areas designated for such purposes as flood control, protection of quality or quantity of groundwater or surface water, floodplain management, fisheries management, or protection of vegetative communities or wildlife habitats. Conservation Uses are further defined in the Conservation land use category, as described in the Permitted Uses portion of the Plan Implementation Section.

- **Consistency:** For purposes of this definition, a local comprehensive plan is said to be consistent with the state comprehensive plan and the regional policy plan if it is "compatible with" or "furthers" such plans. The term "compatible with" means that the local plan is not in conflict with the state comprehensive plan or regional policy plan. The term "furthers" means to take action in the direction of realizing goals or policies of the state or regional plan.

- **Contiguous:** in close proximity, touching or adjacent.

- **County Commission:** the Board of County Commissioners of Broward County.

- **Developer:** any person, including a governmental agency, undertaking any development.

- **Development:**

(1) The carrying out of any building activity or mining operation, the making of any material change in the use of appearance of any structure or land, or the dividing of land into two or more parcels.
(2) The following activities or uses shall be taken for the purposes of this chapter to involve "development", as defined in this section:
(a) A reconstruction, alteration of the size, or material change in the external appearance of a structure on land.
(b) A change in the intensity of use of land, such as an increase in the number of dwelling units in a structure or on land or a material increase in the number of businesses, manufacturing establishments, offices, or dwelling units in a structure or on land.
(c) Alteration of a shore or bank of a seacoast, river, stream, lake, pond or canal, including any "coastal construction" as defined in Section 161.021, Florida Statutes.
(d) Commencement of drilling, except to obtain soil samples, mining, or excavation on a parcel of land.
(e) Demolition of a structure.
(f) Clearing of land as an adjunct of construction.
(g) Deposit of refuse, solid or liquid waste, or fill on a parcel of land.
(3) The following operations or uses shall not be taken for the purpose of this chapter to involve "development" as defined herein:
(a) Work by a highway or road agency or railroad company for the maintenance or improvement of a road or railroad tract, if the work is carried out on land within the boundaries of the right-of-way.
(b) Work by any utility and other persons engaged in the distribution or transmission of gas or water, for the purpose of inspecting, repairing, renewing, or constructing on established rights-of-way any sewers, mains, pipes, cables, utility tunnels, powerlines, towers, poles, tracts, or the like.
(c) Work for the maintenance, renewal, improvement, or alteration of any structure, if the work affects only the interior or the color of the structure or the decoration of the exterior of the structure.
(d) The use of any structure or land devoted to dwelling uses or any purpose customarily incidental to enjoyment of the dwelling.

(e) The use of any land for the purpose of growing plants, crops, trees and other agricultural or forestry products; raising livestock; or for other agricultural purposes.
(f) A change in use of land or structure from a use within a class specified in an ordinance or rule to another use in the same class.
(g) A change in the ownership or form of ownership of any parcel or structure.
(h) The creation or termination of rights of access, reparian rights, easements, covenants concerning development of land, or other rights in land.

(4) "Development," as designated in an ordinance, rule, or development rule includes all other development customarily associated with it unless otherwise specified. When appropriate to the context, "development" refers to the act of developing to the result of development. Reference to any specific operation is not intended to mean that the operation or activity, when part of other operations or activities, is not development. Reference to particular operations is not intended to limit the generality of subsection (1).

- **Development Order:** any order granting, denying, or granting with conditions an application for a development permit.

- **Development Permit:** any building permit, zoning permit, plat approval or rezoning, certification, variance, or other action having the effect of permitting development.

- **Drainage Facilities:** a system of man-made structures designed to collect, convey, hold divert or discharge stormwater, and includes stormwater sewers, canals, detention structures, and retention structures.

- **Dwelling Unit:** a house, apartment, or condominium unit, trailer, group of rooms, or a single room intended for occupancy as separate living quarter with direct access from the outside of the building or through a common hall and with complete kitchen facilities for the exclusive use of the occupants, including rental units contained in a multi-unit structure or complex which are licensed by the State Department of Business Regulation, Division of Hotels and Restaurants, as "apartments", "rental condominiums" and "Retirement Housing".

- **Education Uses:** activities and facilities of public or private primary or secondary schools, vocational and technical schools, and colleges and universities licensed by the Florida Department of Education, including the areas of buildings, campus open space, dormitories, recreational facilities or parking.

- **Environmentally Sensitive Land:** those areas containing Natural Resources, as depicted in the Future Land Use Plan Map Series.

- **Existing Urban Service Area:** means built-up areas where public facilities and services such as sewage treatment systems, roads, schools, and recreation areas are already in place.

- **Flexibility units:** mean the difference between the number of dwelling units permitted within a flexibility zone by the Future Broward County Land Use Plan Map (Series) and the number of dwelling units permitted within the flexibility zone by the Davie Future Land Use Plan map, as certified.

- **Flexibility Zone:** a geographic area, as delineated on the flexibility zone boundary maps in the Administrative Rules Document of the Broward County Planning Council, within which residential densities and land uses may be redistributed through the plan certification process.

- **Flood Plains:** areas inundated during an identified flood event or identified by the National Flood Insurance Program as an A Zone or V Zone on Flood Insurance Rate Maps or Flood Hazard Boundary Maps.

- **Foster Care Facility:** a facility which houses foster residents and provides a family living environment for the residents, including such supervision and care as may be necessary to meet the physical, emotional and social needs of the residents and serving either children or adult foster residents.

- **Future Broward County Land Use Plan Map (Series):** the series of maps adopted by the Broward County Board of County Commissioners as part of the Broward County Land Use Plan. These include the Broward County Land Use Plan Map, Historic District and Historically Significant Properties Map, Natural Resources Map Series-Eastern Broward County, and Natural Resources Map Series-Western Broward County.

- **Goal:** the long-term end toward which programs and activities are ultimately directed.

- **Governing Body:** the board of county commissioners of a county, the commission or council of an incorporated municipality, or any other chief governing body of a unit of local government, however designated, or the combination of such bodies. The governing body for the Town of Davie is the Town Council of the Town of Davie.

- **Governmental Agency:**
  (a) The United States or any department, commission, agency, or other instrumentality thereof;
  (b) The State of Florida or any department, commission, agency, or other instrumentality thereof;

  (c) Any local government, or any department, commission, agency, or other instrumentality thereof;
  (d) Any school board or other special district, authority, or other governmental entity.

- **Gross density:** means the number of dwelling units constructed or proposed within an area, divided by the gross acreage of the area.

- **Gross acreage** means the total number of acres in an area, including acreage used or proposed for streets, lakes, waterways, and other proposed land uses permitted in residential areas by the Davie Future Land Use Plan.

- **Group Home:** a facility which provides a living environment for unrelated residents who operate as the functional equivalent of a family, including such supervision and care as may be necessary to meet the physical, emotional, and social needs of the residents. Adult Congregate Living Facilities comparable in size to group homes are included in this definition. It shall not include rooming or boarding homes, clubs, fraternities, sororities, monasteries or convents, hotels, residential treatment facilities, nursing homes, or emergency shelters.

- **Hazardous waste:** solid waste, or a combination of solid wastes, which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or may pose a substantial present or potential hazard to human health or the environment when improperly transported, disposed of, stored, treated or otherwise managed.

- **Historic Resources:** all areas, districts or sites containing properties listed on the Florida Master Site File, the National Register of Historic Places, or designated by a local government as historically, architecturally, or archaeologically significant.

- **Improvements:** may include, but are not limited to, street pavements, curbs and gutters, sidewalks, alley pavements, walkway pavements, water mains, sanitary sewers, storm sewers or drains, street names, signs, landscaping, permanent reference monuments, permanent control points, or any other improvement required by a governing body.

- **Industrial Uses:** the activities within land areas predominantly connected with manufacturing, assembly, processing, or storage of products.

- **Infrastructure:** those man-made structures which serve the common needs of the population, such as: sewage disposal systems; potable water systems; potable water wells serving a system; solid waste disposal sites or retention areas; stormwater systems; utilities; piers; docks; wharves; breakwaters; bulkheads; seawalls; bulwarks; revetments; causeways; marinas; navigation channels; bridges; and roadways.

- **Land:** the earth, water, and air above, below, or on the surface, and includes any improvements or structures customarily regarded as land.

- **Land Development Code:** the various types of regulations for the development of land within the jurisdiction of a unit of local government when combined into a single document.

- **Land Development Regulations:** ordinances enacted by governing bodies for the regulation of any aspect of development and includes any local government zoning, rezoning, subdivision, building construction, or sign regulations or any other regulations controlling the development of land.

- **Land Development Regulation Commission:** a commission designated by a local government to develop and recommend, to the local governing body, land development regulations which implement the adopted comprehensive plan and to review land development regulations, or amendments thereto, for consistency with the adopted plan and report to the governing body regarding its findings. The responsibilities of the land development regulation commission may be performed by the local planning agency.

- **Land Use:** the development that has occurred on the land, the development that is proposed by a developer on the land, or the use that is permitted or permissible on the land under an adopted comprehensive plan or element or portion thereof, land development regulations, or a land development code, as the context may indicate.

- **Level of Service:** an indicator of the extent or degree of service provided by, or proposed to be provided by a facility based on and related to the operational characteristics of the facility. Level of service shall indicate the capacity per unit of demand for each public facility.

- **Limited Access Facility:** a roadway especially designed for through traffic, and over, from, or to which owners or occupants of abutting land or other persons have no greater than a limited right or easement of access.

- **Local Area of Particular Concern:** an area designated on the Natural Resource Map Series of the Broward County Land Use Plan which has been declared to be environmentally sensitive. Those areas are subject to environmental impact report provisions of the Broward County Land Development Code. The criteria for Local Areas of Particular Concern are contained in the Plan Implementation Requirements section of the Broward County Land Use Plan.

- **Local Comprehensive Plan:** any or all local comprehensive plans or elements or portions thereof prepared, adopted, or amended pursuant to the Local Government Comprehensive Planning and Land Development Regulation Act.

- **Local Road:** a roadway providing service which is of relatively low traffic volume, short average trip length or minimal through traffic movements, and high volume land access for abutting property.

- **Low and Moderate Income Families:** "lower income families" as defined under the Section 8 Assisted Housing Program, or families whose annual income does not exceed 80 percent of the median income for the area. The term "families" includes "households".

- **Mobile Home:** a structure, transportable in one or more sections, which, in the traveling mode, is eight body feet or more in width, and which is built on a metal frame and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air conditioning and electrical systems contained therein. If fabricated after June 15, 1976, each section bears a U.S. Department of Housing and Urban

Development label certifying that it is built in compliance with the federal Manufactured Home Construction and Safety Standards.

- **Natural Reservations:** areas designated for conservation purposes, and operated by contractual agreement with or managed by a federal, state, regional or local government or non-profit agency such as: national parks, state parks, lands purchased under the Save Our Coast, Conservation and Recreation Lands or Save Our Rivers programs, sanctuaries, preserves, monuments, archaeological sites, historic sites, wildlife management areas, national seashores, and Outstanding Florida Waters.

- **Nonpoint Source Pollution:** any source of water pollution that is not a point source.

- **Objective:** a specific, measurable, intermediate end that is achievable and marks progress toward a goal.

- **Open Spaces:** undeveloped lands suitable for passive recreation or conservation uses.

- **Point Source Pollution:** any source of water pollution that constitutes a discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

- **Policy:** the way in which programs and activities are conducted to achieve an identified goal.

- **Pollution:** the presence in the outdoor atmosphere, ground or water of any substances, contaminants, noise, or manmade or man-induced alteration of the chemical, physical, biological, or radiological integrity of air or water, in quantities or at levels which are or may be potentially harmful or injurious to human health or welfare, animal or plant life, or property, or unreasonably interfere with the enjoyment of life or property.

- **Potable Water Facilities:** a system of structures designed to collect, treat, or distribute potable water, and includes water wells, treatment plants, reservoirs, and distribution mains.

- **Private Recreational Sites:** sites owned by private, commercial or non-profit entities available to the public for purposes of recreational use.

- **Public Recreational Sites:** sites owned or leased on a long-term basis by a federal, state regional or local government agency for purposes of recreational use.

- **Public Access:** the ability of the public to physically reach, enter, or use recreation sites including beaches and shores.

- **Public Buildings and Grounds:** structures or lands that are owned, leased, or operated by a government entity, such as civic and community centers, hospitals, libraries, police stations, fire stations, and government administration buildings.

- **Public Facilities:** transportation systems or facilities, sewer systems or facilities, solid waste systems or facilities, drainage systems or facilities, potable water systems or facilities, education systems or facilities, parks and recreation systems or facilities and public health systems or facilities.

- **Recreation:** the pursuit of leisure time activities occurring in an indoor or outdoor setting.

- **Recreation Facility:** a component of a recreation site used by the public such as a trail, court, athletic field or swimming pool.

- **Recreation Uses:** activities within areas where recreation occurs.

- **Resident Population:** inhabitants counted in the same manner utilized by the United States Bureau of the Census, in the category of total population. Resident population does not include seasonal population.

- **Right-Of-Way:** land in which the state, a county, or a municipality owns the fee simple title or has an easement dedicated or required for a transportation or utility use.

- **Roadway Functional Classification:** the assignment of roads into categories according to the character of service they provide in relation to the total road network. Basic functional categories include limited access facilities, arterial roads, and collector roads, which may be subcategorized into principal, major or minor levels. Those levels may be further grouped into urban and rural categories.

- **Sanitary Sewer Facilities:** structures or systems designed for the collection, transmission, treatment, or disposal of sewage and includes trunk mains, interceptors, treatment plants and disposal systems.

- **Seasonal Population:** part-time inhabitants who utilize, or may be expected to utilize, public facilities or services, but are not residents. Seasonal population shall include tourists, migrant farmworkers, and other short-term and long-term visitors.

- **Services:** the programs and employees determined necessary by local government to provide adequate operation and maintenance of public facilities and infrastructure as well as those educational, health care, social and other programs necessary to support the programs, public facilities, and infrastructure set out in the local plan or required by local, state or federal law.

- **Solid Waste:** sludge from a waste treatment works, water supply treatment plant or air pollution control facility or garbage, rubbish, refuse, or other discarded

material, including solid, liquid, semisolid, or contained gaseous material resulting from domestic, industrial, commercial, mining, agricultural, or governmental operations.

- **Solid Waste Facilities:** structures or systems designed for the collection, processing or disposal of solid wastes, including hazardous wastes, and includes transfer stations, processing plants, recycling plants, and disposal systems.

- **Support Documents:** any surveys, studies, inventory maps, data, inventories, listings or analyses used as bases for or in developing the comprehensive plan.

- **Urban Redevelopment**: means the demolition and reconstruction or substantial renovation of existing buildings or infrastructure within existing urban service areas.

- **Water-Dependent Uses:** activities which can be carried out only on, in or adjacent to water areas because the use requires access to the water body for: waterborne transportation including ports or marinas; recreation; electrical generating facilities; or water supply.

- **Water-Related Uses:** activities which are not directly dependent upon access to a water body, but which provide goods and services that are directly associated with water-dependent or waterway uses.

- **Water Wells:** wells excavated, drilled, dug, or driven for the supply of industrial, agricultural or potable water for general public consumption.

TOWN OF DAVIE

TRANSPORTATION ELEMENT

TABLE OF CONTENTS

	Page No.
INTRODUCTION	II-1
DESCRIPTION OF EXISTING TRANSPORTATION SYSTEM	II-1
Roadway System	II-1
Significant Parking Facilities	II-4
Public Transit System	II-5
Significant Bicycle and Pedestrian Ways	II-7
Ports, Airport Facilities, Railways and Intermodal Facilities	II-11
EXISTING FUNCTIONAL CLASSIFICATION & MAINTENANCE RESPONSIBILITIES	II-13
NUMBER OF THROUGH LANES FOR EACH ROADWAY	II-18
MAJOR PUBLIC TRANSIT GENERATORS AND ATTRACTORS	II-21
DESIGNATED LOCAL & REGIONAL TRANSPORTATION FACILITIES CRITICAL TO THE EVACUATION OF THE COASTAL POPULATION	II-24
EXISTING PEAK HOUR, PEAK DIRECTION AND LEVEL OF SERVICE FOR ROADS, MASS TRANSIT FACILITIES & CORRIDORS/ROUTES	II-26
TRANSPORTATION ANALYSIS	II-36
Limited Access Highways	II-36
1. I-595	II-36
a. Facility Description	II-36
b. Present Level of Service	II-37
c. Future Level of Service	II-37
d. Proposed Improvements	II-37
2. I-75	II-38
a. Facility Description	II-38
b. Present Level of Service	II-38
c. Future Level of Service	II-39
d. Proposed Improvements	II-39
3. Florida Turnpike	II-39
a. Facility Description	II-40
b. Present Level of Service	II-40
c. Future Level of Service	II-40
d. Proposed Improvements	II-40

Arterial Roads II-40
1. SW 160th Avenue (Dykes Road) II-40
a. Facility Description II-40
b. Present Level of Service II-41
c. Future Level of Service II-41
d. Proposed Improvements II-42

2. SW 136th Avenue II-42
a. Facility Description II-42
b. Present Level of Service II-43
c. Future Level of Service II-43
d. Proposed Improvements II-43

3. Flamingo Road (SW 124th Avenue) II-44
a. Facility Description II-44
b. Present Level of Service II-45
c. Future Level of Service II-45
d. Proposed Improvements II-45

4. Nob Hill Road (SW 100th Avenue) II-46
a. Facility Description II-46
b. Present Level of Service II-46
c. Future Level of Service II-47
d. Proposed Improvements II-47

5. Pine Island Road II-47
a. Facility Description II-47
b. Present Level of Service II-48
c. Future Level of Service II-49
d. Proposed Improvements II-49

6. University Drive II-49
a. Facility Description II-49
b. Present Level of Service II-50
c. Future Level of Service II-51
d. Proposed Improvements II-51

7. Davie Road/Davie Road Extension II-51
a. Facility Description II-51
b. Present Level of Service II-52
c. Future Level of Service II-53
d. Proposed Improvements II-53

8. SR 7/US 441 II-53
a. Facility Description II-53
b. Present Level of Service II-54
c. Future Level of Service II-55
d. Proposed Improvements II-55

9. SR 84 II-55
a. Facility Description II-55
b. Present Level of Service II-56
c. Future Level of Service II-57
d. Proposed Improvements II-58

10. Griffin Road II-59
a. Facility Description II-59
b. Present Level of Service II-60
c. Future Level of Service II-60
d. Proposed Improvements II-61

11. Stirling Road II-61
a. Facility Description II-61
b. Present Level of Service II-62
c. Future Level of Service II-63
d. Proposed Improvements II-63

12. Sheridan Street II-63
a. Facility Description II-63
b. Present Level of Service II-64
c. Future Level of Service II-64
d. Proposed Improvements II-65

Collector Roadways II-65
1. SW 14th Street II-65
a. Facility Description II-65
b. Present Level of Service II-65
c. Future Level of Service II-66
d. Proposed Improvements II-66

2. Nova Drive II-66
a. Facility Description II-66
b. Present Level of Service II-67
c. Future Level of Service II-67
d. Proposed Improvements II-68

3. SW 36th Street II-68
   a. Facility Description II-68
   b. Present Level of Service II-69
   c. Future Level of Service II-69
   d. Proposed Improvements II-69

4. SW 39th Street II-69
   a. Facility Description II-69
   b. Present Level of Service II-70
   c. Future Level of Service II-70
   d. Proposed Improvements II-70

5. Orange Drive II-71
   a. Facility Description II-71
   b. Present Level of Service II-72
   c. Future Level of Service II-72
   d. Proposed Improvements II-72

6. SW 154th Avenue II-73
   a. Facility Description II-73
   b. Present Level of Service II-73
   c. Future Level of Service II-73
   d. Proposed Improvements II-74

7. College Avenue II-74
   a. Facility Description II-74
   b. Present Level of Service II-75
   c. Future Level of Service II-75
   d. Proposed Improvements II-75

8. SW 148th Avenue II-75

9. Hiatus Road (SW 112th Avenue) II-76

10. SW 26th Street II-77

11. SW 130th Avenue II-78

12. SW 36th Court II-78

13. SW 30th Street II-80

ANALYSIS OF AVERAGE DAILY AND PEAK HOUR TRIPS II-81

ANALYSIS OF MODAL SPLIT AND VEHICLE OCCUPANCY RATES II-88

ANALYSIS OF EXISTING PUBLIC TRANSIT FACILITIES II-89

POPULATION CHARACTERISTICS INCLUDING TRANSPORTATION DISADVANTAGED II-90

CHARACTERISTICS OF MAJOR TRIP GENERATORS AND ATTRACTORS II-91

ANALYSIS OF THE AVAILABILITY OF TRANSPORTATION FACILITIES AND SERVICE TO SERVE EXISTING LAND USES II-93

ANALYSIS OF THE ADEQUACY OF THE EXISTING AND PROPOSED TRANSPORTATION SYSTEM TO EVACUATE THE COASTAL POPULATION PRIOR TO AN IMPENDING NATURAL DISASTER II-97

ANALYSIS OF GROWTH TRENDS, TRAVEL PATTERNS, INTERACTIONS BETWEEN LAND USE AND TRANSPORTATION FACILITIES AND COMPATIBILITY BETWEEN FUTURE LAND USES AND TRANSPORTATION ELEMENTS II-98

ANALYSIS OF EXISTING AND PROJECTED INTERMODAL DEFICIENCIES AND NEEDS II-98

ANALYSIS OF THE PROJECTED TRANSPORTATION LEVEL OF SERVICE AND SYSTEM NEEDS II-98

ANALYSIS OF PROJECTS PLANNED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION'S ADOPTED WORK PROGRAM, METROPOLITAN PLANNING ORGANIZATION AND LOCAL TRANSPORTATION AUTHORITY II-104

ANALYSIS OF MAINTENANCE OF ADOPTED LEVEL OF SERVICE (LOS) STANDARDS II-105

ANALYSIS OF INTERNAL CONSISTENCY BETWEEN ELEMENTS II-112

ANALYSIS OF TRANSPORTATION MANAGEMENT PROGRAMS NECESSARY TO PROMOTE AND SUPPORT PUBLIC TRANSPORTATION SYSTEMS II-112

GOALS, OBJECTIVES AND POLICIES II-124

APPENDIX A (LOS METHODOLOGY/FDOT TABLES/BC MAP 3-7) BA-1

LIST OF MAPS

Map II-1	Existing Roadway System	II-2
Map II-2	Existing Public Transit System	II-6
Map II-3	Existing Bicycle and Pedestrian Ways	II-9
Map II-4	Existing Ports, Airport Facilities, Railways and Intermodal Facilities	II-10
Map II-5	Existing Functional Classification of Roadways	II-17
Map II-6	Existing Number of Through Lanes	II-20
Map II-7	Existing Major Public Transit Trip Generators and Attractors	II-23
Map II-8	Existing Evacuation Routes	II-25
Map II-9	Existing Peak Hour, Peak Directional and Level of Service	II-33
Map II-10	Future Roadway System	II-114
Map II-11	Future Public Transit System	II-115
Map II-12	Significant Bicycle and Pedestrian Ways	II-116
Map II-13	Future Ports, Airport Facilities, Railways and Intermodal Facilities	II-117
Map II-14	Future Functional Classification of Roadways	II-118
Map II-15	Future Number of Through Lanes	II-119
Map II-16	Future Major Public Transit Trip Generators and Attractors	II-120
Map II-17	Future Evacuation Routes	II-121
Map II-18	Projected Peak Hour, Peak Directional and Level of Service	II-122
Map II-19	Recreational Trail Master Plan	II-123

LIST OF TABLES

Table II-1	Existing Functional Classification of Roadways	II-15
Table II-2	Number of Through Lanes	II-18
Table II-3	Capacity Analysis of Existing Roadway System 1997 Traffic Volumes	II-26
Table II-4	Peak Hour and Peak Directional Analysis	II-30
Table II-5a	Historical and Forecasted Traffic Counts AADT	II-83
Table II-5b	Existing and Forecasted Traffic Counts (Two Way Peak Hour)	II-85
Table II-6	Analysis of Residents' Ages	II-90
Table II-7	Final Results of 2015 Model Runs	II-101

Introduction

The Town of Davie adopted a Traffic Circulation Element in accordance with the requirements of Chapter 163.3177 (6)(b) Florida Statutes (F.S.) and Rule 9J-5.007 Florida Administration Code (F.A.C.) requirements in July 1989. Because of the Town's population at that time, the Town was not required to prepare and adopt the optional Mass Transit Element. The Town did not prepare or adopt a Ports, Aviation and Related Facilities Element as none of those facilities were located within the Town. In 1993, the Florida Legislature amended Chapter 163 F.S. to require each local government within the urbanized area of a Metropolitan Planning Organization (MPO) to prepare a Transportation Element which would replace the Traffic Circulation Element, Mass Transit Element and Ports, Aviation and Related Facilities Element. The purpose of the Transportation Element is to analyze and plan for all modes of transportation and to plan for a multi modal transportation system that places more emphasis on public transportation systems.

Description of Existing Transportation System

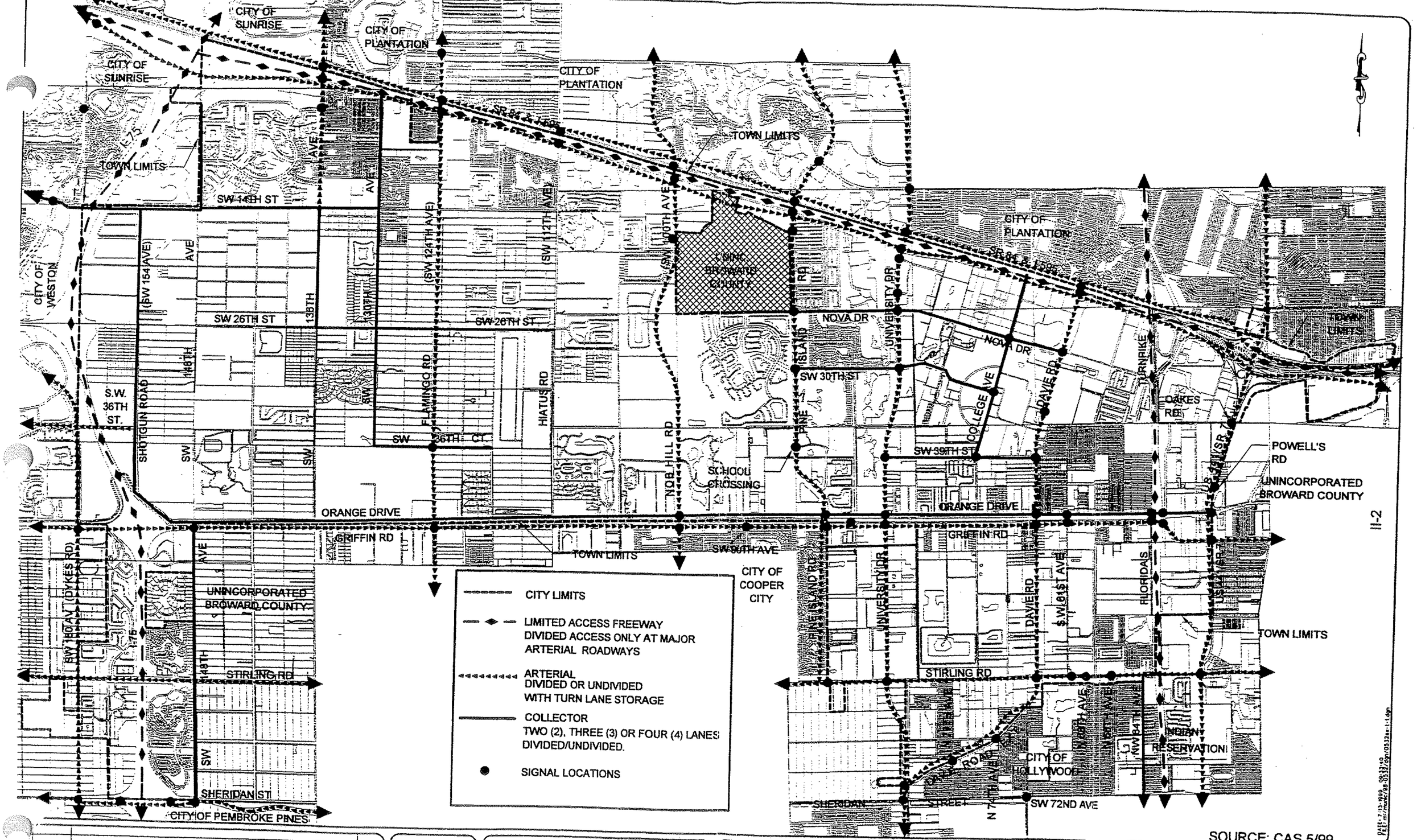
This portion of the Element examines the facilities that serve vehicular and non-vehicular traffic within the Town of Davie planning area. The transportation system is a critical component of society, playing a role in all facets of life, having economic implications, and of recreational value.

The transportation system has two basic components. One is the internal access and circulation of the Town's residential neighborhoods and other areas. The other is the external component that serves as the link to other communities. The first, or internal component is maintained for the most part by the Town or private concerns. The second, or external component forms part of the Federal Interstate Highway System, State of Florida or Broward County Traffic Circulation Network.

The Broward County transportation planning process is carried out by the Metropolitan Planning Organization (MPO), whose charge is to master plan and coordinate roadways, mass transit and other transportation systems on a countywide basis. The MPO's governing board is the Board of County Commissioners.

Roadway System

Map II-1 graphically illustrates the existing transportation road system. Within the Town of Davie, roadways are classified as follows:



SOURCE: CAS 5/99

NO.	DATE	REVISION	BY

Designed: MM 05/99
Drawn: BU 05/99
Checked: MM 05/99

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-1
EXISTING ROADWAY SYSTEM

SCALE	PROJECT NUMBER	SHEET NUMBER
1" = 2000'	98-0532	1 / 2

Limited Access Facilities

I-595
I-75
Florida Turnpike

Arterial Roads

A. North/South
SW 160th Avenue (Dykes Road)
SW 136th Avenue
Flamingo Road (SW 124th Avenue)
Nob Hill Road (SW 100th Avenue)
Pine Island Road
University Drive
Davie Road/Davie Road Extension
SR 7/US 441

B. East/West
SR 84
Griffin Road
Stirling Road
Sheridan Street
SW 36th Street

Collector Roads

SW 14th Street
Nova Drive
SW 39th Street
Orange Drive
SW 154th Avenue (Shotgun Road)
Hiatus Road (SW 112th Avenue)
College Avenue
SW 148th Avenue
SW 26th Street
SW 130th Avenue
SW 36th Court
SW 30th Street

Local Access Roads

All other City public roads.

Significant Parking Facilities

The Town has several developments or areas that have significant parking facilities. The Town's definition of significant includes available spaces of 500 or more. These significant parking facilities are identified on Map II-2.

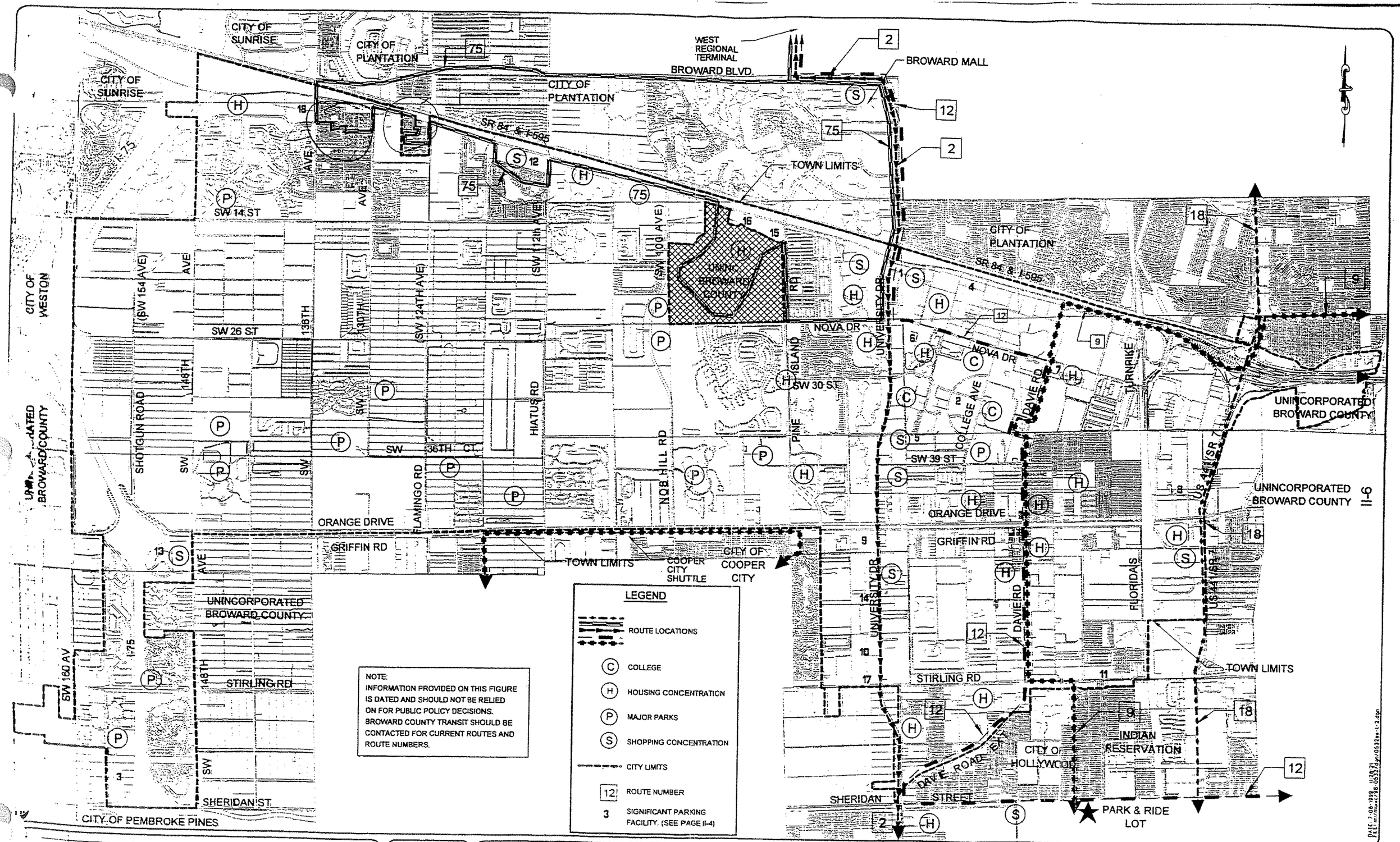
Site No. *	Name	# of Parking Spaces
1	Tower Shoppes	3,451
2	South Florida Education Center	11,000
3	Muvico	1,780
4	Signature Grand	650
5	University Park Plaza	1,126
6	Sun Forest	865
7	Palm Trace	900
8	New Town Commerce Park	956
9	Publix Shopping Center	642
10	Shopping Center	761
11	Bristol Insurance	700
12	The Plaza	1,600
13	Regency Square	920
14	Atrium Plaza	559
15	Pine Island Ridge Plaza	1,111
16	Ridge Plaza	1,086
17	University Creek Shopping Center	978
18	Shenandoah Square	762

*The number in this column corresponds with Map II-2.

Public Transit System

Map II-2 depicts the existing Public Transit System. Information was obtained from the Broward County Community Services Department Mass Transit Division and the Town of Davie.

The Town of Davie is a community with a wide diversity of lifestyles and land uses. The Town has traditionally been a rural agrarian area in central Broward County. Today the Town has a strong rural image west of Nob Hill Road but eastern Davie has emerged as an area containing a major concentration of higher education uses which is located east of University Drive west of Davie Road Extension, south of Nova Drive and north of SW 39th Street, highway commercial uses along University Drive and more suburban type development. Some eastern areas have retained the rural land use pattern of large lots and agrarian land uses. There are concentrations of mobile home parks along I-595 and multi-family uses primarily near the educational campus and older "in Town" neighborhoods. Some higher densities are located along major arterial roadways or clustered at other locations. The Town exhibits slightly higher than average income levels and average age characteristics. The existing public transit service is limited to eastern Davie between University Drive and SR 7 and along the I-595 corridor serving the mobile home parks and multi-family complexes.



NO.	DATE	REVISION	BY

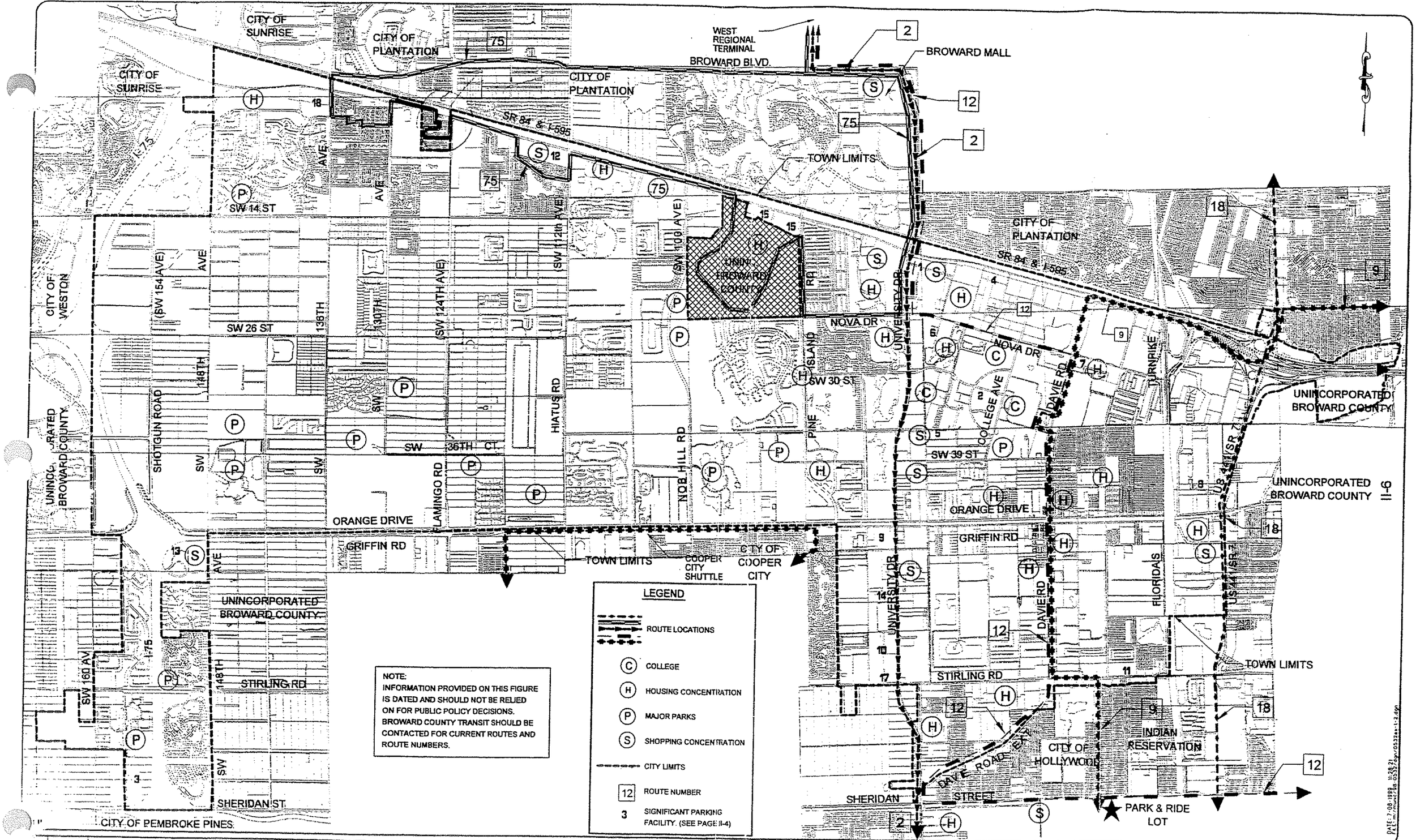
Designed: JDA 02/99
Drawn: BU 06/98
Checked: MM 06/98

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-2
EXISTING PUBLIC TRANSIT SYSTEM

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 1 / 2



NOTE:
INFORMATION PROVIDED ON THIS FIGURE IS DATED AND SHOULD NOT BE RELIED ON FOR PUBLIC POLICY DECISIONS. BROWARD COUNTY TRANSIT SHOULD BE CONTACTED FOR CURRENT ROUTES AND ROUTE NUMBERS.

NO.	DATE	REVISION	BY

Designed: JDA 02/99
Drawn: BU 06/98
Checked: MM 06/98

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-2
EXISTING PUBLIC TRANSIT SYSTEM

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 1 / 2

Public Transit Terminals and Transfer Stations

No public transit terminals or transfer stations exist within the Town of Davie. Periodic bus stops are located along the five (5) bus routes within the Town limits. Three (3) bus routes provide continuous service to the educational campus area. The nearest terminal is located within the City of Plantation approximately 1.5 miles north of the Davie Town limits on Pine Island Road north of Broward Boulevard.

Public Transit Rights of Way and Exclusive Public Transit Corridors

The only public transit rights-of-way within the Town are busbays along several major roads. There are no exclusive public transit corridors located within the Town. The only exclusive public transit corridor identified in the Broward County Transportation Element is the CSX railway corridor which is located just west of I-95 approximately 2 miles east of the nearest portion of the Town.

Significant Bicycle and Pedestrian Ways

Map II-3 depicts the existing bicycle and pedestrian ways within the Town.

a) Bicycle Traffic

Bicycling within the Town's local street system is common, given the current traffic volumes, and controlled traffic conditions encountered. On major roadways, bicyclists typically utilize sidewalks for safety reasons. Some properties provide bike racks but this is not provided on a consistent basis. The Town of Davie Code requires bike racks for certain uses.

The Broward County Transportation Element identifies several significant bikeways within the Town. These includes segments existing or planned along westbound SR 84 along the North New River Canal, along Pine Island Road, Nob Hill Road, Flamingo Road, Griffin Road and SR 7. All such bikeways except the SR 84 greenway are either constructed as wide curb lanes or paved shoulders.

The Town adopted a Recreational Trail Master Plan in 1990 and continues to complete missing segments as opportunities arise. The system includes facilities for bicycles, horses and pedestrians.

b) Pedestrian Traffic

Pedestrian traffic is very common within the Town neighborhoods. All single-family developments other than large lot communities are required to provide internal sidewalks. Additionally, the Town, through cooperation with FDOT and Broward County has been successful in providing sidewalks along all major roadways and other linkages to schools and parks. The maps identifying bicycle and pedestrian ways shows the Town's success in implementing an overall townwide system. It is the policy of the Town to require developers to complete missing links when development occurs. The Town's Engineering Department determines the appropriate width for the various bikeways, pedestrianways and equestrian facilities.

CITY OF SUNRISE

CITY OF WESTON

I-75

SR 84 & I-595

TOWN LIMITS

CITY OF PLANTATION

SW 14 ST

(SW 154 AVE)

SW 26 ST

136

130

(SW 124 AVE)

(SW 112th AVE)

UNINC. BROWARD COUNTY

NOVA DR

SW 30 ST

UNIVERSITY DR

COLLEGE AVE

DAVIE RD

TURNPIKE

US 441/SR 7

UNINCORPORATED BROWARD COUNTY

142nd

SHOTGUN ROAD

SW

FLAMINGO RD

HIATUS RD

NOB HILL RD

PINE ISLAND RD

SW 36 ST

ORANGE DRIVE

GRIFFIN RD

TOWN LIMITS

CITY OF COOPER CITY

UNINCORPORATED BROWARD COUNTY

FLORIDA'S

STIRLING RD

SW 160 AV

SHERIDAN ST

CITY OF PEMBROKE PINES

DAVIE ROAD EXT.

CITY OF HOLLYWOOD

INDIAN RESERVATION

(H) HOSPITAL	CITY LIMITS
(S) SCHOOL	PEDESTRIAN WALK
(P) PARK	BROWARD COUNTY DESIGNATED SIGNIFICANT BIKEWAYS

SOURCE: 1997 Aerial Photograph produced by Experian Information Solutions, Inc., and field verification performed by CAS Staff (1999).

Significant Bikeways per Broward County 1999 adopted Transportation Element Map No. 3.3 "Broward County Significant Bikeways"

SOURCE: DAVIE1995 EAR

DATE: 6-17-1999 14:49:39
FILE: m:/model/98-0532/dgn/0532ex-1-3.dgn

NO.	DATE	REVISION	BY

Designed: DJO 02/99
Drawn: BU 09/98
Checked: MM 09/98

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

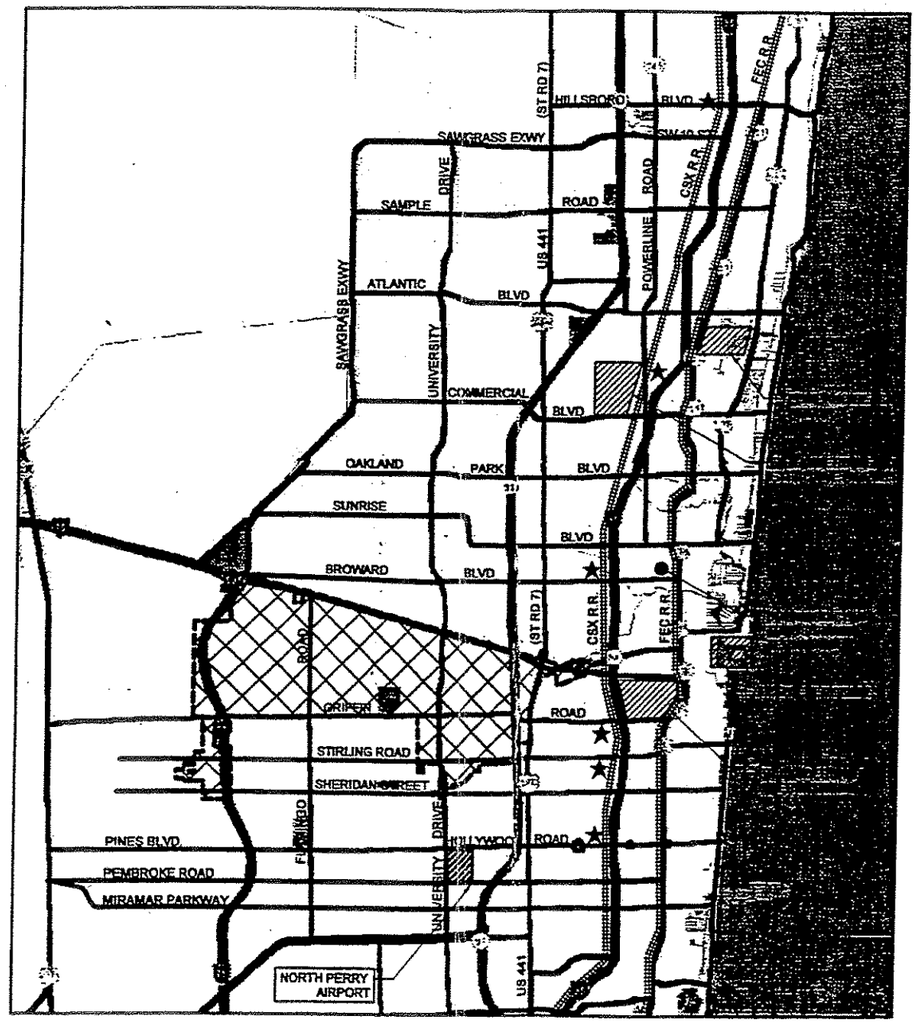
PREPARED FOR
TOWN OF DAVIE

MAP II-3
EXISTING PEDESTRIAN AND BICYCLE WAYS

SCALE: 1" = 1900'

PROJECT NUMBER: 98-0532

SHEET NUMBER



N
W E
S

II-10

DISTANCE FROM TOWN TO:	
TO PORT EVERGLADES	5.0 MILES
TO FT. LAUDERDALE AIRPORT	2.5 MILES
TO FT. LAUDERDALE EXECUTIVE AIRPORT	8.0 MILES
TO POMPANO BEACH AIRPORT	13 MILES
TO NORTH PERRY AIRPORT	2.0 MILES

LEGEND

- TOWN OF DAVIE
- IDENTIFIED FACILITIES
- ★ INTERMODAL FACILITY (TRI-RAIL PARK & RIDE LOT)
- CSX & FEC RAILWAYS

DATE: 6-07-1999 08:57:19
FILE: m:/munic/98-0532/dgn/0532ex-i-4.dgn

URCE: CAS AS OF APRIL 1999

NO.	DATE	REVISION	BY

Designed: MM 03/99
Drawn: BU 03/99
Checked: MM 03/99

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-4
EXISTING PORTS, AIRPORT FACILITIES, RAILWAYS, AND INTERMODAL FACILITIES

SCALE: N.T.S.
PROJECT NUMBER: 98-0532
SHEET NUMBER: 1 / 2

Ports, Airport Facilities, Railways and Intermodal Facilities

Map II-4 illustrates the proximity of the Town of Davie to nearby Ports, Airports, Railways and Related Facilities.

Port Facilities

There are no port facilities within the Town of Davie. The nearest major seaport is Port Everglades which is located approximately six (6) miles east of the closet point of the Town, southeast of the central business district of the City of Fort Lauderdale. Port Everglades is a deep water port serving commercial freight customers, cruise lines and recreation boating needs.

Airport Facilities Including Clear Zones and Obstructions

There are no airport facilities within the Town, however, there are four (4) airports within a few miles of the Town.

Fort Lauderdale/Hollywood International Airport

- Fort Lauderdale/Hollywood International Airport is a regional facility that serves international and domestic air carriers and is located approximately three (3) miles east of the Town. Broward County owns and operates the airport. The airport complex is approximately 1,718 acres in size and is located south of I-595 and east of I-95, some two (2) miles west of the coastline at its closest point. The runway alignments are generally east-west. Air traffic typically lands from the west and takes off eastward over the Atlantic Ocean before beginning turning movements. The primary approach from the west is directly over most portions of the Town just south of I-595. This causes problems with noise primarily in the eastern portion of the Town. There are FAA clear zones restrictions which affect uses and heights of structures. These are restrictions of development within the flight path corridor.

Fort Lauderdale Executive Airport

- Fort Lauderdale Executive Airport is a general aviation facility located approximately seven and one half (7.5) miles northeast of the Town. Air traffic is generally restricted to non-commercial activities. The airport has east-west and diagonal (northwest/southeast and northeast/ southwest) runway alignments. Air traffic typically takes off and lands on the east-west runway due to prevailing winds. The use of the other runway

alignments (other than east-west) on occasion causes some flyover conflicts such as noise or safety concerns to nearby communities, but because of the distance between the Town and the airport little, if any, problems occur. Therefore, no clear zone or obstruction issues generally affect the Town.

Pompano Beach Airport

- Pompano Beach Airport is a general aviation facility located approximately eleven (11) miles northeast of the Town within the City of Pompano Beach. Air traffic is generally restricted to non commercial activities. The runway alignments are generally east-west. Air traffic typically makes turning movements within a few miles of the airport, therefore, no clear zone or obstruction issues affect the Town.

North Perry Airport

- North Perry Airport is a general aviation facility located approximately two (2) miles south of the Town. Air traffic is generally restricted to non-commercial activities. The airport has both north-south and east-west runway alignments. Air traffic typically take off and lands on the east-west runway due to prevailing winds. Therefore, no clear zone or obstruction issues affect the Town.

General Aviation Travel

While the Town does not have physical facilities that directly affect the Town's development, the Federal Aviation Administration (FAA) has designated certain flight routes over the Town. For example, the main approach flight path for Ft. Lauderdale/Hollywood International Airport is directly over the Town, south of I-595. Also, an established helicopter north-south route parallels University Drive. There are frequent occasions when low flying aircraft cause noise problems to residents primarily in the eastern portions of the Town.

Freight and Passenger Rail Lines and Terminals

The Town has no rail line corridors within its boundaries. The closest railway corridors are located generally east of and paralleling Dixie Highway in the far eastern portion of the County and the second is located just west of I-95. Both corridors run in a north-south direction.

The eastern corridor is known as the Florida East Coast (FEC) Railroad

line. The corridor is utilized almost exclusively for freight service. There are grade crossings or overpasses at major roadways.

The western corridor is known as the Seaboard Coastline (CSX) Railroad line. The corridor is utilized almost exclusively for passenger services. Both Amtrak and the Tri-Rail commuter train utilize the corridor. There are transit stations at several locations on the corridor. Broward County owns and operates Park & Ride Lots at several locations along the railway corridor. The closest Tri-Rail Station and parking lot is located south of Griffin Road just west of I-95.

Intermodal Terminals and Access to Intermodal Facilities

As mentioned above, there are no intermodal facilities within the Town. The Broward County West Regional Terminal is located in the City of Plantation north of Broward Boulevard on the east side of Pine Island Road. Also, a Park -n- Ride lot is located on Sheridan Street at north 68th Avenue.

Existing Functional Classification and Maintenance Responsibilities

The Functional Classification of roadways is utilized to create a hierarchical system to establish the responsibility for roadway maintenance and operation by either the State, the County or the local jurisdiction. The following broad guidelines are used to define roadway types:

- Principal Arterials - Major highways serving heavy volumes of traffic through the urban area.
- Minor Arterials - Roadways carrying moderately heavy volumes of traffic which channel traffic to community activity centers.
- Collectors - Roadways carrying moderate volumes of traffic to the arterial network.
- Local Roadways - Neighborhood roadways carrying low volumes of traffic to collector or arterial roadways.

The existing functional classification of major roadways in the Town are provided in the following Table II-1 and illustrated in Map II-5. Both the Federal Government and State of Florida have utilized functional classification systems to assign roadway jurisdictions. In May of 1996 the Florida Department of Transportation issued a letter stating that applicable State laws pertaining to functional classifications had been repealed.

Therefore, the information provided is from the Federal classification system which is further detailed in the Broward County Transportation Element. In addition, several roadways which are depicted as a "local road" on the Broward County 1997 State Highway Classification and Land Arrangement Map actively function within the Town as a Town Collector.

Table II-1
FUNCTIONAL CLASSIFICATION OF ROADWAYS

NORTH/SOUTH ROADWAY	SEGMENT	FUNCTIONAL CLASSIFICATION	REQUIRED ROW WIDTH (1)	# OF LANES
SW 160th Avenue	Sheridan St. to Northern City Limit	UCOLL	120' North of Griffin	2L
			110' South of Griffin	2L
I-75	Sheridan St. to I-595	UPA	325'	8LD
SW 136th Avenue	I-595 to 0.8 Miles North of Orange Dr.	UCOLL	110'	2L
Flamingo Road	I-595 to Griffin Rd.	UPA	200'	6LD
Hiatus Road	I-595 to Orange Dr.	UCOLL	110' (I-595 to SW 14th St.)	2L
Nob Hill Road	I-595 to Griffin Rd.	UMA	110'	4LD
Pine Island Road	I-595 to Stirling Rd.	UCOLL	110'	4LD
University Drive	Sheridan St. to I-595	UPA	200'	6LD
College Avenue	SR 84 to SW 39th St.	CC	80'	2L
Davie Road/Davie Road Extension	I-595 to Griffin Rd.	UMA	106' Nova Dr. to I-595	4L
	University Dr. to Griffin Rd.	UCOLL	80' Nova Dr. to Stirling Rd.	4L
			106' Stirling Rd. to University Dr.	2L
Florida Turnpike	Stirling Rd. to I-595	UPA	325'	6LD
US 441/SR 7	Southern Town Limit to I-595	UPA	200' I-595 to Griffin	6LD
			120' South of Griffin	6L
SW 130th Avenue	I-595 to SW 30th Ct.	CC	See Note	2L
SW 148th Avenue	South of I-595	CC	94' I-595 to SW 14th Street	2L

EAST/WEST ROADWAY	SEGMENT	FUNCTIONAL CLASSIFICATION	REQUIRED ROW WIDTH (1)	# OF LANES
I-595	I-75 to Eastern Town Limits	UPA	325'	6 - 1-75 to University Dr.
				8 - University Dr. to Eastern Town Limits
SR 84	I-75 to Eastern Town Limits	UMA	N/A	4 (2 each way)
SW 14th Street	Weston Rd. to Flamingo Rd.	UCOLL	94'	2L
Nova Drive	Pine Island Rd. to Davie Rd.	UCOLL	110'	2L
	West of Pine Island Rd.	CC	80'	2L
SW 36th Street	Weston Rd. to SW 154th Ave.	UCOLL	110'	2L
SW 39th Street	University Dr. to Davie Rd.	CC	80'	2L
Orange Drive	SW 36th St. to SR 7/US 441	UCOLL	80'	2L
Griffin Road	SW 160th Ave. to SR 7/US 441	UMA	120'±	2/4/6 (See Table II-2)
Stirling Road	West of SW 160th Ave. to Flamingo Rd.	UCOLL	110'	4/6LD
	Flamingo Rd. to Hiatus Rd.	CC	110'	6LD
	Hiatus Rd. to University Dr.	UMA	110'	6LD
SW 26th Street	SW 148th Ave. to Hiatus Rd.	CC	80'	2L
SW 36th Court	SW 130th Ave. to Flamingo Rd.	CC from SW 130th Ave to Flamingo Rd.	See Note 2	2L
SW 30Street	Pine Island Rd. to College Ave.	CC	See Note 2	4L
Sheridan Street	I-75 to University Dr.	UMA	200'	6LD

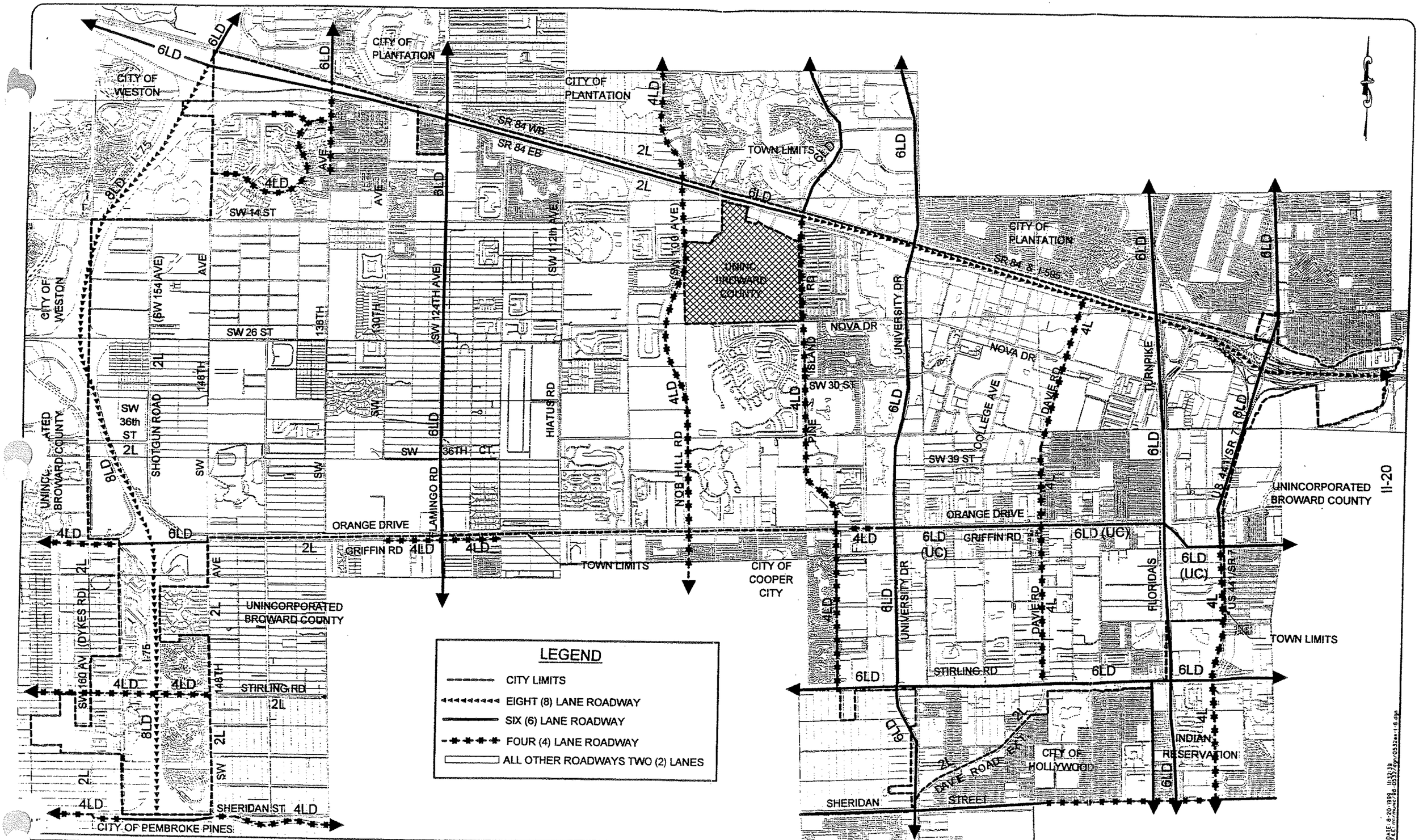
Legend:

UPA = Urban Principal Arterial (State Maintenance)
UMA = Urban Minor Arterial (State Maintenance)
UCOLL = Urban Collector (County Maintenance)
CC = City Collector (Town Maintenance)
LR = Local Road (Town Maintenance)
LD = Lanes Divided

Note: [1]Required Right of Way (ROW) width per BC Trafficways Plan
[2]Roadways not indicating a "Required ROW Width" are not depicted on the Broward County Trafficways Plan.

Source: Broward County 1997 State Highway Functional Classification and Lane Arrangement Map 9/97 and Broward County Transportation Element 11/98.
Broward County Trafficways Map
CAS 1999

Maintenance responsibilities are divided between the State Department of Transportation for Urban Principal Arterials, Broward County for other arterial and County Collector roadways and the Town for Town Collector and local streets.



NO.	DATE	REVISION	BY

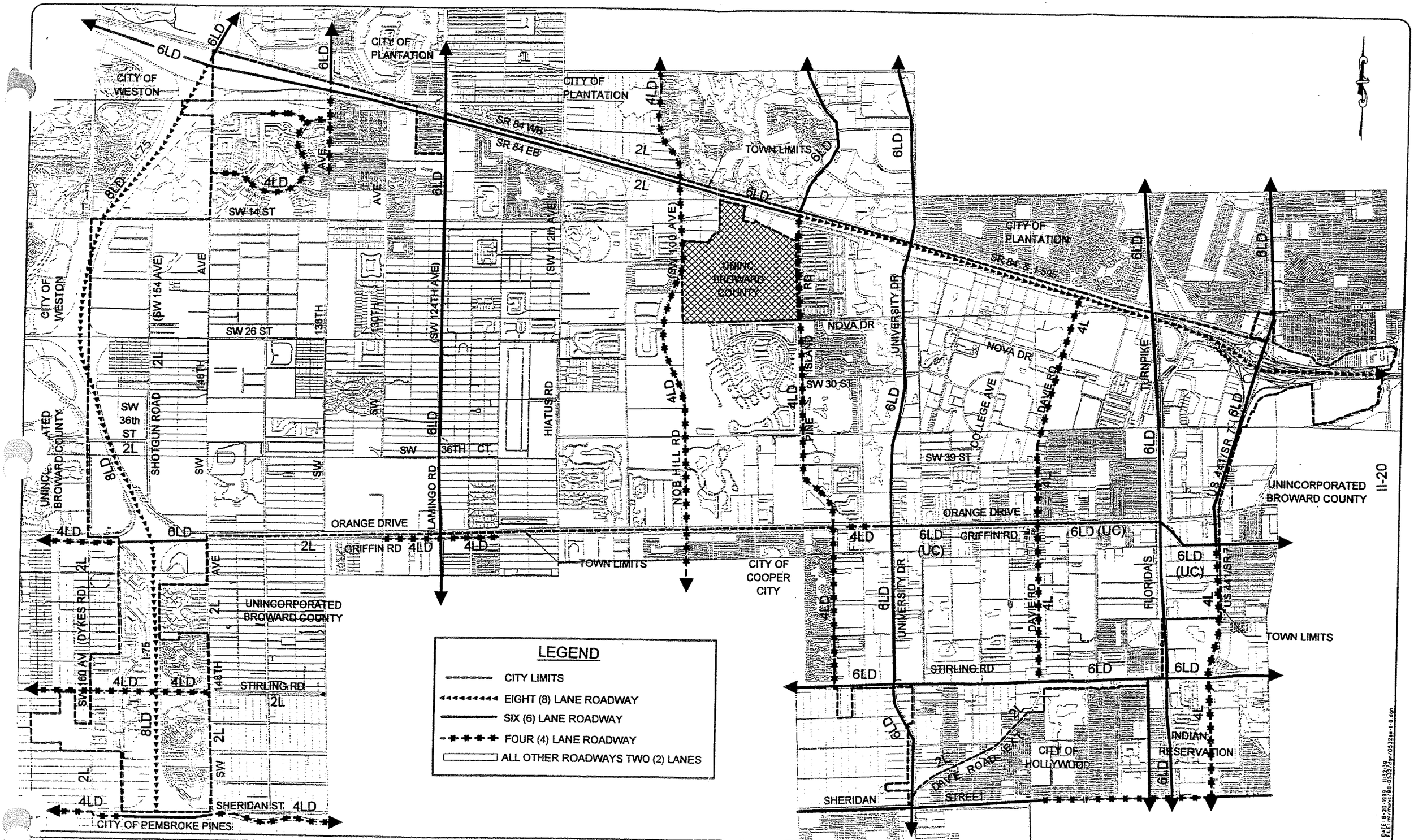
Designed: MM 04/99
Drawn: BU 04/99
Checked: MM 04/99

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-6
EXISTING NUMBER
OF THROUGH LANES

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 1 / 2



NO.	DATE	REVISION	BY

Designed: MM 04/99
Drawn: BU 04/99
Checked: MM 04/99

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-6
EXISTING NUMBER
OF THROUGH LANES

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 1 / 2

Number of Existing Through Lanes for Each Roadway

The number of through lanes is described in Table II-2 and illustrated in Map II-6.

Table II-2

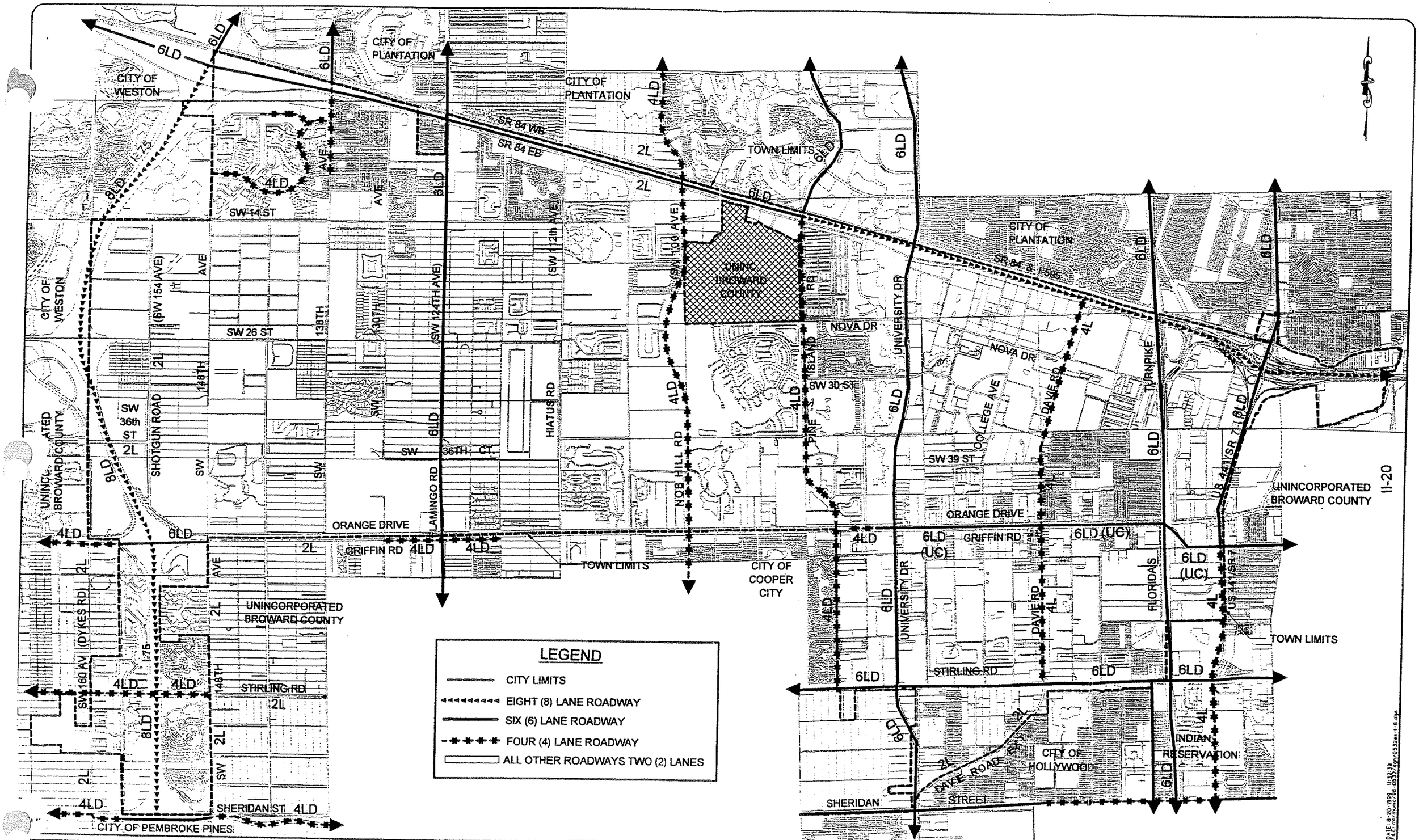
NUMBER OF THROUGH LANES

ROADWAYS	# OF THROUGH LANES
A. North/South	
SW 160th Avenue (Dykes Rd.)	2 (1 each direction)
I-75	8 (4 each direction)
SW 136th Avenue	2 (1 each direction)
Flamingo Road	6 (3 each direction)
Hiatus Road	2 (1 each direction)
Nob Hill Road	4 (2 each direction)
Pine Island Road	4 (2 each direction)
University Drive	6 (3 each direction)
College Avenue	2 (1 each direction)
Davie Road Extension	4 (2 each direction) I-595 to Stirling Rd.
	2 (1 each direction) University Dr. to Stirling Rd.
Florida Turnpike	6 (3 each direction)
SR 7/US 441	6 (3 each direction) I-595 to Griffin Rd.
	4 (2 each direction) Griffin Rd. to south TL

Table II-2 (cont.)

NUMBER OF THROUGH LANES

ROADWAYS	# OF THROUGH LANES
B. East/West	
SR 84 (westbound)	2 (one way westbound)
I-595	6 (3 each direction) I-75 to University Dr.
	8 (4 each direction) University Dr. to Eastern Town Limits.
SR 84 (eastbound)	2 (one way eastbound)
Shenandoah Parkway	4 (2 each direction)
SW 14th Street	2 (1 each direction)
Nova Drive	2 (1 each direction)
S.W. 36th Street	2 (1 each direction)
SW 39th Street	2 (1 each direction)
Orange Drive	2 (1 each direction)
Griffin Road	4 (2 each direction) West of I-75
	6 (3 each direction) I-75 overpass
	2 (1 each direction) SW 148th Ave. to 1000' W of Flamingo Rd.
	4 (2 each direction) 1000' W of Flamingo Rd. to 1000' E of Flamingo Rd.
	2 (1 each direction) 1000' E of Flamingo Rd. to Pine Island Rd.
	4 (2 each direction) Pine Island Rd. to University Dr.
	6 (3 each direction) University Dr. to US 441 (Note - Construction of six lane facility currently in progress from University Dr. to US 441)
Stirling Road	4 (2 each direction) at I-75
	6 (3 each direction) Pine Island Rd. to SR 7/US 441
Sheridan Street	4 (2 each direction) West of I-75
	6 (3 each direction) East of I-75
	4 (2 each direction) West of University Dr.
	6 (3 each direction) East of University Dr.
C. Other Local Roadways	2 (1 each direction)/some local collector roads may be 4 (2 each direction)



NO.	DATE	REVISION	BY

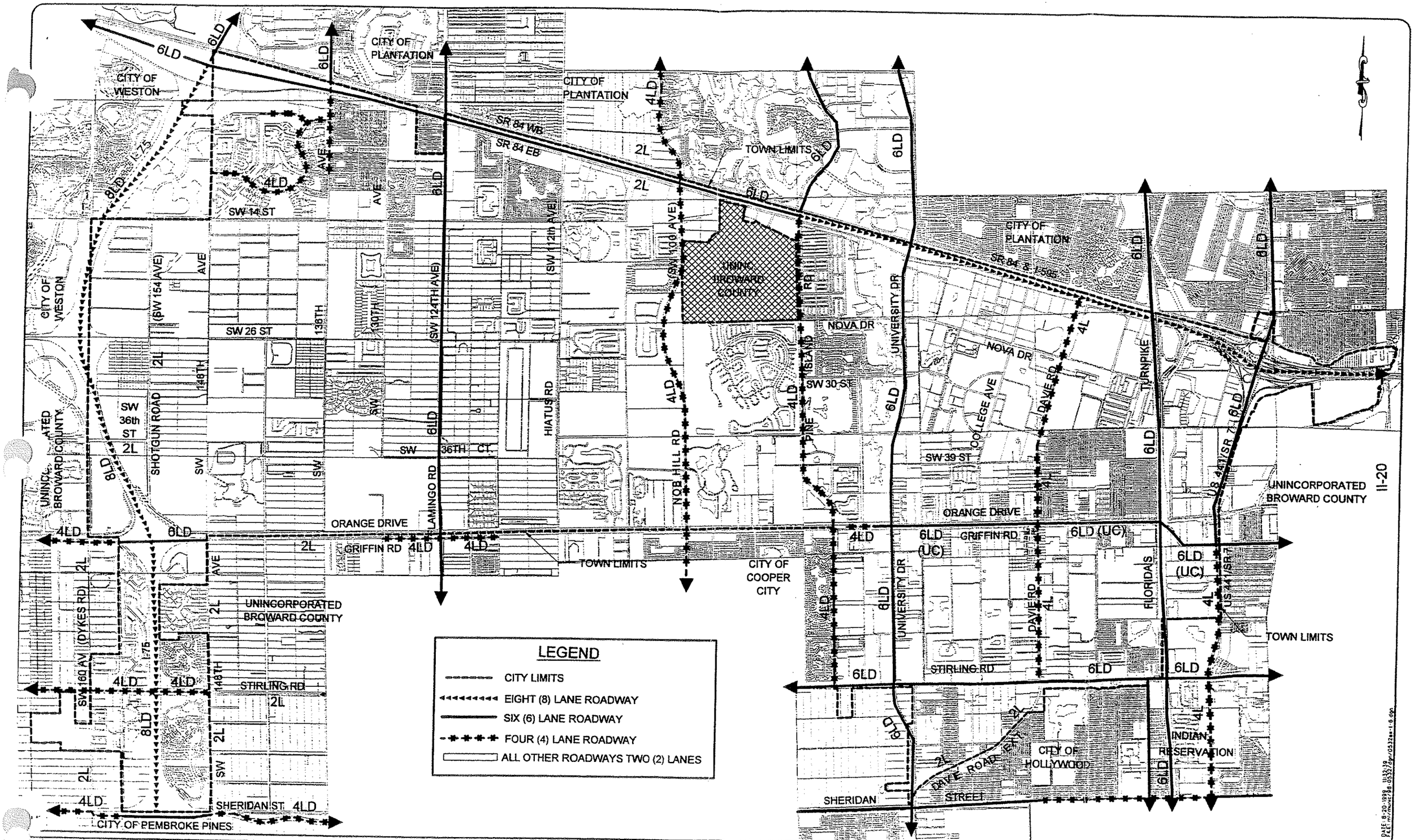
Designed: MM 04/99
Drawn: BU 04/99
Checked: MM 04/99

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-6
EXISTING NUMBER
OF THROUGH LANES

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 1 / 2



NO.	DATE	REVISION	BY

Designed: MM 04/99
Drawn: BU 04/99
Checked: MM 04/99

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-6
EXISTING NUMBER
OF THROUGH LANES

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 1 / 2

Major Public Transit Generators and Attractors

A major Public Transit Generator or Attractor is generally a higher density residential area or major commercial/industrial, employment or shopping area. The Town of Davie has been developed in a generally grid-like fashion. The Town, when originally developed, was a considerable distance from urbanized areas along the coast, therefore, public transit routes did not exist in the area. The major roadways within the Town have existing commercial development abutting the roadways primarily in the eastern portion of the Town (east of Pine Island Road) with commercial development at nodes located at the intersections of major roadways in the western portion of the Town (west of Pine Island Road). It should be noted that the portion of the Town east of Pine Island Road is significantly more intense than development occurring west of Pine Island Road. Development west of Pine Island Road could best be described as rural in nature with significantly lower densities of residential and fewer concentrations of multi-family residential developments with commercial uses being limited to nodes at the intersections of major roadways. Development in the eastern portion of the Town includes higher intensity concentrations of residential developments, intense community facilities (including several major University Campuses) with commercial uses being located along major roadways. The areas can best be described as "strip commercial" in design with numerous curb cuts. These commercial areas are located along Griffin Road, SR 84, University Drive, portions of Orange Drive and Davie Road. The balance of the Town commercial uses are located more at nodes of major roadway intersections. The intensity of development in the commercial areas is primarily one-story retail/office/restaurant uses with low intensity development. Occasionally a multi-story office building exists. In addition, there are several major University Campuses within the Town limits. These are the Broward Community College, University of Florida, Florida International University, Nova Southeastern University and Florida Atlantic University. This area is located east of University Drive, west of Davie Road, south of Nova Drive and north of SW 39th Street.

Multi-family concentrations are scattered throughout the eastern portion of the Town (east of Pine Island Road) and typically do not front on major roads. For the most part the existing multi-family concentrations are 10-16 dwelling units per acre (DUA) in predominantly single or two story structures. There are other examples of higher density housing (16-22) DUA) at various locations along SR 84. Also major mobile home park concentrations are located along the SR 84 corridor. The existing public transit system services most of these developments at present.

Industrial Park/Employment Center concentrations are located in the southwestern and northeastern portions of the Town. These Industrial Park/Employment Centers are located in these areas due to their close proximity to major transportation corridors, primarily I-75 and SR 7/US 441. Thousands of employees travel to and from these areas daily.

Research of Broward County's Mass Transit Division's data revealed that ridership is relatively low in Davie. Because of the Town's residents' general economic characteristics and demographics, most residents utilize automobiles for transportation. Therefore, even though some geographic areas can be described as potential public transit generators or attractors which are illustrated in Map II-7, further study as to cost feasibility would be warranted prior to simply recommending extensions of existing public transit routes.

Designated Local and Regional Transportation Facilities Critical to the Evacuation of the Coastal Population.

According to the Broward County Hurricane Evacuation Plan (BCHEP) prepared by the Division of Emergency Preparedness, no area of the Town of Davie is identified for evacuation during any type of hurricane with the exception of mobile home residents. According to the BCHEP all mobile home residents within Broward County are to evacuate during hurricanes. The most eastern point of the community is located approximately four and one half (4.5) miles from the beach area. If damage were to occur it would be from wind or rainfall. However, lessons learned from a recent major hurricane's impact in South Florida (Andrew) revealed that even inland development can be severely damaged. Broward County has designated three (3) shelters within Davie in case of emergency. The shelters are opened, supplied and operated by the Red Cross, which coordinates with the local school administration and Broward County. These shelters are illustrated on Map II-8. All shelters are located proximate to major roadways, therefore, all shelters can be easily accessed. Finally I-75 abuts the Town on the west with I-595 on the north. The Florida Turnpike is located on the eastern edge of the Town. These roadways would be the primary routes for evacuation from the Town to leave the South Florida Region.

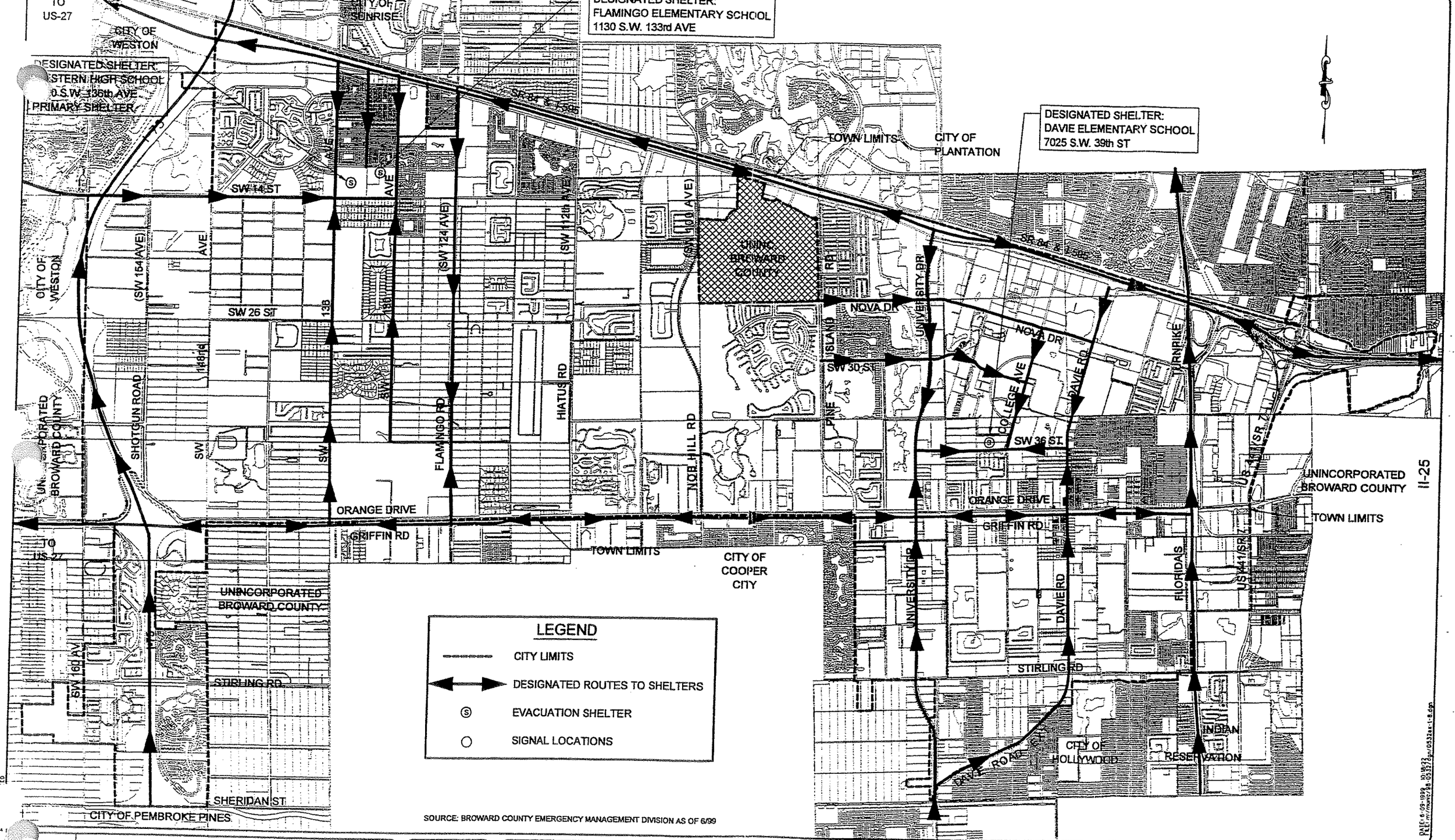
Town of Davie
Designated Hurricane Shelters

- Davie Elementary School
  7025 SW 39th Street

- Western High School
  1200 SW 136th Avenue

- Flamingo Elementary School
  1130 SW 133rd Avenue

Western High School is the primary shelter for the area while the Elementary Schools will be opened upon need.



SOURCE: BROWARD COUNTY EMERGENCY MANAGEMENT DIVISION AS OF 6/99

NO.	DATE	REVISION	BY

Designed: JDA 02/99
Drawn: BU 06/98
Checked: MM 06/98

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-8
EXISTING EVACUATION ROUTES

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 1 / 2

Existing Average Daily Traffic, Peak Hour, Peak Direction, Levels of Service for Roads, Mass Transit Facilities and Corridors/Routes

The existing average daily traffic, peak hour, peak direction levels of service for roads, mass transit facilities and corridors/routes are described in Table II-3 and Table II-4, illustrated on Map II-9 and in following text.

Table II-3

CAPACITY ANALYSIS OF EXISTING ROADWAY SYSTEM 1998 AADT TRAFFIC VOLUMES

EAST/WEST ROADWAYS	SEGMENT	TIP DESIGN CODE	1998 ADT	1998 PEAK	LOS D CAP	EXISTING V/C	LOS ADT	PEAK EXISTING V/C	LOS PEAK
SR 84 (WB)	E of SR 7	222	20,900	21,700	19,500	1.07	E	1.11	E
	E of University Dr.	222	29,000	30,000	19,500	1.49	F	1.54	F
	W of Pine Island Rd.	222	22,000	22,700	19,500	1.13	E	1.16	F
	E of Nob Hill Rd.	222	17,500	18,700	19,500	0.90	D	0.96	D
	E of Hiatus Rd.	222	7,700	8,300	19,500	0.39	A	0.42	A
	E of Flamingo Rd.	222	5,800	5,900	19,500	0.30	A	0.30	A
	W of Flamingo Rd.	222	10,000	11,000	19,500	0.51	A	0.56	A
	W of SW 136th Ave.	222	15,500	18,000	19,500	0.79	C	0.92	D
SR 84 (EB)	E of SR 7	222	13,900	15,300	19,500	0.71	B	0.78	C
	E of University Dr.	222	19,500	21,700	19,500	1.00	D	1.11	E
	W of University Dr.	222	20,300	22,700	19,500	1.04	E	1.16	F
	E of Pine Island Rd.	222	18,500	20,900	19,500	0.95	D	1.07	E
	W of Pine Island Rd.	222	20,800	23,000	19,500	1.07	E	1.18	F
	E of Nob Hill Rd.	222	19,000	20,500	19,500	0.97	D	1.05	E
	E of Hiatus Rd.	222	10,500	11,800	19,500	0.54	A	0.61	A
	E of Flamingo Rd.	222	20,500	21,100	19,500	1.05	E	1.08	E
	W of Flamingo Rd.	222	24,000	25,500	19,500	1.23	F	1.31	F
	E of SW 136TH Ave.	222	17,500	18,000	19,500	0.90	D	0.92	D
I-595	E of SR 7	815	152,000	158,000	138,600	1.10	E	1.14	E
	E of Davie Rd.	815	155,000	169,900	138,600	1.19	F	1.23	F
	E of University Dr.	815	154,000	167,800	138,600	1.11	E	1.21	F
	E of Pine Island Rd.	615	128,500	132,800	101,600	1.26	F	1.31	F
	E of Nob Hill Rd.	615	116,000	121,100	101,600	1.14	E	1.19	F
	E of Hiatus Rd.	615	101,500	106,500	101,600	1.00	D	1.05	E
	E of Flamingo Rd.	615	117,500	123,400	101,600	1.16	F	1.21	F
	E of SW 136th Ave.	615	104,000	111,900	101,600	1.02	E	1.10	E
	W of I-75	615	36,000	50,000	101,600	0.35	A	0.49	A
SW 14th St.	W of Weston Rd.	211	19,900	20,400	14,600	1.39	F	1.40	F
	E of I-75	211	10,800	11,500	14,600	0.74	B	0.79	C
Nova Dr.	E of Pine Island Rd.	221	9,100	9,400	10,900	0.83	C	0.86	D
	E of University Dr.	221	18,400	22,200	10,900	1.69	F	2.07	F
	W of Davie Rd.	221	20,600	23,400	10,900	1.89	F	2.15	F
SW 36th St.	W of I-75	211	2,900	3,000	14,600	0.20	A	0.20	A
SW 39th St.	E of University Dr.	211	10,600	11,700	10,900	0.97	E	1.07	E
	W of Davie Rd. Ext.	211	10,700	11,700	10,900	0.98	D	1.07	E

Table II-3 (cont.)

CAPACITY ANALYSIS OF EXISTING ROADWAY SYSTEM
1998 AADT TRAFFIC VOLUMES

EAST/WEST ROADWAYS	SEGMENT	TIP DESIGN CODE	1998 ADT	1998 PEAK	LOS D CAP	EXISTING V/C	LOS ADT	PEAK EXISTING V/C	LOS PEAK
Orange Dr.	W of Flamingo Rd.	211	750	820	14,600	0.05	A	0.06	A
	E of Hiatus Rd.	211	6,800	7,000	14,600	0.46	A	0.48	A
	E of Pine Island Rd.	221	7,250	7,400	10,900	0.66	B	0.68	B
	E of University Dr.	221	4,240	4,660	10,900	0.39	A	0.43	A
	E of Davie Rd.	221	12,400	12,900	10,900	1.14	E	1.18	F
	W of SR 7	221	11,300	12,300	10,900	1.04	E	1.13	E
Griffin Rd.	W of I-75	410	17,300	18,700	35,000	0.49	A	0.53	A
	E of I-75	610	24,500	25,500	52,500	0.47	A	0.48	A
	E of SW 142nd Ave.	210	15,000	16,100	16,600	0.90	D	0.97	D
	W of Flamingo Rd.	410	12,600	15,300	35,000	0.36	A	0.44	A
	E of Flamingo Rd.	410	14,800	15,200	35,000	0.42	A	0.43	A
	E of Nob Hill Rd.	220	16,000	16,600	14,900	1.07	E	1.11	E
	W of University Dr.	420	27,500	31,300	32,500	0.85	C	0.96	D
	E of University Dr.	610	15,300	16,400	52,500	0.29	A	0.31	A
	W of Turnpike	620	18,300	18,900	48,900	0.37	A	0.39	A
	W of SR 7	620	18,000	18,300	48,900	0.37	A	0.37	A
	E of SR 7	620	29,500	31,900	48,900	0.60	A	0.65	A
Stirling Rd.	W of I-75	410	4,800	6,700	35,000	0.14	A	0.19	A
	E of I-75	410	3,900	4,000	35,000	0.11	A	0.11	A
	W of University Dr.	620	29,800	32,700	48,900	0.61	A	0.67	B
	E of University Dr.	620	24,000	24,900	48,900	0.49	A	0.51	A
	W of Davie Rd.	610	24,500	24,500	52,500	0.47	A	0.47	A
	E of Davie Rd.	610	36,000	38,000	52,500	0.69	B	0.72	B
	W of SR 7	610	34,900	43,300	52,500	0.66	B	0.82	C
	E of SR 7	610	31,000	33,800	52,500	0.59	A	0.64	A
Sheridan St.	W of I-75	422	31,500	33,800	32,500	0.97	E	1.04	E
	E of I-75	622	29,100	32,700	48,900	0.59	A	0.67	B
	W of University Dr.	413	34,100	41,400	35,000	0.97	E	1.18	F
	E of University Dr.	613	29,000	29,400	52,500	0.55	A	0.56	A

Peak-Refers to Peak season traffic volumes for a twenty-four (24) hour period.

DESIGN CODE

1st Digit: # of lanes

2nd Digit: Signals/Mile:
1=Low (less than 1.99)
2=Medium (2.00 - 4.5)
3=High (over 4.5)

3rd Digit: Facility Type
0=Minor Arterial
1=Collector
2=One-way
3=Major Arterial
4=Multi-Lane Highway
5=Expressway

Other: 9=Planned Roadway

SOURCE: FDOT Functional Classification Map, Broward County Dept. of Strategic Planning & Growth Management, FDOT Generalized Annual Average Daily Volume For Florida's Urbanized Areas.

Table II-3 (cont.)

CAPACITY ANALYSIS OF EXISTING ROADWAY SYSTEM
1998 AADT TRAFFIC VOLUMES

NORTH/SOUTH ROADWAYS	SEGMENT	TIP DESIGN CODE	1998 ADT	1998 PEAK	LOS D CAP	EXISTING V/C	LOS ADT	PEAK EXISTING V/C	LOS PEAK
I-75	N of Arvida Pkwy.	815	82,500	92,900	138,600	0.59	A	0.67	B
	N of Griffin Rd.	815	94,900	98,900	138,600	0.68	B	0.71	B
	S of Griffin Rd.	815	85,500	95,700	138,600	0.62	A	0.69	B
	S of Sheridan St.	815	84,500	92,300	138,600	0.61	A	0.67	B
SW 160th Ave.	N of Sheridan St.	211	7,300	7,800	10,900	.67	B	0.71	B
SW 154th Ave.	N of SW 36th St.	211	3,100	3,600	14,600	0.21	A	0.25	A
Flamingo Rd.	N of I-595	613	35,500	36,500	52,500	0.68	B	0.69	B
	N of SW 26th St.	613	24,000	24,400	52,500	0.46	A	0.46	A
	N of Orange Dr.	623	27,500	28,100	48,900	0.56	A	0.57	A
	S of Griffin Rd.	623	29,700	32,000	48,900	0.61	A	0.65	A
SW 136th Ave.	S of I-595 to App. Tr.	211	10,200	12,600	16,600	0.61	A	0.76	C
Hiatus Rd.	S of I-595	212	9,260	9,800	10,900	0.85	C	0.92	D
	N of Orange Dr.	211	3,500	3,600	14,600	0.24	A	0.25	A
Nob Hill Rd.	N of I-595	410	32,600	37,600	35,000	0.93	D	1.07	E
	S of I-595	410	16,900	17,500	35,000	0.48	A	0.50	A
	N of Orange Dr.	410	16,000	16,100	35,000	0.46	A	0.46	A
	S of Griffin Rd.	410	20,700	24,400	35,000	0.59	A	0.70	A
Pine Island Rd.	N of I-595	620	45,800	47,700	48,900	0.94	D	0.97	D
	S of I-595	420	30,400	38,700	32,500	0.93	D	1.19	F
	N of Orange Dr.	410	21,800	25,100	35,000	0.62	A	0.72	B
	S of Griffin Rd.	211	7,600	8,300	16,600	0.46	A	0.50	A
University Dr.	N of I-595	633	78,500	82,100	43,300	1.81	F	1.90	F
	S of I-595	633	60,500	62,700	43,300	1.40	F	1.45	F
	N of Orange Dr.	623	49,500	51,000	48,900	1.01	E	1.04	E
	S of Griffin Rd.	623	45,500	47,400	48,900	0.93	D	0.97	D
	N of Stirling Rd.	623	46,500	50,000	48,900	0.95	D	1.02	E
	N of Sheridan St.	623	48,500	50,700	48,900	0.99	E	1.04	E
College Ave.	S of Nova Dr.	321	18,000	18,200	10,900	1.65	F	1.67	F
Davie Rd.	S of I-595	420	32,600	36,100	31,700	1.03	E	1.14	E
	N of SW 39th St.	420	26,100	36,900	31,700	0.82	C	1.16	F
	N of Orange Dr.	420	27,700	28,300	31,700	0.87	D	0.89	D
	S of Griffin Rd.	421	22,700	24,900	31,700	0.72	B	0.78	C
	S of Stirling Rd.	221	25,000	29,600	10,900	2.29	F	2.71	F
	E of University Dr.	221	15,600	18,800	10,900	1.43	F	1.72	F
Florida Turnpike	S of I-595	615	69,500	N/A	101,600	0.68	B	N/A	N/A
	S of Griffin Rd.	615	69,300	N/A	101,600	0.68	B	N/A	N/A
SR 7/US 441	S of I-595	623	43,000	44,800	48,900	0.88	D	0.92	D
	S of Griffin Rd.	623	45,000	47,800	48,900	0.92	D	0.98	D
	N of Griffin Rd.	623	40,900	44,200	48,900	0.84	C	0.90	D
	S of Stirling Rd.	623	36,000	39,300	48,900	0.74	B	0.80	C

Table II-3 (cont.)

CAPACITY ANALYSIS OF EXISTING ROADWAY SYSTEM
1998 AADT TRAFFIC VOLUMES

NORTH/SOUTH ROADWAYS	SEGMENT	TIP DESIGN CODE	1998 ADT	1998 PEAK	LOS D CAP	EXISTING V/C	LOS ADT	PEAK EXISTING V/C	LOS PEAK
NW 64th Ave.	S of Stirling Rd.	211	5,030	5,700	10,900	0.46	A	0.52	A
NW 72nd Ave.	S of Davie Rd.	211	7,000	7,000	10,900	0.64	A	0.64	A

Peak-Refers to Peak season traffic volumes for a twenty-four (24) hour period.

DESIGN CODE

1st Digit: # of lanes

2nd Digit: Signals/Mile:
1=Low (less than 1.99)
2=Medium (2.00 - 4.5)
3=High (over 4.5)

3rd Digit Facility Type
0=Minor Arterial
1=Collector
2=One Way
3=Major Arterial
4=Multi-Lane Highway
5=Expressway
9=Planned Roadway

SOURCE: FDOT Functional Classification Map, Broward County Dept. of Strategic Planning & Growth Management, FDOT Generalized Annual Average Daily Volume For Florida's Urbanized Areas.

Table II-4

TWO-WAY PEAK HOUR/PEAK DIRECTIONAL ANALYSIS (1998)

East/West Roadway	Location	Pk Hour Dir	Pk Hour Vol	No. of Lanes	Peak Hour LOS D Cap	Peak Hour	Peak Hour LOS	Signal Per Mile
SR 84 (WB)	E of SR 7	WB	1,975	2	2,052	PM	E	2
	E of University Dr.	WB	2,730	2	2,052	PM	F	2
	W. of Pine Island Rd.	WB	2,066	2	2,052	PM	E	2
	E of Nob Hill Rd.	WB	1,702	2	2,052	PM	C	2
	E of Hiatus Rd.	WB	755	2	2,052	PM	A	2
	E of Flamingo Rd.	WB	537	2	2,052	PM	A	2
	W of Flamingo Rd.	WB	1,001	2	2,052	PM	A	2
	W of SW 136th Ave.	WB	1,638	2	2,052	PM	C	2
SR 84 (EB)	E of SR 7	EB	1,392	2	2,052	AM	B	2
	E of University Dr.	EB	1,975	2	2,052	AM	E	2
	E of Pine Island Rd.	EB	1,902	2	2,052	AM	D	2
	E of Nob Hill Rd.	EB	1,865	2	2,052	AM	D	2
	E of Hiatus Rd.	EB	1,074	2	2,052	AM	A	2
	E of Flamingo Rd.	EB	1,920	2	2,052	AM	D	2
	W of Flamingo Rd.	EB	2,320	2	2,052	AM	E	2
	E of SW 136th Ave.	EB	1,638	2	2,052	AM	C	2
I-595	E of SR 7	WB	13,900	8	12,200	PM	E	0
	E of Davie Rd.	WB	14,950	8	12,200	PM	F	0
	E of University Dr.	WB	14,770	8	12,200	PM	F	0
	E of Pine Island Rd.	WB	11,690	6	12,100	PM	E	0
	E of Nob Hill Rd.	WB	10,660	6	12,100	PM	D	0
	E of Hiatus Rd.	WB	9,370	6	12,100	PM	C	0
	E of Flamingo Rd.	WB	10,860	6	12,100	PM	D	0
	E of SW 136th Ave.	WB	9,850	6	12,100	PM	C	0
	W of I-75	WB	4,400	6	12,100	PM	A	0
SW 14th St.	E of I-75	WB	1,856	2	990	PM	E	0
Nova Dr.	E of Pine Island Rd.	WB	855	2	990	AM	D	2
	E of University Dr.	WB	1,998	2	990	PM	F	3
	W of Davie Rd.	WB	2,106	2	990	PM	F	3
SW 36th St.	W of I-75	WB	270	2	990	AM	A	0
SW 39th St.	E of University Dr.	EB	1,067	2	990	PM	E	3
Orange Dr.	W of Flamingo Rd	EB	75	2	990	PM	A	0
	E of Hiatus Rd.	WB	644	2	990	PM	A	1
	E of Pine Island Rd.	EB	681	2	990	PM	B	3
	E of University Dr.	EB	429	2	990	AM	A	2
	E of Davie Rd.	EB	1,187	2	990	PM	F	3
	W of SR 7	WB	1,132	2	990	PM	E	3
Griffin Rd.	W of I-75	WB	1,701	4	3,020	PM	A	2
	E of I-75	EB	2,346	4	3,020	PM	C	2
	E of SW 142nd Ave.	EB	1,480	2	1,550	PM	D	1
	E of Flamingo Rd.	EB	1,398	4	3,020	PM	A	1
	E of Nob Hill Rd.	EB	1,527	2	1,390	PM	E	3
	E of Pine Island Rd.	EB	2,880	6	4,550	PM	A	4
	E of University Dr.	EB	1,509	6	4,550	PM	A	3
	W of Florida Turnpike	EB	1,739	6	4,550	PM	A	4
	W of SR 7	WB	1,684	6	4,550	PM	A	3

Table II-4 (cont.)

TWO-WAY PEAK HOUR/PEAK DIRECTIONAL ANALYSIS (1998)

East/West Roadway	Location	Pk Hour Dir	Pk Hour Vol	No. of Lanes	Peak Hour LOS D Cap	Peak Hour	Peak Hour LOS	Signal Per Mile
Stirling Rd.	W of I-75	EB	610	4	3,260	PM	A	0
	E of I-75	EB	364	4	3,260	PM	A	0
	E of University Dr.	EB	2,266	6	4,550	PM	A	3
	E of Davie Rd.	WB	3,458	6	4,550	PM	C	2
	W of SR 7	WB	3,940	6	4,890	PM	C	1
Sheridan St.	W of I-75	WB	3,076	4	3,020	PM	E	4
	E of I-75	EB	2,976	6	4,550	PM	B	4
	E of University Dr.	WB	2,675	6	4,550	PM	A	2
North/South Roadways								
I-75	N of Arvida Pkwy.	NB	8,360	8	12,100	PM	B	0
	N of Griffin Rd.	SB	8,901	8	12,100	PM	B	0
	S of Griffin Rd.	NB	8,613	8	12,100	PM	B	0
	S of Sheridan St.	NB	8,307	8	12,100	PM	B	0
SW 160th Ave.	N of Sheridan St.	SB	702	2	990	AM	B	1
SW 154th Ave.	N of SW 36th St.	SB	324	2	990	PM	A	0
SW 136th Ave.	S of I-595	SB	1,147	4	3,020	PM	A	2
	N of Griffin Rd.	NB	1,007	2	990	PM	E	1
Flamingo Rd.	N of I-595	SB	3,321	6	4,550	PM	B	2
	N of SW 26th St.	NB	2,220	6	4,550	PM	A	2
	N of Orange Dr.	NB	2,557	6	4,550	PM	A	2
	S of Griffin Rd.	SB	2,912	6	4,550	PM	A	2
Hiatus Rd.	S of I-595	SB	892	2	990	PM	D	1
	N of Orange Dr.	SB	328	2	990	PM	A	0
Nob Hill Rd.	N of I-595	NB	3,384	4	3,020	PM	E	2
	S of I-595	SB	1,592	4	3,020	PM	A	2
	N of Orange Dr.	SB	1,465	4	3,260	PM	A	1
	S of Griffin Rd.	SB	2,220	4	3,260	PM	B	1
Pine Island Rd.	N of I-595	NB	4,340	6	4,550	PM	D	3
	S of I-595	NB	3,522	4	3,020	PM	F	3
	N of Orange Dr.	NB	2,284	4	3,260	PM	B	1
	S of Griffin Rd.	NB	755	2	990	PM	C	2
University Dr.	N of I-595	NB	7,471	6	3,980	PM	F	5
	S of I-595	NB	5,706	6	3,980	PM	F	5
	N of Orange Dr.	NB	4,641	6	4,550	PM	E	2
	S of Griffin Rd.	NB	4,313	6	4,550	PM	D	2
	N of Stirling Rd.	NB	4,550	6	4,890	PM	D	1
	N of Sheridan St.	SB	4,614	6	4,550	PM	E	2
College Ave.	S of Nova Dr.	SB	1,656	2	1,040	PM	F	3
Davie Rd.	S of I-595	SB	3,285	4	3,020	PM	E	3
	N of SW 39th St.	NB	3,358	4	3,020	PM	E	4
	N of Orange Dr.	NB	2,575	4	3,020	PM	C	3
	S of Griffin Rd.	NB	2,266	4	3,020	PM	B	2
	S of Stirling Rd.	NB	2,694	2	1,390	PM	F	3
	E of University Dr.	SB	1,711	2	1,390	PM	F	3

Table II-4 (cont.)

TWO-WAY PEAK HOUR/PEAK DIRECTIONAL ANALYSIS (1998)

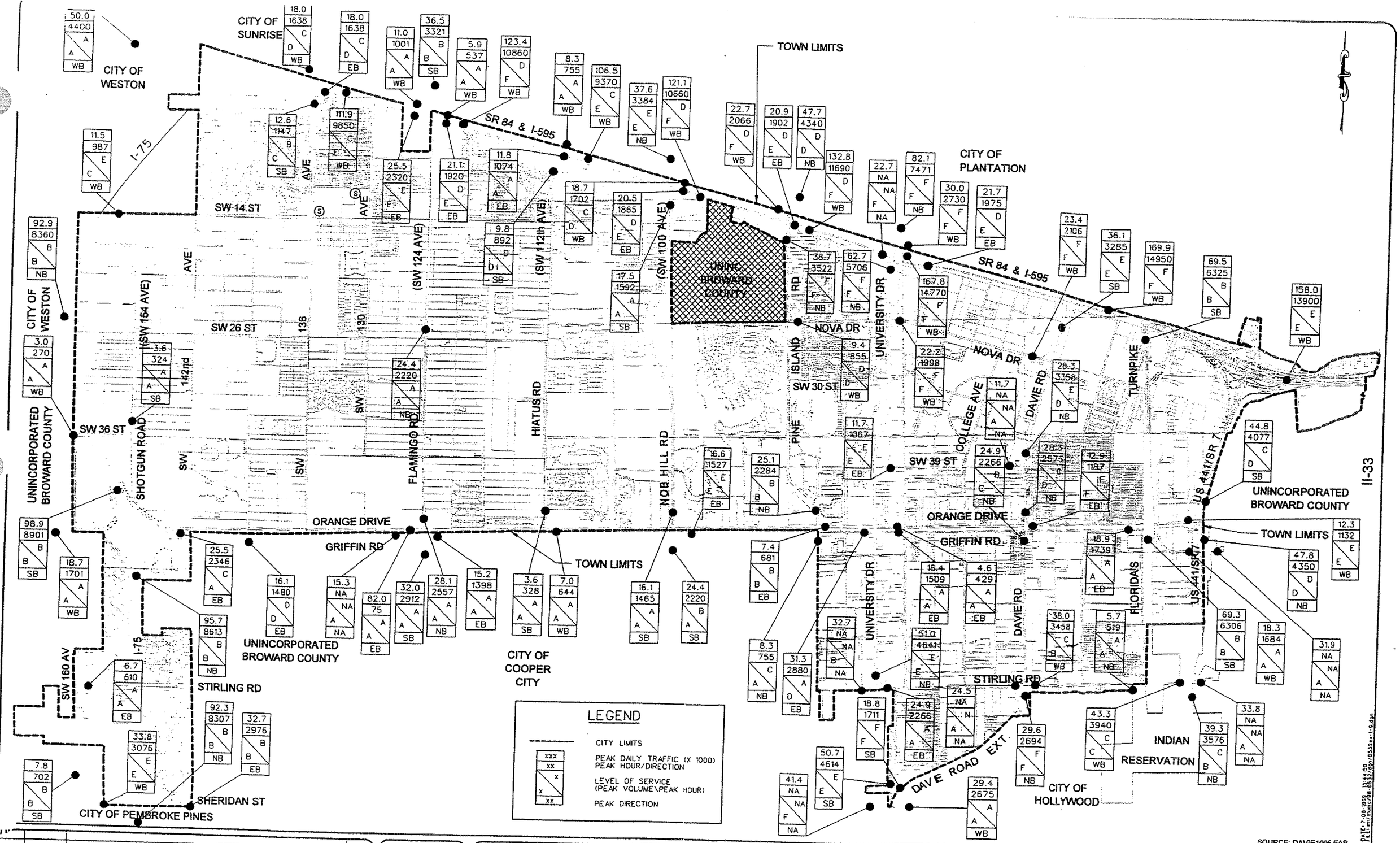
East/West Roadway	Location	Pk Hour Dir	Pk Hour Vol	No. of Lanes	Peak Hour LOS D Cap	Peak Hour	Peak Hour LOS	Signal Per Mile
Florida Turnpike	S of I-595	SB	6,325	6	8,900	PM	B	0
	S of Griffin Rd.	SB	6,306	6	8,900	PM	B	0
SR 7/US 441	S of I-595	SB	4,077	6	4,550	PM	D	1
	S of Griffin Rd.	NB	4,350	6	4,550	PM	E	3
	N of Stirling Rd.	SB	4,022	6	4,550	PM	D	2
	S of Stirling Rd.	NB	3,576	6	4,550	PM	C	2
NW 64th Ave.	S of Stirling Rd.	NB	519	2	990	AM	A	1
NW 72nd Ave.	S of Davie Rd.	NB	637	2	990	AM	A	1

Peak Hour Volume - Refers to the volume of traffic utilizing a roadway during the busiest hour of a twenty-four hour period or 'Peak Hour" (includes two-way directional traffic volume).

Peak Hour Direction - Refers to the direction of the majority of vehicles traveling on a given roadway during the peak hour.

NOTE: Peak Hour Volumes based on Broward County Transportation Element Volume.

Source: FDOT Generalized Two-Way Peak Hour Volumes - Urbanized Areas 3/99
Broward County Office of Planning 1997
CAS 1999



NO	DATE	REVISION	BY

Designed: JDA 02/99
Drawn: BU 05/98
Checked: MM 05/98

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-9
EXISTING PEAK ADT, PEAK HOUR, PEAK DIRECTIONAL AND LEVEL OF SERVICE

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 1 / 2

B. Mass Transit Facilities/Routes

Bus Service

InterCounty bus service is provided by the Broward County Community Services Department Mass Transit Division. Five (5) bus routes currently provide service to the Town in 1999. Along each route are numerous bus stops and shelters too numerous to identify on the map series. Following is a description of each route.

Route 2 is a generally a north-south route which generally follows University Drive. Route 2 enters Broward County from Dade County traveling north on University Drive and enters the Town of Davie after crossing Sheridan Street and continues north through the Town of Davie traveling north until existing the Town after crossing I-595 into the City of Plantation. After leaving the Town, Route 2 travels north on University Drive and provides service to the Broward Mall in the City of Plantation and Coral Square Mall in the City of Coral Springs. After reaching the Coral Square Mall in Coral Springs Route 2 continues north through Coral Springs until reaching Sample Road where it returns south along the same route. Headways are approximately every thirty minutes on weekdays and once every hour on weekends.

Route 9 is generally a north-south route which provides service to southeastern Broward County. Route 9 initiates at the BCT Central Terminal located in the City of Fort Lauderdale and travels west and south through Broward County until entering the Town of Davie at I-595 traveling south on SR 7/US 441 until reaching SR 84 where it turns west until reaching Davie Road where it turns south. Route 9 travels south on Davie Road until reaching Stirling Road where it turns east until reaching North 68th Avenue where it turns south and exits the Town of Davie. After leaving the Town of Davie Route 9 travels south and east through Broward County with stops at Young Circle in the City of Hollywood and the Aventura Mall located in Dade County. Headways are approximately every forty minutes on weekdays and once every hour on weekends.

Route 12 provides north-south and east-west service generally following University Drive (north-south) and Sheridan Street (east-west). The route initiates at the Central Transfer Terminal located north of Broward Boulevard on SW 84 Avenue located in the City of Plantation and travels east until reaching University Drive where it heads south and enters the Town of Davie after crossing I-595. Route 12 travels south until reaching Nova Drive where it turns east until reaching Davie Road, where it turns south, passing by the Broward County Community College (Central Campus). Route 12 continues south on Davie Road Extension where it heads south and west until reaching Sheridan Street. At Sheridan Street, Route 12 heads eastward along Sheridan Street, providing service to the Sheridan Street Park and Ride lot and ultimately terminating at the Anne Kolb Nature Center where the route reverses and heads

westward and north along the same route. Headways are approximately every forty five minutes on weekdays and Saturday and once each hour on Sunday.

Route 18 is generally a north-south intercounty route generally following SR 7/US 441 and providing service within Dade, Broward and Palm Beach Counties. Route 18 initiates at the Margate Terminal located in the City of Margate and proceeds south on SR 7/US 441 until entering the Town of Davie after crossing I-595. Route 18 continues through the Town of Davie traveling south on SR 7/US 441 until exiting the Town after crossing Sheridan Street. After leaving the Town of Davie, Route 18 travels south to the Golden Glades Park and Ride lot located in Dade County (on week days during peak hours only) and then eastward to the 163rd Street Mall shopping center where the route reverses and heads west and north along the same route pausing at the Margate Terminal. After passing the Margate Terminal, Route 18 continues north on SR 7 through north Broward County until exiting Broward County where it enters Palm Beach County. Route 18 provides service to the Sandalfoot Square Shopping Center located at Sandalfoot Boulevard and US 441 where it turns south along the same route. Headways are approximately every twenty minutes on weekdays, every thirty minutes on Saturday and once an hour on Sundays.

Route 75 is generally an east-west route initiating at the BCT West Regional Terminal located in the City of Plantation. Route 75 travels east along Broward Boulevard until reaching SW 136th Avenue where it turns south and enters the Town of Davie after crossing I-595. Route 75 travels south along SW 136th Avenue until reaching SW 5th Street, on which it turns east until reaching SW 134th Terrace. On SW 134th Terrace, Route 75 proceeds south to SW 5th Court where it proceeds east until SW 133rd Avenue, on which it turns south until again reaching SW 5th Court, where it turns east until reaching SW 130th Avenue, where it turns north. Route 75 travels north on SW 130th Avenue until reaching SR 84, where it turns east until reaching SW 117th Way on which it turns south until reaching Rexmere Boulevard where it continues south and east until reaching SW 112th Way where it turns north until reaching SR 84 where it turns east. Route 75 travels east on SR 84 until reaching Pine Ridge Drive where it proceeds throughout Rexmere Village until reaching Pine Island Road. Route 75 travels south on Pine Island Road until reaching Nova Drive, where it turns east until reaching University Drive, where it turns north. Route 75 then travels north on University Drive until exiting the Town of Davie at SR 84 and continues north until reaching Broward Boulevard where it proceeds back to the BCT West Regional Terminal and repeats the same route. Headways are approximately every hour on weekdays and Saturdays. Route 75 does not provide service on Sundays or holidays.

Conversations with the Broward County's Mass Transit Division yielded a conclusion that no capacity problems existed, in fact, methods to increase ridership are continually being sought. Ridership rates vary by route.

Broward County has installed and maintains bus benches and shelters at some of the stops.

Pedestrian access to bus routes is generally very good, as sidewalks exist on a majority of major roadways.

TRANSPORTATION ANALYSIS

ANALYSIS OF EXISTING TRANSPORTATION SYSTEM:

A) LIMITED ACCESS FACILITIES

Three (3) Limited Access Highways are in the Town of Davie. These roadways are maintained by the State of Florida Department of Transportation District IV and the Florida Department of Transportation Turnpike District.

1) **I-595**

a) Facility Description

Discussion – I-595 generally borders the northern boundary of the Town of Davie from just east of SR 7/US 441 to the I-75 Interchange. A total of approximately ten (10) miles of I-595 abuts the Town. The roadway is a six (6) lane and eight (8) lane divided principal arterial.

I-595 is well paved and clearly marked with traffic lane striping. The roadway is "super elevated" and adequate drainage exists.

The State of Florida Department of Transportation maintains I-595.

Traffic signalization - There are no traffic signals on I-595.

Adjoining land uses/access - On the north side of I-595 is the City of Plantation. On the south side is the Town of Davie, which mainly consists of industrial, commercial, and commerce/office land uses directly abutting I-595. However, there are a few residential land uses as well. Access can be made onto I-595 from SR 7/US 441, the Florida Turnpike, Davie Road, University Drive, Pine Island Road, Nob Hill Road, Hiatus Road, Flamingo Road, SW 136th Avenue and I-75. All access except I-75 is via SR 84 frontage roads.

b) Present Level of Service

The roadway segment east of SR 7/US 441 is currently handling 152,000 trips per day (TPD). The roadway segment east of Davie Road is currently handling 155,000 TPD. The roadway segment east of University Drive is currently handling 154,000 TPD. The roadway segment east of Pine Island Road is currently handling 128,500 TPD. The roadway segment east of Nob Hill Road is currently handling 116,000 TPD. The roadway segment east of Hiatus Road is currently handling 101,500 TPD. The roadway segment east of Flamingo Road is currently handling 117,500 TPD. The roadway segment east of SW 136th Avenue is currently handling 104,000 TPD. The roadway segment west of I-75 is currently handling 36,000 TPD. The established Level of Service (LOS) D volume for I-595 is 138,600 TPD east of University Drive and 101,600 TPD west of University Drive. The current volume to capacity (V/C) ratios are 1.10, 1.19, 1.11, 1.26, 1.14, 1.00, 1.16, 1.02 and .35 respectively. This results in a current operating LOS of E, F, E, F, E, D, F, E and A. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic counts will increase steadily except for the roadway segment east of SW 136th Avenue, where there is a slight decrease. The County estimates that 165,900 TPD will occur east of SR 7/US 441, 170,700 TPD east of Davie Road, 161,700 TPD east of University Drive, 153,400 TPD east of Pine Island Road, 162,300 TPD east of Nob Hill Road, 143,200 TPD east of Hiatus Road, 128,700 east of Flamingo Road and 97,800 TPD east of SW 136th Avenue. Broward County's projected LOS D capacity for this roadway is 134,100 TPD east of SR 7/US 441 and 124,000 TPD west of SR 7/US 441, 93,000 TPD west of Flamingo Road. These volumes would result in projected V/C ratios of 1.24, 1.38, 1.30, 1.24, 1.31, 1.15, 1.04 and 1.05 respectively. These V/C ratios would result in a projected LOS of E, F, F, E, F, E, E and E. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

Despite the poor LOS there is only one (1) improvement scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program and the Broward County

Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP). There is a Highway Capacity Safety Improvement scheduled for the east bound Davie Road on-ramp to west of the Florida Turnpike in FY 2000/01. Because of the current and projected LOS, the Town will coordinate with FDOT to the extent possible to study and develop solutions to improve capacity and/or operating conditions from Hiatus Road to the Florida Turnpike.

2) <u>I-75</u>

a) Facility Description

Discussion – I-75 enters the Town limits at the far southwestern corner of the Town at Sheridan Street in a north–south direction. This roadway generally exits the Town limits just north of SW 36th Street. However, this roadway does re-enter the Town limits at two locations in the northwest portion of the Town. A total of approximately four (4) miles traverse through the Town. The roadway is a eight (8) lane divided urban principal arterial.

I-75 is well paved and clearly marked with traffic lane striping. The roadway is "super elevated" and adequate drainage exists.

The Florida Department of Transportation maintains I-75.

Traffic signalization – There are no traffic signals on I-75.

Adjoining land uses/access – Adjoining land uses are predominantly single-family residential. However, there are few areas with commercial land uses. Access can be made onto I-75 from the Sawgrass Expressway, I-595, Griffin Road, Stirling Road and Sheridan Street. An interchange exists at Arvida Parkway (SW 26th Street) but no roadway connection form Davie exists..

b) Present Level of Service

The roadway segment north of Arvida Parkway currently is handling is 82,500 TPD. The roadway segment north of Griffin Road currently is handling 94,900 TPD. The roadway segment south of Griffin Road currently is handling 85,500 TPD. The roadway segment south of Sheridan Street currently is handling 84,500 TPD. The established LOS D volume for I-75 is 138,600 TPD. Therefore, the current V/C ratios are .59, .68, .62 and .61 respectively. This results in a current operating LOS of A, B, A and

A. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic counts will increase steadily. The County estimates that the volumes will be 133,200 TPD north of Arvida Parkway, 106,500 TPD north of Griffin Road, 124,700 TPD south of Griffin Road and 98,100 TPD south of Sheridan Street. Broward County's projected LOS D capacity for this roadway is 124,000 TPD. These volumes would result in projected V/C ratios of 1.07, .86, 1.01 and .79 respectively. This results in an projected LOS of E, D, E and D. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP).

3) **FLORIDA TURNPIKE**

a) Facility Description

Discussion – The Florida Turnpike is generally located in the eastern portion of the Town. This roadway enters the Town limits from the south just north of Stirling Road and traverses north until exiting the Town limits at I-595. A total of approximately 2.6 miles traverse through the Town. The Florida Turnpike extends north to Wildwood in Central Florida and south to Florida City in southern Miami-Dade County. The roadway is a six (6) lane divided principal arterial.

The Florida Turnpike is well paved and clearly marked with traffic lane striping. This roadway is "super elevated" and adequate drainage exists.

The State of Florida Department of Transportation Turnpike District maintain the Florida Turnpike.

Traffic Signalization – there are no traffic signals. However, there is a toll plaza at Griffin Road.

Adjoining land uses/access - Adjoining land uses are predominately industrial. However, there are a few single-family residential, multi-family residential, agricultural, recreation and open space, community facility and commercial land uses as well.

b) Present Level of Service

The roadway segment south of I-595 currently is handling 69,500 TPD. The roadway segment south of Griffin Road currently is handling 69,300 TPD. The established LOS D volume for the Florida Turnpike is 101,600 TPD. Therefore, the current V/C ratios are .68 and .68 respectively. This results in an LOS of B and B. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic counts will increase significantly. Broward County estimates that the volumes will be 157,500 TPD south of I-595 and 110,200 TPS south of Griffin Road. Broward County's projected LOS D capacity for this roadway is 124,000 TPD. This volume would result in projected V/C ratios of 1.27 and .89 respectively. This result in a projected LOS of F and D. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP).

B) ARTERIAL ROADWAYS

Several arterial roadways provide travel both through and within the Town of Davie. These roadways are part of Broward County's system and are maintained by the State of Florida and/or Broward County.

1) SW 160th AVENUE (DYKES ROAD)

a) Facility Description

Discussion – SW 160th Avenue (Dykes Road) is the western most north-south arterial roadway in Davie. This roadway enters the

Town limits from the south, north of Sheridan Street and then exits the Town limits just north of Stirling Road. The roadway then again enters the Town limits at Griffin Road and again exits the Town limits just north of SW 36th Street. The roadway is constructed as a two (2) lane facility for its entire length within the Town limits with a 120' wide right-of-way north of Griffin Road, and a 110' wide right-of-way south of Griffin Road. Its length within the Town limits is approximately 2 miles. A concrete sidewalk abuts the east side of the roadway north of Sheridan Street to north of Stirling Road within the Town limits. Additionally, a concrete sidewalk abuts the west side of the roadway from Griffin Road for approximately 4,000 linear feet.

The pavement is in good condition. There is one (1) traffic control signal, for an average of approximately .5 per mile. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization – exists at the following locations:

- Griffin Road

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access – Adjoining land uses are single-family residential, commercial and recreation and open space. SW 160th Avenue (Dykes Road) provides access to a few residential developments as well as commercial uses. There is access to I-75 from SW 160th Avenue (Dykes Road) as it becomes Weston Road west and north of the Town limits.

b) Present Level of Service

The roadway segment north of Sheridan Street currently is handling 7,300 TPD. The established LOS D volume for SW 160th Avenue (Dykes Road) is 10,900 TPD. Therefore, the current V/C ratio is .67. This results in a current operating LOS of B. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic counts will increase somewhat significantly. The County estimates that the volume will be 13,200 TPD north of Sheridan Street. Broward County's projected LOS D capacity for this roadway

is 22,600 TPD (4LD). This volume would result in a projected V/C ratio of .58. This would result in a projected LOS of B. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program. However, the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP) indicates the addition of two (2) lanes to SW 160th Avenue (Dykes Road) from Sheridan Street to Griffin Road in FY 2002/03.

2) **SW 136th AVENUE**

a) Facility Description

Discussion – SW 136th Avenue is a north-south roadway located in the western portion of Davie. SW 136th Avenue is designated by the Broward County Trafficways Plan as an Arterial Roadway from SR 84 to SW 14th Street. The roadway is classified (Functional Classification) by Broward County's Transportation Element as an Urban Collector on the portion of the roadway south of SW 14th Street and as an Arterial on the portion located north of SW 14th Street intersecting with I-595. SW 136th Avenue enters the Town limits from the north at I-595 and terminates as a cul de sac at approximately SW 36th Street about one half mile north of Orange Drive. The roadway will not be extended to Orange Drive as the Imagination Farms community exists in the area. This roadway is constructed as a four (4) lane facility from I-595 to approximately midway between Shenandoah Parkway and Appalachian Trail. From that point south to the road terminus the road is constructed as a two (2) lane facility. The Broward County Trafficway Plan requires a 110' wide right-of-way between I-595 and SW 14th Street. Its length within the Town limits is approximately three (3) miles. Its length within the Town limits is approximately four (4) miles. A concrete sidewalk abuts the east side of the roadway from SW 26th Street to SW 14th Street and the west side of the roadway from SW 14th Street to I-595. Additionally, there are sidewalks located on a few other small sections of the roadway as well.

The pavement is in fair condition in certain sections south of SW 14th Street. There are a total of three (3) traffic control signals on

SW 136th Avenue within the Town limits, for an average of approximately .75 per mile. There is clearly marked traffic lane striping on the entire length of the roadway. All signals are within ¼ mile of I-595 (SR 84 WB, SR 84 EB, Shenandoah Parkway) with none on the remaining segments to its southern terminus.

Traffic Signalization – exists at the following locations:

- Shenandoah Parkway
- SR 84/I-595 (South Side)
- SR 84/I-595 (North Side)

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access – Adjoining land uses are predominately single-family residential. However, commercial land uses are present as well near I-595. Western High School also has its primary access to SW 136th Avenue near SW 14th Street. SW 136th Avenue provides access to several estate residential neighborhoods south of SW 14th Street.

b) Present Level of Service

The 4-lane roadway segment south of I-595 is currently handling 10,200 TPD. The established LOS D volume for this roadway is 16,600 TPD. Therefore, the current V/C ratio is .61. This results in a current operating LOS of C. For Peak Hour information refer to Table II-5(b). For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic will increase significantly. Broward County estimates that the volume will be 27,600 TPD south of I-595. Broward County's projected LOS D capacity for this roadway is 22,600 TPD south of I-595. This volume would result in projected V/C ratios of 1.22. This results in a projected LOS of F. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the

FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP). Because of the poor projected LOS, improvements will be necessary in the future. The Town will coordinate a study of the southbound traffic pattern between SR 84 and SW 26th Street to reduce conflicts and improve right turn traffic movements into the Shenandoah community.

3) **FLAMINGO ROAD (SW 124th AVENUE)**

a) Facility Description

Discussion – Flamingo Road (SW 124th Avenue) is a north-south arterial roadway located in western Davie. Flamingo Road (SW 124th Avenue) begins at Oakland Park Boulevard in the City of Sunrise and extends south into Miami-Dade County. Flamingo Road (SW 124th Avenue) enters the Town limits from the south at Orange Drive, and traverses north until exiting the Town limits at SR 84/I-595. This roadway is constructed as a six (6) lane divided arterial with a 200' right-of-way. Its length within the Town limits is approximately 3.8 miles. There are no sidewalks abutting this roadway however, there is a bikelane. There is a Frontage Road from just south of I-595 to SW 36th Court adjoining Flamingo Road on the east side.

The pavement is in good condition. There are a total of four (4) traffic control signals on Flamingo Road (SW 124th Avenue). Two (2) are located at SR 84/I-595 while the other two (2) are within ½ mile of the southern end of the segment in the Town. The middle segment of some 2½ miles has no signals at present. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization – exists at the following locations:

- Griffin Road
- SW 36th Court
- SR 84/I-595 (South Side)
- SR 84/I-595 (North Side)

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access – Adjoining land uses are predominately agriculture and single-family residential. However, a few community facility land uses (church/school) are present as well primarily near I-595. The frontage service road located on the east side of Flamingo Road provides direct access to parcels adjacent to the Frontage Road as well as several cross streets.

b) Present Level of Service

The roadway segment north of I-595 is currently handling 35,500 TPD. The roadway segment north of SW 26th Street is currently handling 24,000 TPD. The roadway segment north of Orange Drive is currently handling 27,500 TPD. The roadway segment south of Griffin Road is currently 29,700 TPD. The established LOS D volume for Flamingo Road (SW 124th Avenue) is 48,900 TPD south of NW 26th Street and 52,500 TPD north of SW 26th Street. Therefore, the current V/C ratios are .68, .46, .56 and .61 respectively. These result in a current operating LOS of B, A, A and A. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic will increase significantly south of I-595 and only slightly for the remaining segments. The County forecasts that there will be approximately 48,600 TPD south of I-595 (north of SW 14th Street), 29,200 TPD north of SW 26th Street, 28,100 TPD north of Orange Drive and 31,800 TPD south of Griffin Road. Broward County's projected LOS D capacity for this roadway is 53,700 TPD. These volumes would result in projected V/C ratios of .91, .54, .52 and .59 respectively. This would result in a projected LOS of C, B, B and B. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP). A study is recommended at the intersection of Flamingo Road and SW 36th Court concerning adequate stacking for the northbound turn lane.

4) **NOB HILL ROAD (SW 100TH AVENUE)**

a) Facility Description

Discussion – Nob Hill Road (SW 100th Avenue) is an arterial roadway in the central portion of the Town. Nob Hill Road (SW 100th Avenue) extends from the Palm Beach County Line to Miami-Dade County although the roadway has several different names on various segments. Nob Hill Road (SW 100th Avenue) enters the Town limits from the south at Orange Drive and traverses north until exiting the Town limits at SR 84/I-595. This roadway is constructed as a four (4) lane divided facility with a 110' wide right-of-way. Its length within the Town limits is approximately 3 miles. Concrete sidewalks exists on a majority of both sides of the roadway. Adequate drainage exists for Nob Hill Road (SW 100th Avenue).

The pavement is in good condition. There are five (5) traffic control signals on Nob Hill Road (SW 100th Avenue). Three (3) are within one half mile of I-595/SR 84 while the remaining two (2) are at the southern edge of the Town. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization - exists at the following locations:

- Griffin Road
- Orange Drive
- SW 14th Place
- SR 84/I-595 (South Side)
- SR 84/I-595 (North Side)

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access – Adjoining land uses are predominately single-family residential. However, commercial and community facility land uses are present as well near I-595. In addition recreation and open space uses are present along the corridor with a major park being located just north of Orange Drive (Tree Tops).

b) Present Level of Service

The roadway segment north of I-595 currently is handling 32,600 TPD. The roadway segment south of I-595 (North of State

Road 84) is currently handling 16,900 TPD. The roadway segment north of Orange Drive is currently handling 16,000 TPD. The roadway segment south of Griffin Road is currently handling 20,700 TPD. The established LOS D volume for Nob Hill Road (SW 100th Avenue) is 35,000 TPD. Therefore, the current V/C ratios are .93, .48, .46 and .59 respectively. This results in a current operating LOS of D, A, A, and D. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic counts will increase significantly. The estimates are 45,300 TPD south of I-595, 39,700 TPD north of Orange Drive and 31,100 TPD south of Griffin Road. Broward County's projected LOS D capacities for this roadway are 53,700 TPD north of Orange Drive and 35,700 TPD north and south of Griffin Road. Therefore, these volumes would result in projected V/C ratios of .84, 1.11 and .87 respectively. These V/C ratios would result in a projected LOS of C, E and C. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP).

5) **PINE ISLAND ROAD**

a) Facility Description

Discussion – Pine Island Road is a centrally located north-south roadway in Davie. Pine Island Road is classified by the Broward County Trafficways Plan as an Arterial Roadway. The Broward County Transportation Element classifies (Functional Classification) Pine Island Road as an Urban Collector. This roadway begins at the Palm Beach County line and continues south through Broward County. This roadway enters the Town limits from the south at Stirling Road and traverses north until exiting the Town limits at SR 84/I-595. This roadway is constructed as a four (4) lane divided facility with a 110' wide right-of-way. It's length within the Town limits is approximately 4 miles. Concrete sidewalks abut a majority of both sides of the roadway except between Stirling Road

north to Griffin Road on the west side and on the east side north of SW 36th Street and at SR 84/I-595. Adequate drainage exists the entire length of the roadway.

The pavement is in good condition. There are eight (8) traffic control signals on Pine Island Road, for an average of 1.86 per mile. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization - exists at the following locations:

- Stirling Road
- Griffin Road
- Orange Drive
- Isla Merita (School Crossing)
- SW 30th Street
- Nova Drive
- SR 84/I-595 (South Side)
- SR 84/I-595 (North Side)

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access – Adjoining land uses are single-family residential, multi-family residential, community facility, recreation and open space and commercial. Pine Island Road provides access to several residential neighborhoods, a few commercial centers and a mobile home park.

b) Present Level of Service

The roadway segment north of I-595 in the City of Plantation is currently handling 45,800 TPD. The roadway segment south of I-595 (North of Nova Drive) is currently handling 30,400 TPD. The roadway segment north of Orange Drive is currently handling 21,800 TPD. The roadway segment south of Griffin Road is currently handling 7,600 TPD. The established LOS D volume for Pine Island Road is 48,900 TPD for the segment north of I-595, 32,500 TPD south of I-595 (North of Nova Drive), 35,000 TPD north of Orange Drive and 16,600 TPD south of Griffin Road. Therefore, the V/C ratios are .94, .93, .62 and .46 respectively. This results in a current operating LOS of D, D, A and A. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic volumes will increase steadily for the segments south of I-595 (North of Nova Drive) and north of Orange Drive. The segment south of Griffin Road is projected to increase significantly. The estimates are 43,000 TPD south of I-595 (North of Nova Drive), 33,800 TPD north of Orange Drive and 17,700 TPD south of Griffin Road. Broward County's projected LOS D capacities for this roadway are 53,700 TPD north of Griffin Road and 35,700 south of Griffin Road. Therefore, these volumes would result in projected V/C ratios of .80, .63 and .50 respectively. These V/C ratios would result in a projected LOS of B, B and A. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program. However, the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP) indicates the construction of a new four (4) lane facility from Stirling Road to Sheridan Street in FY 1999/00.

6) **UNIVERSITY DRIVE**

a) Facility Description

Discussion – University Drive is a major north-south arterial roadway located in the eastern portion of Davie. The roadway will eventually extend into Palm Beach County intersecting Glades Road and extends southerly into Miami-Dade County. The portion of the roadway that exists within the Town limits begins to the south at Sheridan Street, and traverses north to the northern Town limits at SR 84/I-595. The roadway is constructed as a six (6) lane divided facility with a 200' wide right-of-way. Its length within the Town limits is approximately 4.4 miles. Concrete sidewalks exists on both sides of the roadway from Rolling Hills Boulevard (SW 35th Street) north to SR 84/I-595. A concrete sidewalk exists on the west side of the roadway from Rolling Hills Boulevard south to Orange Drive. Additionally, there are scattered segments of concrete sidewalks on the remainder of the roadway.

The pavement is in very good condition. There are twelve (12) traffic control signals on University Drive, for an average of 2.7

per mile. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization – exists at the following locations:

- Sheridan Street
- Davie Road Extension
- Stirling Road
- Griffin Road
- Orange Drive
- SW 39th Street
- SW 30th Street
- Nova Drive
- Tower Shops (South Entrance)
- Tower Shops (North Entrance)
- SR 84/I-595 (South Side)
- SR 84/I-595 (North Side)

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access – Adjoining land uses are predominantly strip commercial. However, single-family residential, multi-family residential, commerce/office and community facility land uses are present as well. University Drive provides access to numerous strip commercial centers, a few office complexes and a few multi-family developments.

b) Present Level of Service

The roadway segment north of I-595 (North of State Road 84) in the City of Plantation is currently handling 78,500 TPD. The roadway segment south of I-595 (North of Nova Drive) is currently handling 60,500 TPD. The roadway segment north of Orange Drive is currently handling 49,500 TPD. The roadway segment south of Griffin Road (immediately south of Griffin Road) is currently handling 45,500 TPD. The roadway segment immediately north of Stirling Road is currently handling 44,500 TPD. The roadway segment north of Sheridan Street is currently handling 48,500 TPD. The established LOS D volumes for University Drive are 43,300 TPD north and south of I-595 and 48,900 for the remaining segments. Therefore, the current V/C ratios are 1.81, 1.40, 1.01, .93, .95 and .99 respectively. This results in a current operating LOS of F, F, E, D, D and E. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic volumes will increase slightly for all segments except north of Sheridan Street (South of Stirling Road) where traffic counts are projected to increase significantly. The projected traffic counts for the roadway are 64,100 TPD south of I-595, 50,500 TPD north of Orange Drive, 50,800 TPD north of Stirling Road and 62,900 TPD north of Sheridan Street. Broward County's projected LOS D capacities for this roadway are 65,800 TPD south of I-595, 58,200 TPD north of Orange Drive, and 53,700 TPD for the remaining segments. Therefore, these volumes would result in projected V/C ratios of .97, .87, .95 and 1.17 respectively. These V/C ratios would result in a projected LOS of D, D, D and F. For Peak Hour information refer to Table II-5(b). Broward County's 2015 projections include higher capacity volumes indicting future improvements will be made. No specific improvements are proposed at this time.

d) Proposed Improvements

There are two (2) scheduled improvements to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program and three (3) scheduled improvements per the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP). First, both FDOT/Broward County Work Program and the MPO TIP indicate sidewalk construction along the roadway from Stirling Road to SR 84 in FY 2001/02. Second, the FDOT/Broward County Work Program indicates miscellaneous construction to the roadway at I-595 in FY 2003. Third, the MPO TIP indicates a roadway safety project from north of SW 30th Street to I-595 in FY 1998/99 and FY 1999/00. Finally, the MPO TIP indicates a roadway intersection improvement at SW 30th Street in FY 1998/99, which is underway.

7) **DAVIE ROAD**

a) Facility Description

Discussion – Davie Road is a north-south arterial roadway located in the eastern portion of Davie. Davie Road enters the Town limits from the south, just north of Sheridan Street, where it is known as Davie Road Extension, and traverses north until exiting the Town limits at SR 84/I-595, where it terminates. The roadway is constructed as a four (4) lane facility from I-595 to Nova Drive with a

106' wide right-of-way, as a four (4) lane facility from Nova Drive to Stirling Road with an 80' wide right-of-way and as a two (2) lane facility from Stirling Road to University Drive with a 106' wide right-of-way. Its length within the Town limits is approximately 4 miles. Concrete sidewalks exists on a majority of both sides of the roadway and adequate drainage exists

The pavement is in good condition except for the segment from University Drive to Stirling Road which is in poor condition. There are eleven (11) traffic control signals on Davie Road, for an average of two (2) per mile. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization – exists at the following locations:

- University Drive
- N 77th Avenue
- N 74th Avenue
- Stirling Road
- Griffin Road
- Orange Drive
- SW 39th Street
- Broward Community College Entrance
- Nova Drive
- SR 84/I-595 (South Side)
- SR 84/I-595 (North Side)

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access - Adjoining land uses are commercial, industrial, residential/office, single-family residential, multi-family residential, recreation and open space and community facility. Davie Road provides access to several commercial centers, a few residential neighborhoods, a few multi-family developments and the South Florida Educational Campus area.

b) Present Level of Service

The roadway segment south of I-595 is currently handling 32,600 TPD. The roadway segment north of SW 39th Street is currently handling 26,100 TPD. The roadway segment north of Orange Drive is currently handling 27,700 TPD. The roadway segment south of Griffin Road is currently handling 22,700 TPD.

The roadway segment south of Stirling Road is currently handling 25,000 TPD and the roadway segment east of University Drive is currently handling 15,600 TPD. The established LOS D volumes for Davie Road are 10,900 TPD south of Stirling Road and east of University Drive, and 31,700 TPD for the remaining segments. Therefore, the current V/C ratios are 1.03, .82, .87, .72, 2.29 and 1.43 respectively. These V/C ratios result in a LOS of E, C, D, B, F and F. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic counts will increase slightly for all segments except east of University Drive, where they will increase significantly. The County estimates that there will be 36,400 TPD south of I-595, 33,200 TPD north of Orange Drive, 23,900 south of Griffin Road, 27,100 TPD south of Stirling Road and 27,100 TPD east of University Drive. Broward County's projected LOS D capacities for this roadway are 31,000 TPD south of Griffin Road and 35,700 TPD north of Griffin Road. Therefore, these volumes would result in projected V/C ratios of 1.02, .93, .77 and .87 respectively. These V/C ratios would result in a projected LOS of E, C, D and D. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no proposed improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program. However, the Broward County Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP) indicates the addition of two (2) lanes from University Drive to Stirling Road in FY 1998/99. No work has commenced as of June 1999. Currently there are existing improvements occurring at the intersections of Orange Drive and Griffin Road as part of the road widening project.

8) **SR 7/US 441**

a) Facility Description

Discussion – SR 7/US 441 is the eastern most north-south major arterial roadway located in Davie. SR 7/US 441 initiates in north Miami-Dade County and extends across the State of Florida northward into Georgia. The portion of this roadway that exists within the Town limits begins at the southern Town limits north of

Stirling Road, and traverses north to the northern Town limits just north of SR 84/I-595. The roadway is constructed as a six (6) lane divided facility with a 144' wide right-of-way from the northern Town limits to SR 84/I-595 and with a 200' wide right-of-way from SR 84/I-595 to Griffin Road. Additionally, the roadway is constructed as a six (6) lane facility with a 120' wide right-of-way from Griffin Road to the southern Town limits. Its length within the Town limits is approximately 2.8 miles. A concrete sidewalk exists on a small portion of the west side of the roadway just north of the southern Town limits and just north of Griffin Road. Adequate drainage exists on SR 7/US 441.

The pavement is in good condition except south of Griffin Road which is in fair condition. There are four (4) traffic control signals on SR 7/US 441, for an average of 1.4 per mile. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization - exists at the following locations:

- Griffin Road
- Orange Drive
- Powell's Road
- Oaks Road

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access - Adjoining land uses are predominantly industrial and commercial. SR 7/US 441 provides access to these uses at numerous driveway openings as much of the existing development occurred prior to current access restrictions.

b) Present Level of Service

The roadway segment south of I-595 is currently handling 43,000 TPD. The roadway segment south of Griffin Road is currently handling 45,000 TPD. The roadway segment north of Stirling Road is currently handling 40,900 TPD. The roadway segment south of Stirling Road is currently handling 36,000 TPD. The established LOS D volume for SR 7/US 441 is 48,900 TPD. Therefore, the current V/C ratios are .88, .92, .84 and .74 respectively. This results in a current operating LOS of D, D, C and B. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimates that the traffic volumes will increase significantly for the roadway segment south of I-595 and increase slightly north of Griffin Road. The remaining segments are projected to increase steadily. The projected traffic volumes for this roadway are 72,200 TPD south of I-595, 46,600 TPD north of Griffin Road, 51,300 TPD north of Stirling Road and 41,500 TPD north of Sheridan Street. Broward County's projected LOS D volumes for this roadway are 47,500 TPD north of Sheridan Street and 53,700 TPD for the remaining segments. Therefore, the volumes would result in projected V/C ratios of 1.34, .87, .96 and .87 respectively. These V/C ratios would result in a projected LOS of F, C, D and D. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There is one (1) scheduled improvement to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program and the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP). The west side of the roadway is scheduled for resurfacing at Oaks Road in FY 2001/02. Currently there is an existing intersection improvement being completed at the intersection of SR 7/US 441 and Griffin Road as part of the Griffin Road widening project. The roadway capacity is hampered between Griffin Road and Stirling Road because of the laneage of SR 7/US 441 north of Stirling Road within the Indian Reservation is only four (4) lanes.

9) **SR 84**

a) Facility Description

Discussion – SR 84 is the northern most east-west arterial located in Davie. This roadway enters the Town limits from the west at I-75 and traverses east parallel to I-595 until exiting the Town limits east of SR 7/US 441. The roadway is unique in that it is constructed as a four (4) lane facility, which is divided by I-595. Therefore, there are two (2) lanes traveling in each direction. This roadway can best be described as a one-way frontage road adjoining I-595 with westbound traffic on the north and eastbound traffic on the south. Its length with the Town limits is approximately

10.6 miles. A concrete sidewalk abuts the south side of the roadway between SW 142nd Avenue to SW 136th Avenue between Flamingo Road (SW 124th Avenue) to east of Hiatus Road (SW 112th Avenue) and from Pine Island Road to College Avenue except for a small segment. Additionally, a concrete sidewalk abuts the north side of the roadway from Flamingo Road (SW 124th Avenue) to Hiatus Road (SW 112th Avenue) and from Nob Hill Road (SW 100th Avenue) to Pine Island Road. Adequate drainage exits on SR 84.

The pavement is in good condition. There are seven (7) traffic control signals on each side of SR 84, for an average of .66 per mile. There is clearly marked lane striping on the entire length of the roadway.

Traffic Signalization – exists at the following locations:

- SW 136th Avenue
- Flamingo Road (SW 124th Avenue)
- Hiatus Road (SW 112th Avenue)
- Nob Hill Road (SW 100th Avenue)
- Pine Island Road
- University Drive
- Davie Road

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access – The adjoining land use on the north side of westbound SR 84 is the New River Canal. Adjoining land uses on eastbound SR 84 are commercial, industrial, multi-family residential, commerce/office and community facility. SR 84 provides access to numerous commercial and industrial centers as well as a few multi-family developments as well as mobile home parks.

b) Present Level of Service

Following are the present levels of service for the two (2) lane westbound portion of SR 84. The roadway segment east of SR 7/US 441 is currently handling 20,900 TPD. The roadway segment east of University Drive is currently handling 29,000 TPD. The roadway segment west of Pine Island Road is currently handling 22,000 TPD. The roadway segment east of Nob Hill Road is

currently handling 17,500 TPD. The roadway segment east of Hiatus Road is currently handling 7,700 TPD. The roadway segment east of Flamingo Road is currently handling 5,800 TPD. The roadway segment west of Flamingo Road is currently handling 10,000 TPD. The roadway segment west of 136th Avenue is currently handling 15,500 TPD. The established LOS D volume for the two (2) lane westbound portion of SR 84 is 19,500 TPD. Therefore, the current V/C ratios are 1.07, 1.49, 1.13, .90, .39, .30, .51 and .79 respectively. This results in a current operating LOS of E, F, E, D, A, A, A and C. For Peak Hour information refer to Table II-5(b).

Following are the present level of service for the two (2) lane eastbound portion of SR 84. The segment east of SR 7/US 441 is currently handling 13,900 TPD. The roadway segment east of University Drive is currently handling 19,500 TPD. The roadway segment west of University Drive is currently handling 20,300 TPD. The roadway segment east of Pine Island Road is currently handling 18,500. The roadway segment east of Nob Hill Road is currently handling 19,000 TPD. The roadway segment east of Hiatus Road is currently handling 10,500 TPD. The roadway segment east of Flamingo Road is currently handling 20,500 TPD. The roadway segment west of Flamingo Road is currently handling 24,000 TPD. The roadway segment east of SW 136th Avenue is currently handling 17,500 TPD. The established LOS D volume for the two (2) lane eastbound portion of SR 84 is 19,500 TPD. Therefore, the current V/C ratios are .71, 1.00, 1.04, .95, 1.07, .97, .54, 1.05, 1.23 and .90 respectively. This results in a current operating LOS of B, D, E, D, E, D, A, E, F and D. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that the traffic volumes will increase somewhat significantly on some portions of the roadway and to decrease somewhat on other portions. The projected 2-way traffic volumes for the roadway are 57,600 TPD east of SR 7/US 441, 45,200 TPD east of University Drive, 35,300 TPD east of Pine Island Road, 35,300 TPD east of Nob Hill Road, 19,200 TPD east of Hiatus Road, 39,300 TPD east of Flamingo Road, 24,800 TPD east of SW 136th Avenue. Broward County's projected LOS D capacities for this roadway are 47,500 TPD east of SR 7/US 441 and 42,840 TPD for the remaining segments. Therefore, these volumes would result in projected V/C ratios of 1.21, 1.06, .82, .71, .45, .92 and .58 respectively. These V/C ratios would result in a projected LOS of F, E, C, B, A, D and A.

For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There is one (1) scheduled improvement to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program and the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP). A bike path is scheduled to be constructed from Davie Road to east of SR 7/US 441 in FY 2001/02.

10) **GRIFFIN ROAD**

a) Facility Description

Discussion – Griffin Road is an east-west arterial roadway that is located in the west central and east central portion of Davie. Griffin Road enters the Town limits from the west at SW 160th Avenue (Dykes Road) and traverses east until exiting the Town limits at SW 148th Avenue. The roadway continues east just south of the Town limits until re-entering the Town limits at Pine Island Road, where it continues east until exiting the Town limits at SR 7/US 441. The roadway is constructed as a four (4) lane facility from SW 160th Avenue (Dykes Road) to the I-75 overpass which is constructed as a six (6) divided roadway. The road narrows to four (4) again to SW 148th Avenue where it narrows to two (2) lanes to Pine Island Road except for portions of four (4) lanes divided around Flamingo Road. Griffin Road is a four (4) land divided facility from just east of Pine Island Road to just west of University Drive. Griffin Road is a six (6) lane divided facility from University Drive to SR 7/US 441 with a 120' wide right-of way. It is important to note that at the time of this documents preparation (6/99), the six (6) lane divided facility section of this roadway within the Town limits was under construction. Its length within or adjacent to the Town limits is approximately 10 miles. A concrete sidewalk exists on the south side of the roadway from just east of Pine Island Road to SR 7/US 441. Additionally, a concrete sidewalk exists on the north side of the roadway just west of SR 7/US 441 for a small stretch. Adequate drainage exists on Griffin Road.

The pavement is in very good condition except for the two (2) lane areas. There are thirteen (13) traffic control signals on Griffin Road within or adjacent to the Town limits, for an average of 1.3 per mile. There is clearly marked traffic lane stripping on the entire length of the roadway.

Traffic Signalization – exists at the following locations:

- SW 160th Avenue (Dykes Road)
- SW 148th Avenue
- Flamingo Road
- Nob Hill Road
- SW 90th Avenue
- Pine Island Road
- Bowens Road
- University Drive

- Davie Road
- SW 61st Avenue
- Florida's Turnpike (West Side)
- Florida's Turnpike (East Side)
- SR 7/US 441

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access - Adjoining land uses are predominantly commercial, however, community facility, multi-family residential, agricultural and recreation and open space are present as well. Griffin Road provides access to mainly commercial uses south of the road as a canal exists on the north side of the roadway.

b) Present Level of Service

The roadway segment west of I-75 is currently handling 17,300 TPD. The roadway segment east of I-75 is currently handling 24,500 TPD. The roadway segment east of SW 142nd Avenue is currently handling 15,000 TPD. The roadway segment west of Flamingo Road is currently handling 12,600 TPD. The roadway segment east of Flamingo Road is currently handling 14,800 TPD. The roadway segment east of Nob Hill Road is currently handling 16,000 TPD. The roadway segment west of University Drive is currently handling 27,500 TPD. The roadway segment east of University Drive is currently handling 15,300 TPD. The roadway segment west of the Turnpike is currently handling 18,300 TPD. The roadway segment west of SR 7/US 441 is currently handling 18,000 TPD. The roadway segment east of SR 7/US 441 is currently handling 29,500 TPD. The established LOS D volumes for Griffin Road are 35,000 TPD west of Hiatus Road, 14,900 TPD east of Nob Hill Road, 32,500 TPD west of University Drive, 52,500 TPD east of University Drive and 48,900 TPD for the remaining segments east of University Drive. Therefore, the current V/C ratios are .49, .47, .90, .36, .42, 1.07, .85, .29, .37, .37 and .60 respectively. This results in a current operating LOS of A, A, D, A, A, E, C, A, A, A and A. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimates that the traffic volumes will increase somewhat significantly for most segments of the roadway. The projected traffic volumes for the

roadway are 37,800 TPD west of I-75, 29,700 TPD east of I-75, 22,700 TPD east of SW 142nd Avenue, 19,200 TPD east of Flamingo Road, 28,400 TPD east of Nob Hill Road, 44,800 TPD east of Pine Island Road, 34,000 TPD east of University Drive, 45,500 TPD east of Davie Road and 44,700 TPD west of SR 7/US 441. Broward County's projected LOS D capacities for this roadway are 35,700 TPD for the segments east of SW 148th Avenue and east of Flamingo Road and 53,700 TPD for the remaining segments. Therefore, these volumes would result in projected V/C ratios of .70, .55, .64, .54, .53, .84, .85 and .83 respectively. These V/C ratios would result in a projected LOS of B, B, B, B, B, C, C and C. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are four (4) scheduled improvements to the road per the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP). First, is the addition of four (4) lanes, to create a six (6) lane divided facility from east of University Drive to SR 7/US 441 in FY 1998/99, which is already under construction. Second, the right-of-way acquisition program will occur for the segment from I-75 to west of Flamingo Road in FY 2001/2002. Construction has not as yet been scheduled. Third, is the addition of two (2) lanes and four (4) lanes with miscellaneous reconstruction, to create a six (6) lane divided facility in FY 1999/00 and FY 2000/01 from Flamingo Road to east of Nob Hill Road. Lastly, is the addition of two (2) lanes and four (4) lanes to create a six (6) lane divided facility from Nob Hill Road to University Drive in FY 1999/00 and FY 2000/01.

11) **STIRLING ROAD**

a) Facility Description

Discussion – Stirling Road is an east-west arterial roadway that is located in the southwest and southeast portion of Davie. Stirling Road enters the Town limits from the west at SW 160th Avenue (Dykes Road) and traverses east until exiting the Town limits at SW 148th Avenue. The roadway continues east south of the Town limits until re-entering the Town limits at Pine Island Road, where it continues east until exiting the Town limits at SR 7/US 441. The roadway is constructed as a four (4) lane divided facility from SW 160th Avenue to 148th Avenue. Additionally the roadway is constructed as a six (6) lane divided facility from Pine Island Road to SR 7/US 441 with a 110' wide right-of-way. Its

length within the Town limits is approximately 4.4 miles. Concrete sidewalks exist on a majority of both sides of the roadway. Adequate drainage exists on Stirling Road.

The pavement is in good condition. There are seven (7) traffic control signals on Stirling Road, for an average of 1.6 per mile. There is adequate marked traffic lane striping on the entire length of the roadway.

Traffic Signalization – exists at the following locations:

- Pine Island Road
- University Drive
- Davie Road
- SW 61st Avenue
- N 68th Avenue
- N 66th Avenue
- SR 7/US 441

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access - Adjoining land uses are single-family residential, multi-family residential, commercial and community facility. Stirling Road provides access to a few residential neighborhoods, a few multi-family developments and several commercial centers.

b) Present Level of Service

The roadway segment west of I-75 is currently handling 4,800 TPD. The roadway segment east of I-75 is currently handling 3,900 TPD. The roadway segment west of University Drive is currently handling 29,800 TPD. The roadway segment east of University Drive is currently handling 24,000 TPD. The roadway segment west of Davie Road is currently handling 24,500 TPD. The roadway segment east of Davie Road is currently handling 36,000 TPD. The roadway segment west of SR 7/US 441 is currently handling 34,900 TPD. The roadway segment east of SR 7/US 441 is currently handling 31,000 TPD. The established LOS D volumes for Stirling Road are 35,000 TPD east and west of I-75, 48,900 TPD east and west of University Drive and 52,500 TPD for the remaining segments. Therefore, the current V/C ratios are .19, .11, .67, .51, .47, .72, .82 and .64 respectively. This results in a current operating LOS of A, A, B, A, A, B, C, and A. For Peak Hour information refer to

Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimates that the traffic volumes will actually decrease for the segments east and west of I-75 and west of University Drive. However, projected traffic volumes will increase somewhat significantly for the remaining segments. The projected traffic volumes for the roadway are 4,600 TPD west of I-75, 3,700 TPD east of I-75, 29,600 TPD west of University Drive, 35,300 TPD east of University Drive. 45,200 TPD east of Davie Road and 45,700 TPD west of SR 7/US 441. Broward County's projected LOS D capacities for this roadway are 22,600 TPD east and west of I-75, 35,700 TPD west of University Drive and 53,700 TPD for the remaining segments. Therefore, these volumes would result in projected V/C ratios of .20, .16, .83, .66, .84 and .85 respectively. These V/C ratios would result in a projected LOS of C, C, C, B, C and C. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP).

12) **SHERIDAN STREET**

a) Facility Description

Discussion – Sheridan Street is an east-west arterial roadway that is located in the far southwestern and southeastern portion of Davie. Sheridan Street enters the Town limits from the west at I-75 and traverses east a short distance until exiting the Town limits at SW 148th Avenue. Additionally, a small portion of Sheridan Street touches the Town limits near Davie Road Extension. This roadway is constructed as a six (6) lane divided facility with a 200' wide right-of-way within and adjacent to the Town Limits. Its length within the Town limits is approximately .75 miles. No sidewalks are present. Adequate drainage does exist.

The pavement is in very good condition. There are five (5) traffic control signals on Sheridan Street within the Town. There are several other signals in adjacent cities between I-75 and University Drive. There is clearly marked traffic lane stripping on

the entire length of the roadway.

Traffic Signalization – exists at the following locations:

- SW 160th Avenue
- SW 148th Avenue
- I-75 (West Side)
- I-75 (East Side)
- University Drive

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access - Adjoining land uses are single-family residential. Sheridan Street provides access to a few single-family residential neighborhoods.

b) Present Level of Service

The roadway segment west of I-75 is currently handling 31,500 TPD. The roadway segment east of I-75 is currently handling 29,100 TPD. The roadway segment west of University Drive is currently handling 34,100 TPD. The roadway segment east of University Drive is currently handling 29,000 TPD. The established LOS D volumes for Sheridan Street are 32,500 TPD west of I-75, 48,900 TPD east of I-75, 35,000 TPD west of University Drive and 52,500 TPD east of University Drive. Therefore, the current V/C ratios are .97, .58, .97 and .55 respectively. This results in a current operating LOS of E, A, E and A. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimates that the traffic volumes will increase significantly. The projected traffic volumes for the roadway are 50,900 TPD west of I-75, 44,500 TPD east of I-75, 43,200 TPD west of University Drive and 37,200 TPD east of University Drive. Broward County's projected LOS D capacities for this roadway are 47,500 TPD east of University Drive and 53,700 TPD for the remaining segments. Therefore, these volumes would result in projected V/C ratios of .95, .83, .81 and .78 respectively. These V/C ratios result in a projected LOS of D, C, C and C. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP).

C) COLLECTOR ROADWAYS

Several collector roadways provide travel within the Town of Davie. The Town of Davie maintains these roadways.

1) SW 14TH STREET

a) Facility Description

Discussion – SW 14th Street is an east-west collector roadway located in the northwest portion of Davie. SW 14th Street enters the Town limits from the west across I-75 and traverses east until its terminus at SW 130th Avenue. This roadway is constructed as a two (2) lane urban local collector from I-75 to SW 136th Avenue and as a City Collector from SW 136th Avenue to SW 130th Avenue, with a 94' wide right-of-way. Its length within the Town limits is approximately 2.75 miles. A right-of-way corridor partially exists (no roadway) between SW 130th Avenue and Flamingo Road where a future intersection is planned at Flamingo Road. Concrete sidewalks exist on both sides of the roadway from I-75 to SW 142nd Avenue, and on the north side of the roadway from SW 142nd Avenue to SW 136th Avenue and on the south side of the roadway from SW 136th Avenue to SW 130th Avenue. Adequate drainage exists on SW 14th Street.

The pavement is in good condition. There are no traffic control signals on SW 14th Street. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization – there are no traffic signals on SW 14th Street within the Town, however traffic control signs do exist.

Adjoining land uses/access – Adjoining land uses are predominantly single-family residential. Western High School exists at SW 136th Avenue. SW 14th Street provides access to several

residential neighborhoods.

b) Present Level of Service

The roadway segment west of Weston Road is currently handling 19,900 TPD. The roadway segment east of I-75 is currently handling 10,800 TPD. The established LOS D volume for SW 14th Street is 14,600 TPD. Therefore, the current V/C ratios are 1.36 and .74 respectively. This results in a current operating LOS of F and B. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that the traffic volumes will decrease east of Weston Road and increase slightly east of I-75. The projected volumes for the roadway are 8,500 TPD east of Weston Road and 12,900 TPD east of I-75. Broward County's projected LOS capacity for this roadway is 10,200 TPD. Therefore, these volumes would result in projected V/C ratios of .84 and 1.27 respectively. These V/C ratios result in a projected LOS of D and F. For Peak Hour information refer to Table II-5(b). The Town strongly disagrees with the projections as it is felt the segment east of I-75 will increase significantly.

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP).

2) **NOVA DRIVE**

a) Facility Description

Discussion – Nova Drive is an east-west collector roadway located in the northeastern portion of Davie. This roadway is constructed as a two (2) lane urban local collector roadway with a 110' wide right-of-way from Pine Island Road to Davie Road, and as a City Collector with an 80' wide right-of-way west of Pine Island Road. The entire length of the roadway is within the Town limits and is approximately 3.3 miles. A concrete sidewalk exists on the north side of the roadway and approximately half of the south side of the

roadway. Adequate drainage exists on Nova Drive.

The pavement is in good condition. There are four (4) traffic control signals on Nova Drive, for an average of approximately .82 per mile. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization - exists at the following locations:

- Pine Island Road
- University Drive
- College Avenue
- Davie Road

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access – Adjoining land uses are, multi-family residential, single-family residential, commercial recreation and the Educational campus near Davie Road. Nova Drive provides access to several multi-family developments, a residential neighborhood and a few commercial centers as well.

b) Present Level of Service

The roadway segment east of Pine Island Road is currently handling 9,400 TPD. The roadway segment east of University Drive is currently handling 18,400 TPD. The roadway segment west of Davie Road is currently handling 20,600 TPD. The established LOS D volume for Nova Drive is 10,900 TPD. Therefore, the current V/C ratios are .83, 1.69 and 1.89 respectively. This results in a current operating LOS of C, F and F. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic counts will decrease for the segments of the roadway east of Pine Island Road and east of University Drive. The estimates are 4,200 TPD east of Pine Island Road and 13,600 TPD east of University Drive. Broward County's projected LOS D capacity for this roadway is 10,200 TPD. Therefore, these volumes would result in projected V/C ratios of .41 and 1.33 respectively. These V/C ratios would result in a projected LOS of C and F.

Because the Educational campus is expanding, the forecasts between University Drive and Davie Road should not decrease but increase. For Peak Hour information refer to Table II-5(b). The Town strenuously disagrees with the County's future projections that indicate traffic volumes will decrease from 9,400 TPD east of Pine Island Road in 1998 to 4,200 TPD in 2015 and decrease from 18,400 TPD east of University Drive in 1998 to 13,600 TPD in 2015. The areas are experiencing new development, especially the South Florida Educational Campus area between University Drive and Davie Road. The Town will coordinate with Broward County to monitor this area. Currently the roadway needs to be widened to four (4) lanes in the above referenced segment in the near future. The Town will request Broward County to reevaluate the projected traffic volume for 2015 and examine capacity enhancements.

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP). As the roadway currently has LOS operating problems and is projected to continue, a widening project should be explored in the near future.

3) **SW 36TH STREET**

a) Facility Description

Discussion – SW 36th Street is an east-west collector roadway located in the far west central portion of Davie. SW 36th Street enters the Town limits from the west at SW 160th Avenue (Dykes Road) and traverses east a short distance to its terminus at SW 154th Avenue (Shotgun Road). This roadway is constructed as a two (2) lane facility with a 110' wide right-of-way. Its length within the Town limits is approximately .53 miles. No sidewalks exists on SW 36th Street. However, adequate drainage exists on SW 36th Street.

The pavement is in good condition. There are no traffic control signals on SW 36th Street. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization – there are no traffic signals on SW 36th Street, however, traffic control signs do exist.

Adjoining land uses/access – Adjoining land uses are predominantly single-family residential, however, commercial land uses are present as well. SW 36th Street does not provide access to any developed property in the Town at present.

b) Present Level of Service

The roadway segment west of I-75 is currently handling 2,800 TPD. The established LOS D volume for SW 36th Street is 14,600 TPD. Therefore, the current V/C ratio is .20. This results in a current operating LOS of A. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County YEAR 2015 Traffic Projections estimate that the traffic counts will increase significantly. The estimate is 7,400 TPD west of I-75. Broward County's projected LOS D capacity for this roadway is 10,200 TPD. Therefore, this volume would result in a projected V/C ratio of .73. This V/C ratio would result in a projected LOS of B. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no proposed improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP).

4) **SW 39TH STREET**

a) Facility Description

Discussion – SW 39th Street is an east-west collector roadway located in the east central portion of Davie. This roadway is constructed as a two (2) lane City collector roadway. The Broward County Traffficways Plan requires an 80' wide right-of-way from College Avenue to Davie Road. The entire length of the roadway is within the Town limits and is approximately 1.4 miles. A concrete sidewalk exists on the south side of the roadway from 76th Avenue (Kirkland Road) to College Avenue. Adequate drainage exists on SW 39th Street.

The pavement is in good condition. There are three (3) traffic control signals on SW 39th Street, for an average of 2.4 per mile. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization - exists at the following locations:

- University Drive
- College Avenue
- Davie Road

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access - Adjoining land uses are single-family residential, multi-family residential, community facility and commercial. SW 39th Avenue provides access to a few residential neighborhoods, a few multi-family developments and several educational facilities as well as a few commercial uses.

b) Present Level of Service

The roadway segment east of University Drive (West of College Avenue) is currently handling 10,600 TPD. The roadway segment west of Davie Road (East of College Avenue) is currently handling 10,700 TPD. The established LOS D volume for SW 39th Street is 10,900 TPD. Therefore, the current V/C ratios are .97 and .98 respectively. These resulting a current operating LOS of E and D. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that the traffic count east of University Drive (West of College Avenue) will increase slightly. The estimate is 11,500 TPD east of University Drive. Broward County's projected LOS D capacity for this roadway is 10,200 TPD. Therefore, this volume would result in a projected V/C ratio of 1.13. This V/C ratio would result in a projected LOS of E. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work

Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP).

5) **ORANGE DRIVE**

a) Facility Description

Discussion – Orange Drive is an east-west collector roadway located in the central portion of Davie. This roadway is constructed as a two (2) lane urban local collector with an 80' wide right-of-way. The entire length of the roadway is within the Town limits and is approximately 9.2 miles. In the far western portion of the Town limits, where this roadway turns north, it is known as SW 154th Avenue (Shotgun Road). An asphalt walking/jogging path exists on the south side of the roadway adjoining the New River Canal. Adequate drainage exists on Orange Drive.

The pavement is in good condition. There are seven (7) traffic control signals on Orange Drive, for an average of .86 per mile. There is clearly marked traffic lane striping on the entire length of the roadway. Through traffic across University Drive is restricted by a channelized median.

Traffic Signalization – exist at the following locations:

- Nob Hill Road
- Pine Island Road
- Davie Road
- SW 61st Avenue
- Florida Turnpike (West Side)
- Florida Turnpike (East Side)
- SR 7/US 441

Adjoining land uses/access - Adjoining land uses are single-family residential, multi-family residential, commercial, residential/office, recreation and open space, community facility and industrial. Orange Drive provides access to several residential neighborhoods, a few multi-family developments as well as commercial and industrial uses.

b) Present Level of Service

The roadway segment west of Flamingo Road is currently handling 750 TPD. The roadway segment east of Flamingo Road is handling approximately 510 TPD. The roadway segment east of Hiatus Road is currently handling 6,800 TPD. The roadway east of Pine Island Road is currently handling 7,250 TPD. The roadway segment east of University Drive is currently is handling 4,240 TPD. The roadway segment east of Davie Road is currently handling 12,400 TPD. The roadway segment west of SR 7/US 441 is currently handling 11,300 TPD. The established LOS D volumes for Orange Drive are 14,600 TPD for the segments west of Flamingo Road and east of Hiatus Road and 10,900 TPD for all remaining segments. Therefore, the current V/C ratios are .05, .04, .46, .66, .39, 1.14 and 1.04 respectively. These result in a current operating LOS of A, A, A, B, A, E and E. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic counts will increase significantly west of Flamingo Road, slightly east of Davie Road, and decrease for the remaining segments. The estimates are 2,700 TPD west of Flamingo Road, 2,700 TPD east of Hiatus Road, 6,000 TPD east of Pine Island Road, 4,000 TPD east of University Drive and 14,400 TPD east of Davie Road. Broward County's projected LOS D capacity for this roadway is 10,200 TPD. Therefore, these volumes would result in projected V/C ratios of .27, .27, .59, .39 and 1.41 respectively. These V/C ratios would result in a projected LOS of C, C, D, C and F. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP). However, the Griffin Road widening projects will include improvements which affect Orange Drive. A median with pedestrian, bicycle and equestrian features is proposed for 2000-01 at Pine Island Road and the traffic signal will be removed. At Nob Hill Road, north bound and southbound movements will be restricted as 2 southbound left turn lanes will be constructed at Griffin Road which will move the existing median east. This project

is scheduled for 2001-02.

6) **SW 154TH AVENUE (SHOTGUN ROAD)**

a) Facility Description

Discussion – SW 154th Avenue (Shotgun Road) is a north-south collector roadway located in the far western portion of Davie. This roadway is constructed as a two (2) lane city collector roadway. The roadway begins to the east of I-75 just south of SW 36th Street and traverses north until exiting the Town limits at SW 14th Street. To the south, this road becomes Orange Drive. Its length within the Town limits is approximately 3 miles. A concrete sidewalk exists on the east side of the roadway from SW 31st Street to SW 14th Street. Adequate drainage exists on SW 154th Avenue (Shotgun Road).

The pavement is in good condition. There are no traffic control signals on SW 154th Avenue (Shotgun Road). There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization – there are no traffic signals on SW 154th Avenue (Shotgun Road), however, traffic control signs do exist.

Adjoining land uses/access - Adjoining land uses are predominately single-family residential. SW 154th Avenue (Shotgun Road) provides access to mainly residential neighborhoods.

b) Present Level of Service

The roadway segment north of SW 36th Street currently is handling 3,100 TPD. The established LOS D volume for SW 154th Avenue (Shotgun Road) is 14,600 TPD. The current V/C ratio is .21. This results in a current operating LOS of A. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that traffic counts will increase somewhat significantly. The estimate is 5,600 TPD north of SW 36th Street. Broward County's projected LOS D capacity for this roadway is 10,200 TPD. Therefore, this volume would result in a projected V/C ratio of .55. This V/C ratio would result in a projected LOS of A. For Peak Hour information refer to Table II-5(b).

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP).

7) **COLLEGE AVENUE**

a) Facility Description

Discussion – College Avenue is a north-south collector roadway located in the northeastern portion of Davie. This roadway is constructed as a two (2) lane City collector roadway with an 80' wide right-of-way. The entire length of the roadway is within the Town limits and is approximately 1.6 miles. A concrete sidewalk exists on a majority of the west side of the roadway from SW 36th Street to Nova Drive. Additionally, a concrete sidewalk exists on the east side of the roadway north of Nova Drive. Adequate drainage exists on College Avenue.

The pavement is in good condition. There are three (3) traffic control signals on College Avenue, for an average of 1.8 per mile. There is clearly marked traffic lane striping on the entire length of the roadway.

Traffic Signalization - exists at the following locations:

- SW 39th Street
- SW 30th Street
- Nova Drive

All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses/access – Adjoining land uses are predominately community facility and industrial, however, a multi-family residential and commercial land uses are present as well. College Avenue provides access to mainly education facilities.

b) Present Level of Service

The roadway segment south the Nova Drive is currently handling 18,000 TPD. The established LOS D volume for College Avenue is 10,900 TPD. Therefore, the current V/C ratio is 1.65. This result in a current operating LOS of F. For Peak Hour information refer to Table II-5(b).

c) Future Level of Service

The Broward County Year 2015 Traffic Projections estimate that the traffic count will decrease. The estimate is 15,300 TPD. Broward County's projected LOS D volume for College Avenue is 22,600 TPD which anticipates a widening to four (4) lanes. Therefore, this would result in a projected V/C ratio of .68. This V/C ratio would result in a projected LOS of B. For Peak Hour information refer to Table II-5(b). The Town strongly disagrees that the volumes will decease as enrollments are increasing and new educational facilities are proposed.

d) Proposed Improvements

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 through FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP). The Broward County 2015 projection assumes the roadway will be widened to four (4) lanes which needs to occur.

There are several other City Collector Roadways which connect local roadways to County Collectors or Arterials.

8) **SW 148th AVENUE**

SW 148th Avenue is a two lane north/south Collector roadway located in the western portion of the Town of Davie. The roadway initiates immediately south of I-595 at SR 84 and continues south until reaching SW 14th Street. The roadway between SR 84 and SW 14th Street is required to have 94' of right of way as per the Broward County Trafficways Plan. This roadway provides access only to those residential developments immediately abutting the facility which primarily include estate single family residential development. Information relating to the current and projected traffic volumes on this roadway is not available nor monitored by Broward County. However, field observation reveals that traffic volumes on this

roadway are low and the roadway appears to have sufficient capacity to accommodate all existing traffic at a high level of service (LOS A). In addition, given the development of the existing land, adjacent to the facility and the anticipated future development of remaining vacant land it is anticipated that this roadway will have sufficient capacity to accommodate all future increases in traffic which are not anticipated to be significant. Therefore, as of 1999 there are no improvements anticipated to be needed to insure the provision of an acceptable level of service.

9) **HIATUS ROAD (SW 112TH AVENUE)**

Hiatus Road (SW 112th Avenue) is a centrally located north-south roadway extending from north to I-595 to Orange Drive. The Broward County Trafficway Plan identifies Haitus Road from McNab Road in the City of Tamarac to I-595 as a 110' wide arterial roadway. Also, the segment from Orange Drive south to its terminus near Miramar Parkway has an identical designation. Broward County's adopted Transportation Element classifies Hiatus Road (Functional Classification) as an Urban Collector. Hiatus Road (SW 112th Avenue) begins in the Town limits at Orange Drive and traverses north terminating at the Town limits at SR 84/I-595. Hiatus Road is constructed as a two (2) lane facility for its entire length within the Town limits. Its length within the Town limits is approximately 3 miles. A concrete sidewalk exists on the east side of the roadway from SW 38th Drive north to SW 26th Street and on the west side from SW 26th Street to SR 84. Additionally, there are sidewalks located on a few other small sections of the roadway as well. Adequate drainage exists for Hiatus Road (SW 112th Avenue).

The pavement is in fair condition. There are a total of two (2) traffic control signals on Hiatus Road (SW 112th Avenue) within the Town both of which are at the I-595/SR 84 interchange. There is clearly marked traffic lane striping on the entire length of the roadway. All traffic signals are operated and maintained by either Broward County or FDOT.

Adjoining land uses are predominantly estate single-family residential. However, multi-family residential and commercial land uses are present as well near I-595. Additionally, Hiatus Road (SW 112th Avenue) provides access to a few mobile home parks, as well. The roadway segment south of I-595 (North of SW 14th Street) is currently handling 9,260 TPD. The roadway segment north of Orange Drive is currently handling 3,500 TPD. The established LOS D volume for Hiatus Road (SW 112th Avenue) is 10,900 TPD near I-

595 because of the signalization and 14,600 TPD south of SW 14th Street. Therefore, the current V/C ratios are .85 and .23 respectively These result in a current operating LOS of C and A. For Peak Hour information refer to Table II-5(b). The Broward County Year 2015 Traffic Projections estimate that traffic counts will increase significantly south of I-595 (North of SW 14th Street) and minimally north of Orange Drive. The estimates are 21,200 TPD south of I-595 (North of SW 14th Street) and 3,900 TPD north of Orange Drive. Broward County's projected LOS D capacities for this roadway are 23,800 TPD south of I-595 and 10,900 TPD north of Orange Drive. Therefore, these projected volumes would result in V/C ratios of .89 and .38 respectively. These V/C ratios would result in a projected LOS of D and A. For Peak Hour information refer to Table II-5(b).

There are no improvements scheduled to the road per the FDOT/Broward County FY 1999/00 though FY 2003/04 Work Program or the Broward County Metropolitan Planning Organization (MPO) FY 1998/99 through 2002/03 Transportation Improvement Program (TIP). Future Broward County forecasts for the roadway segment from SW 14th Street to I-595 will require widening to four (4) lanes. However, the Town wishes to maintain the segments south of SW 14th Street as a two (2) lane facility to preserve the integrity of the estate residential area.

10) **SW 26th STREET**

SW 26th Street is a two (2) lane east/west Collector roadway located in the western portion of the Town of Davie. The roadway currently initiates at SW 148th Avenue and continues east until SW 127th Avenue. Portions of right-of-way exist between SW 127th Avenue and Flamingo Road but the road is not constructed. Another two (2) lane segment exists between Flamingo Road and Hiatus Road. The Town supports the extension of the road to Flamingo Road. The roadway is required to have 80' of right of way as per the Broward County Trafficways Plan. This roadway provides access to those residential developments in the vicinity of the facility which primarily includes estate single family residential development. Information relating to the current and projected traffic volumes on this roadway is not available nor monitored by Broward County. However, field observation reveals that traffic volumes on this roadway are low and the roadway appears to have sufficient capacity to accommodate all existing traffic at a high level of service (LOS A). In addition, given the development of the existing land adjacent to the facility and the anticipated future development of remaining vacant land, it is anticipated that this roadway will have sufficient capacity to accommodate future increases in traffic. Therefore, as of 1999 there

are no improvements anticipated to be needed to insure the provision of an acceptable level of service. However, there are roadway safety and general maintenance improvements needed because of the existing drainage canal (no shoulder) and road condition. The Town strongly opposes the extension of SW 26th Street between I-75 and SW 148th Avenue. Such a major roadway corridor would severely impact the rural estate qualities of the general area.

11) **SW 130th AVENUE**

SW 130th Avenue is a two (2) lane north/south Collector roadway located in the western portion of the Town of Davie. The roadway initiates at SR 84 and continues south until reaching SW 36th Court, where it terminates. This roadway provides access only to those residential developments in the vicinity of the facility which primarily includes estate single family residential development. Information relating to the current and projected traffic volumes on this roadway is not available nor monitored by Broward County. However, field observation reveals that traffic volumes on this roadway are low and the roadway appears to have sufficient capacity to accommodate all existing traffic at a high level of service (LOS A). In addition, given the development of the existing land adjacent to the facility and the anticipated future development of remaining vacant land it is anticipated that this roadway will have sufficient capacity to accommodate all future increases in traffic which are not anticipated to be significant. Therefore, as of 1999 there are no improvements anticipated to be needed to insure the provision of an acceptable level of service.

12) **SW 36th COURT**

SW 36th Court is a two (2) lane east/west Collector roadway located in the western portion of the Town of Davie. The roadway initiates at SW 130th Avenue and continues east until SW 121st Avenue where it terminates. This roadway provides access to those lands in the vicinity of the facility which includes agricultural uses and estate single family residential development. Information relating to the current and projected traffic volumes on this roadway is not available nor monitored by Broward County. However, field observation reveals that traffic volumes on this roadway are low and the roadway appears to have sufficient capacity to accommodate all existing traffic at a high level of service (LOS A). In addition, given the development of the existing land adjacent to the facility and the anticipated future development of remaining vacant land it is

anticipated that this roadway will have sufficient capacity to accommodate all future increases in traffic which are not anticipated to be significant. Therefore, as of 1999 there are no improvements anticipated to be needed to insure the provision of an acceptable level of service.

13) SW 30th STREET

SW 30th Street is a two (2) lane east/west Collector roadway located in the eastern portion of the Town of Davie. The roadway initiates at Pine Island Road and continues east until College Avenue where it terminates. This roadway provides access to those residential developments immediately abutting the facility between Pine Island Road and University Drive and commercial uses and numerous educational uses between University Drive and College Avenue. Information relating to the current and projected traffic volumes on this roadway is not available nor monitored by Broward County. However, field observation reveals that traffic volumes on this roadway are moderate between Pine Island Road and University Drive but higher between University Drive and College Avenue. Further study is recommended. Given the development of the existing land adjacent to the facility and the anticipated future development of remaining vacant land it is anticipated that this roadway will have similar traffic characteristics for all future increases in traffic. As of 1999 there are no improvements anticipated to be needed to insure the provision of an acceptable level of service but some improvements may be needed east of University Drive.

Analysis of Average Daily and Peak Hour Trips

The data provided in this portion of the element was obtained from Broward County, FDOT and/or forecasted by the Town's consultant Engineers and Planners. The Town's 1996 EAR included the 1994 Average Annual Daily Traffic (AADT) provided by Broward County. New 1998 AADT was obtained from Broward County which was published in March 1999. Forecasts for the Year 2002 and 2015 were obtained from Broward County's newly adopted (11/98) Transportation Element. The Town of Davie is in the center of development in southeast Florida, located in mid-central Broward County. The Town experiences much pass through traffic.

Broward County created Concurrency Exception Areas (CEA) in 1993. The current areas of Broward County within the Concurrency Exception Areas include all lands east of I-95 from the Palm Beach County line to Commercial Boulevard and all lands east of the Florida Turnpike between Commercial Boulevard and the Dade County line. The purpose is to encourage urban infill and redevelopment in eastern Broward County where most major roadways are over capacity at present, which would otherwise prohibit development to occur. New development is exempt from roadway concurrency review but Transit Impact Fees are required by the County if platting is necessary. The area east of the Florida Turnpike to the north and south boundaries of the Town limits are within the CEA. Additionally, the area east of SW 67th Avenue, west of SW 55th Avenue, north of SW 48th Street, and south of SW 37th Street is within the Davie CEA.

Broward County prepared forecasts for future traffic volumes in 1987, which identified existing counts for 1987 and forecasted traffic counts for 1994 and 2010 which were used in the original 1989 Comprehensive Plan. Broward County adopted a new Transportation Element in November 1998, which contained the newest trip count data available (1997) and new Year 2002 and 2015 projections. However, since the time of adoption of Broward County's Transportation Element, 1998 trip count data has been made available. Also, in March of 1999 FDOT published an updated LOS manual which changed some generalized capacity numbers. Therefore, following are the forecasts and actual 1998 AADT and two-way peak hour counts and analysis. It should be noted that the Broward County forecasts are modeled. There are numerous instances where existing traffic counts exceed forecasted volumes which is unlikely. The Town includes the County's forecasts for years 2002 and 2015 for coordination purposes and for lack of better data. However, the Town questions some of the forecasts and will monitor annual actual counts published by Broward County. Also, the County's Peak Hour analysis is not based upon actual counts, rather, it was assumed approximately 9% of the ADT counts were for peak hours. The County will be switching from ADT to peak hour concurrency analysis in the next

two (2) years. As newer and more accurate information becomes available, the Town will monitor the data. This may affect LOS determinations and improvements needs. The following Tables present information on ADT and peak hour traffic counts for historical, current and future conditions. The information (future) is graphically presented on Map II-18

TABLE II-5A
HISTORICAL AND FORECASTED TRAFFIC COUNTS
AVERAGE ANNUAL DAILY TRAFFIC (AADT)

East/West Roadway	Location	Actual (1) 1987	Est. (1) 1994	Actual (3) 1994	Actual (2) 1998	1998 (3) V/C	1998 (3) LOS	Est. (2) 2002	2002 (2) V/C	2002 (2) LOS	Est. (2) 2015	2015 (2) V/C	2015 (2) LOS
I-595	E of SR 7	N/A	82,200	116,700	152,000	1.10	E	160,200	1.16	F	165,900	1.20	F
	E of Davie Rd	N/A	84,400	145,700	155,000	1.19	F	164,800	1.19	F	170,700	1.23	F
	E of University Dr	N/A	83,100	156,100	154,000	1.11	E	156,100	1.13	E	161,700	1.17	F
	E of Pine Island Rd	N/A	74,200	132,900	128,500	1.26	F	148,100	1.46	F	153,400	1.51	F
	E of Nob Hill Rd	N/A	71,800	117,100	116,000	1.14	E	156,700	1.54	F	162,300	1.60	F
	E of Hiatus Rd	N/A	47,100	102,200	101,500	1.00	E	138,300	1.36	F	143,200	1.41	F
	E of Flamingo Rd	N/A	45,900	99,200	117,500	1.16	F	124,200	1.22	F	128,700	1.27	F
	E of SW 136th Ave	N/A	36,100	105,500	104,000	1.02	E	84,400	.93	D	97,800	.96	E
SR 84	E of SR 7	50,600	41,300	34,000	20,900 WB 13,900 EB	.97	E	38,900	1.09	E	57,600	1.61	F
	E of University Dr	40,000	28,100	24,200 BW 20,300 EB	29,000 WB 19,500 EB	1.13	E	43,700	1.02	E	45,200	1.05	E
	E of Pine Island Rd	38,500	27,100	13,900 WB 12,200 EB	22,000 WB 18,500 EB	.94	D	34,100	.79	C	35,300	.82	C
	E of Nob Hill Rd	37,500	27,900	17,600 WB 20,000 EB	17,500 WB 19,000 EB	.85	C	29,500	.69	B	30,500	.71	B
	E of Hiatus Rd	37,500	28,000	6,178 WB 10,100 EB	7,700 WB 10,500 EB	.42	A	18,000	.42	A	19,200	.45	A
	E of Flamingo Rd	36,400	26,100	9,300 WB 10,700 EB	5,800 WB 20,500 EB	.61	A	37,900	.88	D	39,300	.92	D
	E of SW 136th Ave	26,400	20,400	11,800 WB 13,600 EB	15,500 WB 17,500 EB	.77	C	24,000	.56	A	24,800	.58	A
SW 14th Street	E of I-75	3,600	5,600	9,400	10,800	.74	B	11,400	.78	C	12,900	.88	D
Nova Drive	E of Pine Island Rd	6,900	8,800	7,800	9,100	.83	C	7,300	.67	B	4,200	.38	A
	E of University Dr	10,800	13,700	15,100	18,400	1.69	F	16,900	1.55	F	13,600	.57	A
	W of Davie Rd	NL	NL	18,500	20,600	1.89	F	NL	NL	NL	NL	NL	NL
SW 36th Street	W of I-75	NL	NL	1,600	2,900	.20	A	4,000	.27	A	7,400	.51	A
SW 39th Street	E of University Dr	4,800	7,100	NL	10,600	.97	E	11,800	1.08	E	11,500	1.06	E
Orange Drive	W of Flamingo Rd	6,700	5,500	1,600	750	.05	A	1,100	.07	A	2,700	.18	A
	E of Hiatus Rd	6,600	4,700	5,100	6,800	.46	A	5,300	.36	A	2,700	.18	A
	E of Pine Island Rd	9,800	9,500	NL	7,250	.66	B	5,700	.52	A	6,000	.55	A
	E of University Dr	10,000	9,100	6,400	4,240	.39	A	4,000	.37	A	4,000	.37	A
	E of Davie Rd	9,400	9,700	NL	12,400	1.14	E	12,700	1.16	F	14,400	1.32	F
	W of SR 7	NL	NL	11,300	11,300	1.04	E	NL	NL	NL	NL	NL	NL
Griffin Road	W of I-75	7,500	10,100	17,100	17,300	.49	A	21,700	.62	A	37,800	1.08	E
	E of I-75	8,600	10,900	12,000	14,500	.47	A	18,700	.36	A	29,700	.56	A
	E of SW 142nd Ave	9,000	11,500	13,300	15,000	.90	D	16,900	1.02	E	22,700	.43	A
	E of Flamingo Rd	8,800	12,200	16,300	14,800	.42	A	15,100	.43	A	19,200	.55	A
	E of Nob Hill Rd	13,000	17,100	16,100	16,000	1.07	E	20,200	.58	A	28,400	.81	C
	E of Pine Island Rd	20,600	20,600	23,700	27,500	.85	C	33,000	1.01	E	44,800	.92	D
	E of University Dr	14,000	14,500	12,500	15,300	.29	A	20,200	.38	A	34,000	.65	A
	E of Davie Rd	13,900	17,900	18,200	23,000	.37	A	28,500	.58	A	45,500	.93	D
	W of SR 7	14,200	22,400	18,600	18,000	.37	A	26,400	.54	A	44,700	.91	D
Stirling Road	W of I-75	500	900	NL	4,800	.14	A	4,500	.13	A	4,600	.13	A
	E of I-75	300	700	4,000	3,900	.11	A	3,600	.10	A	3,700	.11	A
	W of University Dr	15,100	18,200	23,800	29,800	.61	A	28,600	.58	A	29,600	.84	C
	E of Univeristy Dr	14,500	19,100	21,500	24,000	.49	A	34,100	.70	B	35,300	.72	B
	E of Davie Rd	25,800	32,400	35,000	24,500	.69	B	38,400	.73	B	45,200	.86	D
	W of SR 7	34,600	40,400	36,800	34,900	.66	B	42,000	.80	C	45,700	.87	D

Sheridan Street	W of I-75	900	8,100	10,400	31,500	.97	E	31,100	.96	E	50,900	.97	E
	E of I-75	2,000	7,900	18,000	29,100	.59	A	33,400	.68	B	44,500	.91	D
	W of University Dr	13,000	22,000	29,200	34,100	.97	E	37,800	1.08	E	43,200	.88	D
	E of University Dr	29,300	35,000	28,200	29,000	.55	A	30,100	.57	A	37,200	.71	B
North/South Roadways													
SW 160th Avenue	N of Sheridan St	N/A	4,000	3,000	7,300	.67	B	7,200	.66	B	13,200	.55	A
I-75	N of Arvida Pkwy	13,000	32,100	75,200	82,500	.59	A	96,400	.69	B	133,200	.96	E
	N of Griffin Rd	17,000	35,000	82,300	94,900	.68	B	93,900	.68	B	106,500	.77	C
	S of Griffin Rd	22,500	41,300	78,600	85,500	.62	A	94,800	.68	B	124,700	.90	D
	S of Sheridan St	NL	39,100	84,800	84,500	.61	A	97,800	.70	B	98,100	.71	B
SW 154th Avenue	N of SW 36th St	3,100	5,900	1,700	3,100	.21	A	3,800	.26	A	5,600	.38	A
Flamingo Road	S of I-595	7,200	17,800	19,500	26,500	.50	B	32,700	.62	A	48,600	.93	D
	N of SW 26th St	8,000	16,500	NL	24,000	.46	A	27,000	.51	A	29,200	.56	A
	N of Orange Dr	9,000	16,600	19,400	27,500	.56	A	26,400	.54	A	28,100	.57	A
	S of Griffin Rd	12,000	18,500	25,800	29,700	.61	A	31,500	.64	A	31,800	.65	A
SW 136th Avenue	S of I-595	7,700	8,400	19,800	10,200	.61	A	15,600	.94	D	27,600	1.16	F
	N of Griffin Rd	N/A	N/A	NL	11,000	.66	B	11,200	.67	B	11,600	.70	B
Hiatus Road	S of I-595	6,200	6,800	6,100	9,260	.85	C	12,800	1.17	F	21,200	.89	D
	N of Orange Dr	5,000	5,100	3,700	3,500	.24	A	3,800	.26	A	3,900	.27	A
Nob Hill Road	S of I-595	300	9,600	14,800	16,900	.48	A	39,500	1.13	E	45,300	.93	D
	N of Orange Dr	1,000	6,300	10,500	16,000	.46	A	24,400	.70	B	39,700	.81	C
	S of Griffin Rd	14,400	15,700	20,200	20,700	.59	A	22,400	.64	A	31,100	.89	D
Pine Island Road	S of I-595	23,300	24,500	27,700	30,400	.93	D	33,500	1.03	E	43,000	.88	D
	N of Orange Dr	8,500	12,600	15,300	21,800	.62	A	20,800	.59	A	33,800	.96	E
	S of Griffin Rd	N/A	4,500	NL	7,600	.46	A	4,900	.29	A	17,700	.50	A
University Drive	S of I-595	50,100	55,900	62,900	60,500	1.40	F	59,000	1.36	F	64,100	1.48	F
	N of Orange Dr	45,000	50,700	41,800	49,500	1.01	E	48,800	1.00	E	50,500	1.03	E
	S of Griffin Rd	39,700	44,000	45,000	45,500	.93	D	NL	NL	NL	NL	NL	NL
	N of Stirling Rd	41,300	45,800	39,900	46,500	.95	D	50,000	1.02	E	50,800	1.04	E
	N of Sheridan St	38,100	41,400	48,200	48,500	.99	E	46,900	.96	E	62,900	1.29	F
College Avenue	S of Nova Dr	5,500	7,600	NL	18,000	1.65	F	14,500	1.33	F	15,300	1.40	F
Davie Road	S of I-595	17,400	22,800	37,300	32,600	1.03	E	35,100	1.11	E	36,400	1.15	E
	N of SW 39th St	NL	NL	27,100	26,100	.82	C	NL	NL	NL	NL	NL	NL
	N of Orange Dr	20,000	25,100	29,100	27,700	.87	D	32,000	1.01	E	33,200	1.05	E
	S of Griffin Rd	15,000	19,000	NL	22,700	.72	B	23,000	.72	B	23,900	.75	B
	S of Stirling Rd	NL	NL	21,100	25,000	2.29	F	26,000	.82	C	27,100	.85	C
	E of University Dr	10,000	16,000	15,300	15,600	1.43	F	21,900	.69	B	27,100	.85	C
Florida Turnpike	S of I-595	54,200	67,700	65,300	69,500	.68	B	87,400	.86	D	157,500	1.55	F
	S of Griffin Rd	54,200	68,700	62,700	69,300	.68	B	74,700	.73	B	110,200	1.08	E
SR 7/US 441	S of I-595	36,000	46,100	45,700	43,000	.88	D	51,900	1.06	E	72,200	1.48	F
	N of Griffin Rd	37,800	46,100	45,400	45,000	.92	D	46,700	.95	D	46,600	.95	D
	N of Stirling Rd	39,800	45,900	45,500	40,900	.84	C	46,800	.96	E	51,300	1.05	E
	N of Sheridan St	32,900	33,300	35,300	36,000	.74	B	40,100	.82	C	41,500	.85	C

Source: 1. Broward County Comprehensive Plan 1989
2. Broward County Transportation Element 11/98
3. CAS 1999

Table T-5b
Town of Davie
Existing and Forecasted Traffic Counts
Peak Hour

East/West Roadway	Location	1998 Volumes	1998 Capacity	1998 V/C	1998 LOS	2002 Volumes	2002 Capacity	2002 V/C	2002 LOS	2015 Volumes	2015 Capacity	2015 V/C	2015 LOS
SR 84 (WB)	E of SR 7	1,975	2,052	.96	E	2,117	2,052	1.03	E	3,111	2,052	1.52	F
	E of University Dr	2,730	2,052	1.33	F	2,356	2,052	1.15	E	2,440	2,052	1.19	F
	W of Pine Island Rd	2,066	2,052	1.01	E	1,652	2,052	.80	C	1,709	2,052	.83	C
	E of Nob Hill Rd	1,702	2,052	.83	C	1,317	2,052	.64	A	1,363	2,052	.66	B
	E of Hiatus Rd	755	2,052	.37	A	689	2,052	.33	A	738	2,052	.36	A
	E of Flamingo Rd	537	2,052	.26	A	771	2,052	.38	A	799	2,052	.39	A
	W of Flamingo Rd	1,001	2,052	.49	A	672	2,052	.33	A	696	2,052	.34	A
	W of SW 136th Ave	1,638	2,052	.80	C	1,484	2,052	.72	B	1,537	2,052	.75	B
SR 84 (EB)	E of SR 7	1,392	2,052	.68	B	1,496	2,052	.73	B	2,253	2,052	1.10	E
	E of University Dr	1,975	2,052	.96	E	1,706	2,052	.83	C	1,767	2,052	.86	D
	E of Pine Island Rd	1,902	2,052	.93	D	1,521	2,052	.74	B	1,578	2,052	.77	C
	E of Nob Hill Rd	1,865	2,052	.91	D	1,426	2,052	.69	B	1,477	2,052	.72	B
	E of Hiatus Rd	1,074	2,052	.52	A	980	2,052	.48	A	1,049	2,052	.51	A
	E of Flamingo Rd	1,920	2,052	.94	D	2,757	2,052	1.34	F	2,855	2,052	1.39	F
	W of Flamingo Rd	2,320	2,052	1.13	E	1,559	2,052	.76	C	1,614	2,052	.79	C
	E of SW 136th Ave	1,638	2,052	.80	C	1,484	2,052	.72	B	1,537	2,052	.75	B
I-595	E of SR 7	13,900	12,200	1.14	E	14,081	12,200	1.15	E	13,979	12,200	1.15	E
	E of Davie Rd	14,950	12,200	1.22	F	14,483	12,200	1.19	F	15,001	12,200	1.23	F
	E of University Dr	14,770	12,200	1.21	F	13,725	12,200	1.12	E	14,214	12,200	1.16	F
	E of Pine Island Rd	11,690	12,100	.97	E	13,057	12,100	1.08	E	13,481	12,100	1.11	E
	E of Nob Hill Rd	10,660	12,100	.88	D	13,817	12,100	1.14	E	14,266	12,100	1.18	F
	E of Hiatus Rd	9,370	12,100	.77	C	12,190	12,100	1.01	E	12,586	12,100	1.04	E
	E of Flamingo Rd	10,860	12,100	.90	D	10,954	12,100	.90	D	11,310	12,100	.93	D
	E of SW 136th Ave	9,850	12,100	.81	C	8,326	12,100	.69	B	8,623	12,100	.71	B
	E of I-75	4,400	12,100	.36	A	8,326	12,100	.69	B	8,623	12,100	.71	B
SW 14th Street	E of I-75	987	990	1.00	E	1,038	990	1.05	E	1,177	990	1.19	F
Nova Drive	E of Pine Island Rd	855	990	.86	D	668	990	.67	B	384	990	.39	A
	E of University Dr	1,998	990	2.02	F	1,541	990	1.56	F	1,240	2,170	.57	A
	W of Davie Rd	2,106	990	2.13	F	1,895	990	1.91	F	2,150	2,170	.99	E
SW 36th Street	W of I-75	270	990	.27	A	372	990	.38	A	678	990	.68	B
SW 39th Street	E of University Dr	1,067	990	1.08	E	1,073	990	1.08	E	1,048	990	1.06	E
Orange Drive	E of Flamingo Rd	75	990	.07	A	149	990	.05	A	57	990	.06	A
	E of Hiatus Rd	644	990	.65	A	486	990	.49	A	248	990	.25	A
	E of Pine Island Rd	681	990	.69	B	521	990	.53	A	549	990	.55	A
	E of University Dr	429	990	.43	A	368	990	.37	A	361	990	.36	A
	E of Davie Rd	1,187	990	1.20	F	1,162	990	1.17	F	1,308	990	1.32	F
	W of SR 7	1,132	990	1.14	E	NL	990	NL	NL	NL	990	NL	NL
Griffin Road	W of I-75	1,701	3,020	.56	A	2,015	3,020	.67	B	3,523	3,020	1.17	F
	E of I-75	2,346	3,020	.78	C	1,745	3,020	.58	A	2,764	3,020	.91	D
	E of SW 142nd Ave	1,480	1,550	.95	D	1,309	1,550	.84	C	2,09	3,020	.70	B
	E of Flamingo Rd	1,398	3,020	.46	A	1,403	3,020	.46	A	1,784	3,020	.59	A
	E of Nob Hill Rd	1,527	1,390	1.10	E	1,876	1,390	.35	F	2,645	3,020	.87	D
	E of Pine Island Rd	2,880	4,550	.63	A	3,075	4,550	.68	B	4,176	4,550	.92	D
	E of University Dr	1,509	4,550	.33	A	1,883	4,550	.41	A	3,162	4,550	.69	B
	W of Florida Turnpike	1,739	4,550	.38	A	2,652	4,550	.58	A	4,238	4,550	.93	D
	W of SR 7	1,684	4,550	.37	A	2,454	4,550	.54	A	4,165	4,550	.91	D
Stirling Road	W of I-75	610	3,260	.19	A	407	3,260	.12	A	422	3,260	.13	A
	E of I-75	364	3,260	.11	A	325	3,260	.10	A	336	3,260	.10	A
	E of University Dr	2,266	4,550	.50	A	3,172	4,550	.70	B	3,285	4,550	.72	B
	E of Davie Rd	3,458	4,550	.76	C	3,572	4,550	.78	C	4,209	4,550	.92	D

	W of SR 7	3,940	4,890	.80	C	3,915	4,890	.80	C	4,260	4,890	.87	D
Sheridan Street	W of I-75	3,076	3,020	1.02	E	2,890	3,020	.96	E	4,743	4,550	1.04	E
	E of I-75	2,976	4,550	.65	B	3,107	4,550	.68	B	4,144	4,550	.91	D
	E of University Dr	2,675	4,550	.59	A	2,804	4,550	.62	A	3,463	4,550	.76	C
North/South Roadways													
SW 160th Avenue	N of Sheridan St	702	990	.71	B	660	990	.67	B	1,200	2,170	.55	A
I-75	N of Arvida Pkwy	8,360	12,100	.69	B	8,470	12,100	.70	B	11,710	12,100	.97	E
	N of Griffin Rd	8,901	12,100	.74	B	8,257	12,100	.68	B	9,360	12,100	.77	C
	S of Griffin Rd	8,613	12,100	.71	B	8,336	12,100	.69	B	10,960	12,100	.90	D
	S of Sheridan St	8,307	12,100	.69	B	8,598	12,100	.71	B	8,627	12,100	.71	B
SW 154th Avenue	N of SW 36th St	324	990	.33	A	350	990	.35	A	513	990	.52	A
SW 136th Avenue	S of I-595	1,147	2,170	.53	A	1,425	2,170	.66	B	2,516	2,170	1.16	F
	N of Griffin Rd	1,007	990	1.02	E	1,021	990	1.03	E	1,057	990	1.07	E
Flamingo Road	N of I-595	3,321	4,550	.73	B	3,043	4,550	.67	B	5,825	4,550	1.28	F
	N of SW 26th St	2,220	4,550	.49	A	2,515	4,550	.55	A	2,721	4,550	.60	A
	N of Orange Dr	2,557	4,550	.56	A	2,460	4,550	.54	A	2,618	4,550	.57	A
	S of Griffin Rd	2,912	4,550	.64	A	2,938	4,550	.64	A	2,963	4,550	.65	A
Hiatus Road	S of I-595	892	990	.90	D	1,163	990	1.17	F	1,937	2,170	.89	D
	N of Orange Dr	328	990	.33	A	345	990	.35	A	357	990	.36	A
Nob Hill Road	N of I-595	3,384	3,020	1.12	E	3,669	3,020	1.21	F	4,215	4,550	.93	D
	S of I-595	1,592	3,020	.53	A	3,555	3,020	1.18	F	4,017	4,550	.88	D
	N of Orange Dr	1,465	3,260	.45	A	2,273	3,260	.70	B	3,691	3,260	1.13	E
	S of Griffin Rd	2,220	3,260	.68	B	1,232	3,260	.38	A	2,892	3,260	.89	D
Pine Island Road	N of I-595	4,340	4,550	.95	D	4,436	4,550	.97	E	4,846	4,550	1.06	E
	S of I-595	3,522	3,020	1.17	F	3,114	3,020	1.03	E	3,998	4,550	.88	D
	N of Orange Dr	2,284	3,260	.70	B	1,931	3,260	.59	A	3,147	3,260	.96	E
	S of Griffin Rd	755	990	.76	C	456	990	.46	A	1,646	2,170	.76	C
University Drive	N of I-595	7,471	3,980	1.88	F	7,388	4,550	1.62	F	8,562	5,590	1.53	F
	S of I-595	5,706	3,980	1.43	F	5,069	4,550	1.11	E	5,962	5,590	1.07	E
	N of Orange Dr	4,641	4,550	1.02	E	4,195	4,550	.92	D	4,673	5,590	.84	C
	S of Griffin Rd	4,313	4,550	.95	D	4,427	4,550	.97	E	4,703	4,550	1.03	E
	N of Stirling Rd	4,550	4,890	.93	D	4,659	4,550	1.02	E	4,734	4,550	1.04	E
	N of Sheridan St	4,614	4,550	1.01	E	4,364	4,550	.96	E	5,853	4,550	1.29	F
College Avenue	S of Nova Dr	1,656	1,040	1.59	F	1,349	1,040	1.30	F	1,396	2,170	.64	A
Davie Road	S of I-595	3,285	3,020	1.09	E	3,245	3,020	1.07	E	3,381	3,020	1.12	E
	N of SW 39th St	3,358	3,020	1.11	E	3,115	3,020	1.03	E	3,240	3,020	1.07	E
	N of Orange Dr	2,575	3,020	.85	C	2,985	3,020	.99	E	3,091	3,020	1.02	E
	S of Griffin Rd	2,266	3,020	.75	B	1,999	3,020	.66	B	2,071	3,020	.69	B
	S of Stirling Rd	2,694	1,390	1.94	F	1,950	3,020	.65	A	2,212	3,020	.73	B
	E of University Dr	1,711	1,390	1.23	F	1,901	3,020	.63	A	2,353	3,020	.78	C
Florida Turnpike	S of I-595	6,325	8,900	.71	B	7,705	8,900	.87	D	13,849	12,100	1.14	E
	S of Griffin Rd	6,306	8,900	.71	B	6,586	8,900	.74	B	9,685	12,100	.80	C
SR 7/US 441	S of I-595	4,077	4,550	.90	D	4,757	4,550	1.04	E	6,722	4,550	1.48	F
	N of Griffin Rd	4,350	4,550	.96	E	4,349	4,550	.95	D	4,338	4,550	.95	D
	N of Stirling Rd	4,022	4,550	.88	D	4,350	4,550	.95	D	4,778	4,550	1.05	E
	S of Stirling Rd	3,576	4,550	.78	C	3,728	4,550	.82	C	3,863	4,550	.85	C
NW 64th Avenue	S of Stirling Rd	519	990	.52	A	585	990	.59	A	685	990	.69	B
NW 72nd Avenue	S of Davie Rd	637	990	.64	A	772	990	.78	C	1,006	990	1.02	E

Source: Broward County Transportation Element 11/98
CAS 6/99

As may be observed from the above data, the results of forecasted versus actual traffic counts varied widely. The Broward County forecasts are performed via computer modeling. The assumptions of growth areas intensities and travel patterns are best guesses. The computer model utilizes link analysis, travel distance and attractor/generator variables. As actual growth has occurred in Broward County and the Town, more specific data has become available and travel patterns have become more visible. The Town's main roadway pattern is virtually complete as of 1999. Development opportunities that remain can best be described as being infill development in varying areas of the Town. Given these facts, future projections can be more accurately made at this time compared to estimates made in 1987 or even the mid 1990's. Broward County, because of the expense involved, does not update long-term traffic projections frequently. Therefore, much of their data is dated and questionable. Of the sixty-nine monitored stations that remained in the same location for the 1994 estimate and the 1994 actual flows, only eight (8) were within 10% accuracy. Twenty-four (24) locations noted lower than anticipated volumes. These were on SR 84 east of SR 7 (18% less), SR 84 east of Pine Island Road (4% less), SR 84 east of Hiatus Road (42% less), SR 84 east of Flamingo Road (23% less), Nova Drive east of Pine Island Road (11% less), Orange Drive west of Flamingo Road (71% less), Orange Drive east of University Drive (30% less), Griffin Road east of Nob Hill Road (6% less), Griffin Road east of University Drive (14% less), Griffin Road west of SR 7/US 441 (17% less), Stirling Road west of SR 7/US 441 (9% less), Sheridan Street east of University Drive (19% less), SW 160th Avenue north of Sheridan Street (25% less), SW 154th Avenue north of SW 36th Street (71% less), Hiatus Road south of I-595 (10% less), Hiatus Road north of Orange Drive (27% less), University Drive north of Orange Drive (18% less), University Drive north of Stirling Road (13% less), Davie Road east of University Drive (4% less), Florida Turnpike south of I-595 (4% less), Florida Turnpike south of Griffin Road (9% less), SR 7/US 441 south of I-595 (1% less), SR 7/US 441 north of Griffin Road (2% less) and SR 7/US 441 north of Stirling Road (1% less).

Of the seventy-eight (78) monitored stations that remained in the same location for the 1994 estimate and the 1998 actual traffic flows, only nine (9) were within 10% accuracy. Sixteen (16) locations noted lower than anticipated traffic volumes. These were on SR 84 east of SR 7/US 441 (26% less), SR 84 east of Hiatus Road (35% less), Orange Drive west of Flamingo Road (84% less), Orange Drive east of Pine Island Road (24% less), Orange Drive east of University Drive (53% less), Griffin Road east if Nob Hill Road (6% less), Stirling Road east of Davie Road (24% less), Stirling Road west of SR 7/US 441 (14% less), Sheridan Street east of University Davie (17% less), SW 154th Avenue north of SW 36th Street (47% less), Hiatus Road (71% less), University Drive north of Orange

Drive (2% less), Davie Road east of University Drive (2% less), SR 7/US 441 south of I-595 (7% less), SR 7/US 441 north of Griffin Road (2% less) and SR 7/US 441 north of Stirling Road (11% less).

Traffic volumes on I-595 are on average 96% higher in 1998 than anticipated by forecasts for 1994, 48% higher on SW 14th Street minus the segment east of Weston Road, 224% higher on Griffin Road east of I-75, 61% higher on Stirling Road west of University Drive, 37% higher on Sheridan Street east and west of I-75 and 236% higher on I-75.

The Town of Davie, because of its geographic location and design does not have significant peak season characteristics but does have significant peak hour characteristics. As may be expected, most peak hour traffic is in the PM hours (4-6 PM) and related to work trips. I-595 exhibits the most significant peak hour problems as the roadway is the main east/west link from coastal communities to the western suburbs.

As mentioned previously, the Broward County forecasts for both 2002 and 2015 appear quite high for most roadways. The assumption that traffic will continue increasing at an annual rate of 2-5% or more is felt to be questionable in light of the existing development status of the Town and surrounding communities. Some estimates are felt to be too low given existing traffic volumes and planned expansions such as the South Florida Educational Campus.

Mass Transit (bus) occupancy levels are generally quite low in the Town. The peak occupancy occurs during A.M. peak periods. Normal occupancy levels are monitored by Broward County Transit by route. Occupancy rates are from 23.9% on Route 2, 25.0% on Route 9, 22.8% on Route 12, 49% on Route 18 and 15% on Route 75. Detailed ridership information can be found in the following sections of this Element.

Analysis of Modal Split and Vehicle Occupancy Rates

The modal split in Broward County is estimated at 1.15% mass transit and 98.85% vehicular (auto/truck/motorcycle). For planning purposes it is estimated that occupancy rates for vehicles average approximately 1.56 persons per vehicle. This data is verified in the Broward County Transportation Element, which noted the occupancy as the County average. A visual inspection of bus occupancy noted similar occupancy rates as other communities with similar median incomes. The vast majority of Davie households (approximately 96%) own at least one automobile, while nearly two thirds (66%) of total occupied units own two or more vehicles. Because of the income levels within the Town and surrounding areas, the vast majority of households having access to

vehicles and the rural lifestyle and character of the Town, a slightly less then average proportion of public transit use is thought to occur.

Analysis of Existing Public Transit Facilities

The Town is currently served by five (5) InterCounty bus routes. The Town is felt to be well served by the bus routes available to the urbanized areas of the Town. Because of the large rural areas of Davie, typical service standards are not appropriate to determine if the population as a whole is serviced. Some expansion of routes should be studied by Broward County Transit (BCT). In nearly all instances, pedestrian walkways allow easy travel to bus routes/stops. The Tri-Rail system is not easily accessible to Town residents. The stations, which are located along the railway line some two (2) miles from the Town's eastern border, are divorced from the Town's general population.

Broward County has adopted the following Public Transit LOS standard. Unlike the roadway LOS standard, which measures vehicles, the Public Transit LOS standard measures accessibility to public transit. Accessibility is addressed through the concept of functional area coverage, which is defined as maintaining a 70% peak hour functional area coverage for residential and employment locations. Accessibility is determined if a land use is within ¼ mile of a fixed bus route. Under the 1999 Broward County Transportation Element functional area coverage was measured on a daily basis.

Route 2 currently has 221 persons boarding in Davie per day. This Route has 33 trips per day. Each bus can carry up to 45 seated passengers. According to the Broward County Mass Transit Division, the average load factor (occupancy rate) for the entire route is 23.9%.

Route 9 currently has 433 persons boarding in Davie per day. This route has 23 trips per day. According to the Broward County Mass Transit Division, the average load factor for the entire route is 25.0%.

Route 12 currently has 279 persons boarding in Davie per day. This route has 18 trips per day. According to the Broward County Mass Transit Division, the average load factor for the entire route is 22.8%.

Route 18 currently has 182 persons boarding in Davie per day. This route has 50 trips per day. According to the Broward County Mass Transit Division, the average load factor for the entire route is 49%.

Route 75 currently has 97 persons boarding in Davie per day. This route has 15 trips per day. According to the Broward County Mass Transit Division, the average load factor for the entire route is 15.0%.

Population Characteristics Including Transportation Disadvantage

The Town of Davie can best be described as generally youthful with a median household income of $36,843. The median age of a Town resident is 32.6 years old. A more detailed breakdown is as follows:

Table II-6

Town of Davie
Analysis of Residents Ages

Age Group	No.	Percent
Under 18	11,758	25%
18 - 64	31,229	66%
65 and Over	4,230	9%
Total	47,217	100%

Source: 1990 U.S. Census

The Town's population has increased to approximately 62,738 in 1998 and the age breakdown is felt to be substantially the same.

Household occupancy is estimated at 2.62 persons per household according to the 1990 U.S. Census. Out of a total of 17,766 total households 3,472 households or 20% were one person households. 2,007 or 58% of the one person households were occupied by a female. 2,851 total households (16%) had at least one person over 65 years of age.

Transportation disadvantaged persons are individuals who because of physical or mental disability, income status, or age are unable to transport themselves to or purchase transportation and are, therefore dependent upon others to obtain access to health care, employment, education, shopping, social activities, or other life-sustaining activities. This segment of the population includes persons age 65 or older, persons aged 14 or younger, and the seasonal population.

An exact number of persons needing transportation assistance is difficult to determine. The needs of the transportation disadvantaged are documented in A Plan for Complementary Paratransit Mass Transit Services for Persons with Disabilities for Broward County, Florida and in Broward County Transportation Disadvantaged Service Plan, 1996. The vast majorities of residents are mobile and can either walk or drive for services. Broward County contracts with private providers for services also. Service for qualified elderly and handicapped persons within Davie remains on a prearranged "as needed" basis. There are currently five (5)

BCT transit routes within Davie, which are operating as wheelchair accessible routes.

Characteristics of Major Trip Generators and Attractors

As described in previous sections, the Town has identified four (4) land uses/areas, which it considers major trip generators and attractors. Broward County defines a major trip generator or attractor as a concentrated area of intense land use or activity that produces or attracts a significant number of local trip ends. For public transit, this is a site, which attracts a substantial number of person trips per day. The Broward County Transportation Element defines such as meeting or exceeding the following thresholds: Office parks – 100,000 sq. ft. GLA; shopping centers – 500,000 sq. ft.; schools – 1,000 students; major employers – 1,000 employees; health facilities – 100 beds.

All of the above may be considered attractor uses while housing concentrations are typically defined as generators. The County does not have a threshold for housing, nor does the State of Florida. For purposes of this element, the Town of Davie defines residential uses as concentration of higher density housing (over 10 DUA) and containing a minimum of 200 DU.

Generators

1. Multi-Family Concentrations – The Town of Davie has a significantly lower percentage of multi-family homes than Broward County on average. Broward County has approximately 57% of all housing units as multi-family compared to 37% in the Town. The Town's 1995 EAR found 8,108 multi-family units in the Town, however, newer developments since that time have increased the number to approximately 9,300 units. Virtually all multi-family housing is located in eastern Davie around the County Clubs and Educational Campus, in older sections of the Town north of Orange Drive and east of Davie Road and south of Stirling Road north of Davie Road Extension and finally along SR 84/I-595. Nearly all older complexes are small scale developments (4 DU to 40 DU). Some new complexes are larger which has been the trend in recent times. The largest projects include the Conquistador (318) DU), Palm Trace Landings (494 DU), Poinciana Lakes (208 DU) Newport Apartments (239 DU), Cameron Palms (340 DU), Sun Forest (494 DU), El Jardin (232 DU) and Emerald Palms (318 DU). Based upon the total of multi-family housing units, it is estimated that 46,000 TPD are generated by this land use.

Attractors

1. Education Complex - This area is quite unique as a specific area has evolved into a complex of universities, colleges, local schools and specialty educational uses. The area is generally located east of University Drive, south of Nova Drive, west of Davie Road and north of SW 39th Street. The University of Florida, Florida Atlantic University, Florida International University, Nova Southeastern University, McFatter Vocational Institute and Broward Community College are the main occupants. The Miami Dolphins training facility is located within the complex as well. The area encompasses some 760± acres of land housing approximately 2,200,000 square feet. Based upon ITE estimates, approximately 38,800 TPD occur around the campus area.

2. University Drive Commercial Corridor – University Drive is the central commercial spine of Davie as it is for most western communities in Broward County. The Corridor contains approximately 400± acres of commercial uses including "big box" uses such as Home Depot and K-Mart as well as smaller shopping centers, offices and specialty stores. It is estimated that 1,800,000 square feet of buildings exist which would attract approximately 144,000 TPD.

3. Davie Road/Orange Drive/Stirling Road Commercial Areas – These areas include smaller businesses related to the Educational Campus such as fast food establishments but also includes the oldest business areas of Davie north of Orange Drive and east of Davie Road. Businesses include repair shops, service businesses, car repair and the like. The area includes approximately 175± acres of land with approximately 1,250,000 ± square feet of space. It is estimated the area attracts 100,000 TPD.

4. Industrial Complex – The primary industrial area of Davie is located between Davie Road and University Drive north of Nova Drive, and between the Florida Turnpike and SR 7/US 441 from I-595 to the southern town limits. The areas include approximately 1,130 acres of land area. There are a wide variety of land uses including manufacturing, warehouses, trucking terminals, storage yards, etc. Some acreage is made up of open water bodies. It is estimated that 50% of the acreage is currently occupied. Therefore approximately 7,400,000 square feet of buildings existing which attracts approximately 22,000 TPD.

5. Western High School – Western High School is located at 1200 S.W. 136th Avenue. Current enrollment at this high school is 3,354 students. It is estimated that this would attract 5,031 TPD to the school.

Analysis of the Availability of Transportation Facilities and Services to Serve Existing Land Uses

All areas of the Town are currently served by existing roadways. No additional major roadways will be necessary to serve the community at buildout. The largest problem is the capacity and current/future traffic volumes of several of the existing roadways. The Town is located in the middle of Broward County and the overall southeast Florida Metropolitan area. Many of the existing major roadways have been widened for the most part to their maximum lane expansions. Future roadway expansion is warranted for portions of Flamingo Road, Nob Hill Road, Pine Island Road, College Avenue, Nova Drive, S.W. 39th Street and S.W. 14th Street. Therefore, the existing roadway system (other than segment improvements) is deemed adequate to serve the Town. (See Map II-10)

As mentioned earlier, Tri-Rail is available but not conducive to use because the transit station is some distance away from the residential areas of the Town. The nearest stations are at Broward Boulevard and I-95 and at the intersection of Tigertail Boulevard and Ravenswood Road. The closest distance from Davie is 2± miles with the most western areas 8± miles away.

Bus service is felt to be available to most residents living within the higher density residential developments in the Town (See Map II-11). The major provider of service is the Broward County Mass Transit Division (BCT), which operates the countywide bus system. The county also contracts with private vendors for public school busing, handicapped and Social Service Transportation (SST). Other service providers include private taxi service companies and the Greyhound/Trailways Bus Company.

Broward County is characterized by a suburban land development pattern and consequently by relatively low residential land use densities and few activity focal points. There are few major corridors with significant transit trip origins and destinations. Given the multitude of local governments in Broward County, dense roadway network, an average vehicle occupancy ratio of 1.56 and a relatively affluent population, the transit modal split is only 1.15 percent of total daily trips.

Because transit service is provided by BCT and Tri-Rail, the Town's role in transit planning is limited. While BCT provides the primary transit service for Davie, the Town is active in transit planning with regard to monitoring County actions and providing local input where necessary.

The County's Mass Transit operation is primarily a large passenger bus system operating on the existing highway network. The average seating capacity of Broward County Transit buses is 45 persons. Considering the capacity of the fleet and the provision of either 30 or 60 minute headways for all of the routes, the overall capacity of the system far exceeds the level of existing ridership. Even with ample transit system capacity and existing congested roadways in the region, the vast majority of the local population still prefers the automobile as a means of transportation. Transit planning activities are carried out by the Urban Transit section of the Transportation Planning Division of the Broward County Department of Strategic Planning and Growth Management. The transit planning and operation staff monitors ridership and periodically alters routes and operations. The County staff is also charged with preparing the County's Transit Development Program which summarizes future capital and operations improvements.

BCT is a fixed-route, fixed-schedule bus system operated by the Broward County Mass Transit Division with the main hub operating from Downtown Fort Lauderdale. BCT operates 7 days a week with maximum service provided on weekdays. Weekday service hours generally run from 5:00 A.M. to 10:30 P.M., with most routes operating on half hour headways. Saturday service operates almost the same as weekday service, with all routes in operation and some minor changes in headways and service hours. On Sunday a reduced route schedule is available between 9:00 A.M. to 8:00 P.M. with all routes operating on one hour headways.

The County's main bus maintenance facility and the Broward County Division of Mass Transit main office are located in the City of Pompano Beach on Copans Road just east of the Florida Turnpike.

The BCT charges low fares for riders. Reduced fares for senior (65 years old plus) and handicapped citizens are available. Monthly unlimited use passes are also available. The weekly pass is targeted mostly for tourists and is sold at many hotels and motels.

BCT interfaces with the Dade and Palm Beach County transit systems to provide tri-county service. Dade County's METROBUS links with BCT at locations in south Broward County and the Aventura Mall in North Dade County. BCT also connects with the Palm Beach County Palm Trans system at the Boca Town Center Mall and at Mizner Park. Finally, the County's Tri-Rail stations are served by nine (9) BCT routes.

Paratransit Service is a specialized transportation system provided for the County's elderly and handicapped persons. Services are available to qualified persons who live within three-quarters of a mile of regular bus service. The hours of operation are the same as the Broward County bus system. Fares range between $1.50 each way for trips scheduled in advance and $5.00 each way for trips scheduled on the same day.

The school bus system serves all of the public schools in Davie and is provided by a private company contracted by the Broward County School Board. The system provides free service to all students enrolled at public schools who live more than two miles from their respective school, or who otherwise lack safe accessways to a less distant facility.

The Greyhound/Trailways Bus line provides regional, statewide and interstate travel. They provide fixed service seven days a week as well as specialized service.

Service areas for BCT bus service are defined as a one-quarter mile corridor around the route. The adopted level of service set by Broward County states that at least 70% of all residences and employment locations have access to fixed route transit service.

System capacity is analyzed by service frequency, or headway, and the seating capacity of the vehicles in relation to ridership. The existing level of service, according to Broward County's Transportation Element, is above the seventy (70) percent coverage rate countywide. Davie is within the County's west central sector where there is a low percent population coverage and low percent employment location coverage by fixed transit service.

Evaluation of service area coverage is based on how well a system services the general population, special transit captive groups, and the accessibility of service between these groups and major work, shopping, medical and recreational facilities within the community. Mass transit ridership is significantly influenced by auto ownership. Zero or single auto households are in greater need of transit service than other households. Automobile ownership is generally characterized by relatively few automobiles per household. In addition, senior citizens are also more apt to utilize public transportation. An identification of these target groups and areas were made to identify existing service needs.

Demographic data provided in the 1990 U.S. Census was analyzed to identify the Town's level of transit dependency as compared to Broward County's based upon area of low income, concentrations of senior citizens and concentration of persons whose means of transportation to work is by bus.

According to the 1990 Census, Davie had a median household income of $36,843. The Broward County figure was $30,571.

The Table below indicates that 9% of total population was at least 65 years of age or older. In addition, the percentage of households with no vehicles available is 2.2%. The presence of such a relatively small proportion of elderly persons and a small number of households with no vehicles available indicates a lower demand for public transportation in the Town of Davie.

Town of Davie
Transit Dependency Demographics

Age: % Under 15	Age: % Over 65	% Using Public Transportation	Median Income
20%	9%	<1%	$36,843

Source: 1990 U.S. Census

Tri-Rail

Tri-Rail is a sixty-seven (67) mile at-grade commuter rail line serving Palm Beach, Broward and Miami-Dade Counties. Tri-Rail service connects to Metrorail in Miami-Dade County at the Tri-Rail/Metrorail Station and to Miami International Airport (MIA) via a shuttle bus service provided at the last stop. Tri-Rail currently operates thirty (30) weekday trains, twenty (20) Saturday trains and ten (10) Sunday trains. Operations begin at 4:45 A.M. and end at midnight.

Tri-Rail has begun a three (3) phase improvement program. Double tracking within the rail corridor was included in the first phase of improvements. Future improvements include extending Tri-Rail further south to connect to the MIA and replacing the signaling system. Tri-Rail is also in the process of upgrading its stations to include more amenities and landscaping. Miami-Dade County however, is considering funding cuts arguing that Miami-Dade County residents do not benefit significantly from Tri-Rail service. This funding issue has generated some controversies and questioned Tri-Rail's service, performance and future presence.

High Speed Rail

In February 1996, the Florida Department of Transportation selected Florida Overland Express to be the high-speed rail franchise. The Florida Overland Express was proposing a high-speed rail system which would have been capable of operating at speeds of two-hundred (200) miles per hour. Stations were proposed to be located in Miami, western Broward County and West Palm Beach. However, the newly elected Governor of Florida Jeb Bush has discontinued the concept of the high-speed rail in the state at this time.

Analysis of the Adequacy of the Existing and Proposed Transportation System to Evacuate the Coastal Population Prior to an Impending Natural Disaster

According to the Broward County Hurricane Evacuation Plan (BCHEP) prepared by the Division of Emergency Preparedness, no area of the Town of Davie is identified for evacuation. However, according to the Town's 1996 Evaluation and Appraisal Report, approximately 11% (3,094 units) of the Town's housing stock consists of mobile homes. According to the BCHEP, all mobile homes within the Broward County are to be evacuated during any hurricane. According to the Broward County Department of Emergency Management, individual municipalities are not specifically designated to utilize individual hurricane shelters. Therefore, residents from the Town would be welcome to travel to any shelter located within Broward County. The following shelters are located within the Town's Corporate limits; Davie Elementary School, Western High School and the Flamingo Elementary School. The shelters are opened, supplied and operated by the Red Cross, which coordinates with the local school administration, and Broward County. Figures II-8 and II-17 depict the specified evacuation routes to the shelters. In general, within 12 hours of a storm's anticipated landfall or coastal impact, evacuation notice is given to residents. The primary evacuation routes for residents would be along Sheridan Street, Stirling Road, Griffin Road, Orange Drive, SR 84 and I-595 for westward evacuation and SR 7/US 441, Davie Road, University Drive, Pine Island Road, Nob Hill Road and Flamingo Road for north-south travel. In addition, I-75 and the Florida Turnpike or other north-south roadways could be utilized to evacuate from the region. Based on the above analysis, the transportation system is deemed adequate for evacuation should the need arise.

Analysis of Growth Trends, Travel Patterns, Interactions Between Land Use and Transportation Facilities and Compatibility Between Future Land Uses and Transportation Elements.

The Town of Davie growth trend can best be described as "meteoric", particularly in the 1980's and 1990's. The growth rate has been one of the highest in the southeast United States for many years. In recent years steady growth has continued with buildout approaching within 5-10± years. During the time period 1990-1995 the Town averaged 599 new single-family units and 67.4 multi-family units annually. Fifty-eight (58) acres of commercial property has been developed annually between 1989 and 1995. Most of the commercial growth has been occurring in the north and western portions of the Town. The vast majority of recent residential development in terms of acreage has been in western and central Davie. Travel patterns are generally well established except in western Davie where rural home sites and agricultural areas break up an otherwise grid roadway pattern. Interactions between land uses and transportation facilities are monitored by FDOT, Broward County and the Town during platting and/or site plan processes.

This element was prepared to be consistent and compatible with the Future Land Use Element and other community's Transportation Elements, including the Broward County Transportation Element, the Broward County Land Use Plan, the Long Range Transportation Plan, the Year 2015 Cost Feasible Plan (CFP), the Florida Department of Transportation's Adopted Work Program, the Transportation Improvement Program (TIP), the Tri-County Rail Transit Development Plan and the Broward County Bicycle Facilities Network Plan.

Analysis of Existing and Projected Intermodal Deficiencies and Needs

There are no identifiable deficiencies noted within the Town. Town residents are anticipated to continue the use of automobiles for primary travel purposes as is common in Broward County, where 98.9% automobile use is the current modal split. Access to the Tri-Rail system is available but not convenient to Town residents.

Analysis of the Projected Transportation Level of Service and System Needs

The Town is approximately 80% builtout. There are approximately 4,600 acres of vacant land at present. Following is an estimate of future additional traffic that could be added. Certain assumptions were made for typical plot coverage. ITE generation rates were utilized to examine probable rates by use. Most single-family development is now zero lot

line homes averaging 6 DUA. However the vast majority of vacant single family acreage is in estate areas with densities of 1 DUA. Commercial estimates are based on ITE retail commercial shopping center generation rates as a worst case as some uses may be office uses at substantially fewer trips per day. Broward County maintains a countywide computer modeling program which monitors existing traffic and future estimates. Therefore, the following is a worst case scenario.

A. Residential

Single-family = 4,485 DU @ 10 TPD = 44,850 TPD

Multi-family = 815 DU @ 5 TPD = 4,075 TPD

B. Commercial

519 AC @ 20% coverage 4,521,528 sq. ft.
4,521,528 sq. ft. @ 80 TPD per 1,000 sq. ft. = 452,153 TPD

C. Industrial

116.7 AC @ 30% coverage = 1,525,035 sq. ft.
1,525,035 @ 5.4 TPD per 1,000 sq. ft. = 8,235 TPD

Total = 418,882 potential TPD

SOURCE: Town of Davie 6/99

The previous analysis identified some potential capacity problems to accommodate the future growth. Some State and County roadway segments need to be widened but most of the roadways with the capacity problems are built as maximum cross sections. Widening would be very expensive in some instances, not possible in others and could cause more harm to adjoining land uses.

The Broward County Transportation Element contains a detailed analysis of the current and future public transit network needs. This analysis was performed by taking the future bus route system and superimposing it over a database associated with the 2015 TAZ Map. The results of this analysis show that the future public transit network would meet the adopted transit level of service standard. Additionally, some needs for the year 2015 were identified and are as follows:

- Estimated fleet size: 700 buses (including 20% space)
- System highlights: Regional Park and Ride network, local routes

including existing and new as proposed in Transit Development Plan, plus additional new local routes conceptually consistent with the 2010 Regular Transit Network, with 7.5 minute headway service on most routes.

- Established Daily Ridership: 448,000 boardings and 230,600 local bus trips.

There are portions of missing bikeway/sidewalk segments that could eventually complete a more comprehensive citywide system. (See Map II-12)

As mentioned previously, no airport or seaport facilities are located within the Town, therefore, integration and coordination analysis is limited to flight path restrictions for Fort Lauderdale Airport. The two (2) railway corridors have existed for many years and other than maintenance and lane widening on the Tri-Rail route, no expansion is warranted.

The following is a summarization of the Broward County Transportation Element modeling process (Broward County Transportation Element, pages 3-131 to 3-143). On March 24 and July 29, 1997 the Department of Community Affairs (DCA) met with the Broward County League of Cities Technical Advisory Committee (TAC) to discuss the implementation of subsection 163.3177(6)(i)(8), F.S. It was concluded from these meetings that it was not necessary for all 29 municipalities to independently model changes to land use intensities. However, a coordinated county wide effort was chosen, with Broward County taking the lead role.

A TAC subcommittee was formed comprised of eight (8) representatives from differing municipalities within the County. Additionally, representatives from the Broward County and South Florida Regional Planning Council were part of the subcommittee. Initially, seven (7) future land use scenarios were provided for consideration. At the meeting, the subcommittee members proposed five (5) additional scenarios for consideration.

After a brief presentation of each scenario and division among the subcommittee members, the twelve (12) scenarios was shortened to three (3). These three (3) scenarios were then taken to the TAC as the subcommittee's recommendation. For more detailed information pertaining to these three (3) scenarios, please see the Broward County Transportation Element, page 3-134.

The Florida Standard Urban Transportation Model Structure (FSUTMS), maintained by the Broward County MPO, was the travel demand forecast model used to model alternative land use intensities.

This is a four stage gravity model and is structured around the following steps.

- Trip Generation
- Trip Distribution
- Model Choice
- Assignment

The FSUTMS model generates trips at each traffic analysis zone (TAZ) from land use variables (population and employment). Trips are distributed between zones using a gravity concept and function factors. Trips are then split between highway, transit and other modes using mode choice concept. Highway trips are converted to auto trips using an appropriate auto occupancy rate. Auto trips are assigned to the highway network according to equalization concept based on speed and capacity of each highway facility in the network.

The preliminary modeling that was done for the three selected scenarios all had modal split lower than the baseline scenario. The models were then tweaked with suggestions made by the TAC and the final modeling results are shown in the following Table.

TABLE II-7

Final Result of 2015 Model Runs

Characteristic	Baseline	Nodes	Corridors
Total Person Trips/Day	5,212,253	5,565,885	7,138,472
Intrazonal Person Trips/Day	153,888	167,252	249,678
Mode Split (includes Tri-Rail)	1.51	1.61	1.63
Total VMT*	36,482,580	38,141,252	44,653,860
Total VHT**	1,536,529	1,615,902	2,017,919
Congested Speed (mph)	25.2	25.5	23.5
Daily Transit Ridership (includes P&R and Tri-Rail)	78,855	89,655	116,040

Source: Broward County Transportation Planning Division, 1998.
*Vehicle Miles Traveled
**Vehicle Hours Traveled

As Table II-7 shows, modal split increased from 1.51 with the baseline scenario to 1.61 under the node intensification scenario and to 1.63 under the corridor intensification scenario. Daily transit ridership also improved under both scenarios. The mode intensification scenario produced 89,655 daily transit riders per day and the corridor intensification scenario produced 116,040 daily transit riders per day.

The mode intensification scenario produced 1,658,672 VMT per day over baseline, while the corridor intensification scenario provided 8,171,280 VMT per day over the baseline. The increase in VMT is always accompanied by an increase in congestion and air pollution. This impact should be weighed against the increase in transit ridership and the improvement in modal split demonstrated by both the node and corridor scenarios.

The modeling results are consistent with the weight of data, which shows that intensifying land uses along public transit corridors can improve transit ridership. The modeling results also indicate that land use intensification must include some form of transit enhancements as needed in order to attract and absorb additional riders generated by land use intensification such as headway reduction. The modeling exercise, however, has several important constraints that mitigate against wholesale future land use map amendments along the identified corridors:

- Inadequacy of FSUTMS: The FSUTMS model was not intended to be used for land use analysis although it is used for this purpose throughout Florida. The existing problem with using FSUTMS for this purpose is not the land use data but the connectivity to the highway network and the relationship between the land uses within a TAZ. Existing connections are sometimes not representative of existing conditions and commercial development is connected by the same connector used by residential development. Commercial development occurs primarily along the perimeter of a TAZ while residential development occurs primarily within a TAZ. These factors must be weighted before accepting the results of this analysis.

- Macro not micro analysis: The model runs assumed the TAZ at densities higher than those existing. Higher densities are practical when a TAZ is primarily undeveloped, but are unlikely when they are more fully developed.

Analysis of Projects Planned by the Florida Department of Transportation's Adopted Work Program, Metropolitan Planning Organization and Local Transportation Authority.

Previous discussion on each major roadway contained a description of proposed improvements which are summarized below:

ROADWAY	IMPROVEMENT	ANTICIPATED YEAR	COST
I-595 (Eastbound Davie Rd. on-ramp to west of the Florida Turnpike)	Highway Capacity Safety Improvement	2000/01	$666 K
SW 160th Avenue (Dykes Rd.) (Sheridan St. to Griffin Rd.)	Two (2) Lane Addition	2002/03	$7.4 M
Pine Island Road (Stirling Rd. to Sheridan St.)	New Four (4) Lane Facility	1999/00	$3.9 M
University Drive (Stirling Rd. to SR 84)	Sidewalk Construction	2001/02	$426 K
University Drive (At I-595)	Miscellaneous Construction	2003	$200 K
University Drive (SW 30th St. to I-595)	Roadway Safety Project	1998/99 1999/00	$681 K $50 K
Davie Road Extension (University Dr. to Stirling Rd.)	Two (2) Lane Addition	1998/99	$4.3 M
SR 7/US 441 (West side at Oaks Rd.)	Resurfacing	2001/02	$414 K
SR 84 (Davie Road to SR 7/US 441)	Bike Path Construction	2001/02	$301 K
Griffin Road (W. of Flamingo Road to E. of SW 100 Avenue)	Add 2 Lanes to create 6 Lane road	98/99 - 01/02	$19.5 M
Griffin Road E. of University Dr. to SR 7	Add 2 Lanes and reconstruct 4 lanes to create a 6 Lane road	98/99	$300 K (Design Cost)
Griffin Road I-75 to W of Flamingo Road	Add 2 lanes and reconstruct 2 Lanes to create a 4 Lane Road	99/00 -01/02	$5.01 M
Griffin Road E. of 100 Avenue to E of University Drive	Add 2 Lanes and add 4 lanes and reconstruct 4 lanes and 2lanes to create a 6 Lane Road	98/99 - 00/01	$11.9 M

- Political constraints: The governing bodies for Broward County and its municipalities are not likely to accept future land use map amendments based upon the results of a modeling exercise. Such an approach would be deemed "revolutionary" instead of "evolutionary". If improved transportation and land use planning are to succeed, it will occur on an evolutionary or incremental basis.

Based upon the model results, the following recommendations were made in the County's Element:

Broward County, in conjunction with the affected municipalities, the MPO, the FDOT, and the DCA, will select at least one of the six (6) identified roadway corridors for a demonstration project on transit oriented design and development. The corridor selection will be based upon such factors as:

a) The degree of municipal interest in the corridor.

b) The amount of undeveloped land and the potential for redevelopment of existing land.

c) The potential for implementation.

The demonstration project should include the following components:

- Preparation of an overlay transit oriented corridor (TOC) zoning district that would be adopted by each municipality along the corridor.

- development of long-term roadway and public transit monitoring system.

- Grants funding for the demonstration project.

- Improving public transit access along the corridor.

Analysis of Maintenance of Adopted Level of Service (LOS) Standards

Broward County and the FDOT have adopted LOS D for all arterial and collector roadways under their jurisdiction. The Town of Davie has adopted LOS D for all Town arterial and collector roadways and LOS C for all local roadways. Existing volumes are generally within acceptable LOS limitations except for the following roadway segments:

TOWN OF DAVIE
OVERCAPACITY ROADWAY SEGMENTS 1999
ADT

Roadway Segment	ADT Existing LOS
Westbound SR 84 east of SR 7/US 441	LOS E/peak E
Westbound SR 84 east of University Drive	LOS F/peak F
Westbound SR 84 west of Pine Island Road	LOS E/peak F
Eastbound SR 84 east of University Drive	LOS D/peak E
Eastbound SR 84 west of University Drive	LOS E/peak F
Eastbound SR 84 east of Pine Island Road	LOS D/peak E
Eastbound SR 84 west of Pine Island Road	LOS E/peak F
Eastbound SR 84 east of Nob Hill Road	LOS D/peak E
Eastbound SR 84 east of Flamingo Road	LOS E/peak E
Eastbound SR 84 west of Flamingo Road	LOS F/peak F
I-595 east of SR 7/US 441	LOS E/peak E
I-595 east of Davie Road	LOS F/peak F
I-595 east of University Drive	LOS E/peak F
I-595 east of Pine Island Road	LOS F/peak F
I-595 east of Nob Hill Road	LOS E/peak F
I-595 east of Hiatus Road	LOS D/peak E
I-595 east of Flamingo Road	LOS F/peak F
I-595 east of SW 136th Avenue	LOS E/peak E
SW 14th Street east of Weston Road	LOS F/peak F
Nova Drive east of University Drive	LOS F/peak F
Nova Drive west of Davie Road Extension	LOS F/peak F
SW 39th Street east of University Drive	LOS D/peak E
SW 39th Street west of Davie Road Extension	LOS D/peak E
Orange Drive east of Davie Road	LOS E/peak F
Orange Drive west of SR 7/US 441	LOS E/peak E
Griffin Road east of Nob Hill Road	LOS E/peak E
Sheridan Street west of I-75	LOS D/peak E
Sheridan Street west of University Drive	LOS D/peak F
Nob Hill Road north of I-595	LOS D/peak E
University Drive south of I-595	LOS F/peak E
University Drive north of Orange Drive	LOS D/peak E
University Drive north of Sheridan Street	LOS D/peak E
College Avenue south of Nova Drive	LOS F/peak F
Davie Road south of I-595	LOS E/peak E
Davie Road Ext. between Stirling Rd. and Univ. Dr.	LOS F/peak F

TOWN OF DAVIE
OVERCAPACITY ROADWAY SEGMENTS 1999
TWO-WAY PEAK HOUR

All two-way peak hour LOS is at LOS A, B, C or D except the following segments:

Roadway Segment	Existing LOS
Westbound SR 84 west of Pine Island Road	LOS E
Westbound SR 84 east of SR 7	LOS E
Westbound SR 84 east of University Drive	LOS F
I-595 east of SR 7	LOS E
I-595 east of Davie Road	LOS F
I- 595 east of University Drive	LOS F
I- 595 east of Pine Island Road	LOS E
SW 14th Street east of I-75	LOS E
Nova Drive east of Pine Island Road	LOS F
Nova Drive east of University Drive	LOS F
Nova Drive west of Davie Road	LOS F
SW 39th Street east of University Drive	LOS E
Orange Drive east of Davie Road	LOS F
Orange Drive west of SR 7/US 441	LOS E
Griffin Road east of Nob Hill Road	LOS E
Sheridan Street west of I-75	LOS E
SW 136th Avenue north of Griffin Road	LOS E
Hiatus Road south of I-595	LOS F
Pine Island Road south of I-595	LOS F
University Drive south of I-595	LOS F
University Drive north of Orange Drive	LOS E
University Drive north of Sheridan Street	LOS E
College Drive south of Nova Drive	LOS F
Davie Road south of I-595	LOS E
Davie Road north of SW 39th Street	LOS E
Davie Road south of Stirling Road	LOS F
Davie Road east of University Drive	LOS F
SR 7 north of Griffin Road	LOS E
Eastbound SR 84 east of University Drive	LOS E
Eastbound SR 84 west of Flamingo Road	LOS E

As the remaining property is developed additional traffic volumes can be expected. Without some improvements to several Town, State and County roadway segments the traffic problems will increase, resulting in unacceptable volumes.

Roadways in need of scheduled Improvements Include:

Westbound SR 84

- East of SR 7/US 441 - existing traffic is 20,900 ADT/21,700 peak and is projected to increase to 57,600 ADT by 2015. LOS D capacity for this segment of the roadway is 19,500 TPD.

- East of University Drive - existing traffic is 29,000 ADT/30,000 ADT peak and is projected to increase to 45,200 ADT by 2015. LOS D capacity for this segment of the roadway is 19,500 TPD.

- West of Pine Island Road - existing traffic is 22,000 ADT/22,700 ADT peak and is projected increase to 35,300 ADT east of Pine Island Road by 2015. Broward County does not have a 2015 estimate for the segment west of Pine Island Road. LOS D capacity for this segment of the roadway is 19,500 TPD

Eastbound SR 84

- East of University Drive – existing traffic is 19,500 ADT/21,700 ADT peak and is projected to increase to 45,200 ADT by 2015. LOS D capacity for this segment of the roadway is 19,500 TPD. The peak volumes currently exceed and are projected to continue to exceed LOS D generalized capacity, therefore, some improvements is warranted for peak conditions.

- West of University Drive – existing traffic is 20,300 ADT/22,700 ADT peak and is projected to increase to 45,200 ADT east of University Drive by 2015. Broward County does not have a 2015 estimate for the segment west of University Drive. LOS D capacity for this segment of the roadway is 19,500 TPD.

- East of Pine Island Road – existing traffic is 18,500 ADT/20,900 ADT peak and is projected to increase to 35,300 ADT by 2015. LOS D capacity for this segment of the roadway is 19,500 TPD. The peak volumes currently exceed and are projected to continue to exceed LOS D generalized capacity, therefore, some improvement is warranted for peak conditions.

- West of Pine Island Road – existing traffic is 20,500 ADT/23,000 ADT peak and is projected to increase to 35,300 ADT east of Pine Island Road by 2015. Broward County does hot have a 2015 estimate for the segment west of Pine Island Road. LOS D capacity for this segment of the roadway is 19,500 TPD.

- East of Nob Hill Road – existing traffic is 19,000 ADT/20,500 ADT peak and is projected to increase to 30,500 ADT by 2015. LOS D capacity for this segment if the roadway is 19,500 TPD. The peak volumes currently exceed and are projected to continue to exceed LOS D generalized capacity, therefore, some improvement is warranted for peak conditions.

- East of Flamingo Road – existing traffic is 20,500 ADT/21,100 ADT peak and is projected to increase to 39,300 ADT by 2015. LOS D capacity for this segment of the roadway is 19,500 TPD.

- West of Flamingo Road – existing traffic is 24,000 ADT/25,500 ADT peak and is projected to increase to 39,300 ADT east of Flamingo Road by 2015. Broward County does not have a 2015 estimate for the segment west of Flamingo Road. LOS D capacity for this segment of the roadway is 19,500 TPD.

<u>I-595</u>

- East of SR 7/US 441 – existing traffic is 152,000 ADT/158,000 ADT peak and is projected to increase to 165,900 ADT by 2015. LOS D capacity for this segment of the roadway is 138,600 TPD.

- East of Davie Road – existing traffic is 155,000 ADT/169,900 ADT peak and is projected to increase to 170,700 ADT by 2010. LOS D capacity for this segment of the roadway is 138,600 TPD.

- East of University Drive – existing traffic is 154,000 ADT/167,800 ADT peak and is projected to increase to 161,700 ADT by 2015. LOS D capacity for this segment of the roadway is 138,600 TPD.

- East of Pine Island Road – existing traffic is 128,500 ADT/132,800 ADT peak and is projected to increase to 153,400 ADT by 2015. LOS D capacity for this segment of the roadway is 101,600 TPD.

- East of Nob Hill Road – existing traffic is 116,000 ADT/121,100 ADT peak and is projected to increase to 162,300 ADT by 2105. LOS D capacity for this segment of the roadway is 101,600 TPD.

- East of Hiatus Road – existing traffic is 101,500 ADT/106,500 ADT peak and is projected to increase to 143,240 ADT by 2015. LOS D capacity for this segment of the roadway is 101,600 TPD. The peak volumes currently exceed and are projected to continue to exceed LOS D generalized capacity, therefore, some improvement is warranted for peak conditions

- East of Flamingo Road – existing traffic is 117,500 ADT/123,400 ADT

peak and is projected to increase to 128,700 ADT by 2015. LOS D capacity for this segment of the roadway is 101,600 TPD.

- East of SW 136th Avenue – existing traffic is 104,000 ADT/111,900 ADT peak and is projected by Broward County to decrease to 97,800 ADT by 2105. LOS D capacity for this segment of the roadway is 101,600 TPD. This scenario is unlikely.

Pine Island Road

- South of I-595 – existing traffic is overcapacity only at peak hour. ADT traffic is at LOS. Further study is recommended.

University Drive

- South of I-595 – existing traffic is 60,500 ADT/62,700 peak which is anticipated to increase significantly by 2015. LOS D capacity is 43,300 TPD. The area needs separate study for solutions.

- North of Orange Drive – existing traffic is 49,500 ADT/51,000 peak. Some minor operational improvements are recommended as the LOS is just below D. LOS capacity for this segment is 48,900 TPD.

- North of Sheridan Street – existing traffic is 48,500 ADT/50,700 peak. Some minor operational improvements are recommended as the LOS is just below D. LOS capacity for this segment is 48,900 TPD.

College Avenue

- South of Nova Drive – existing traffic is 18,000 ADT/18,200 peak. The roadway needs to be widened to a four (4) lane facility. LOS D capacity for the roadway is 10,900 TPD.

Davie Road

- Between University Drive and Stirling Road – existing traffic is 25,000 ADT/29,600 peak south of Stirling Road and 15,600 ADT/18,000 peak near University Drive. A roadway widening to four (4) lanes is imminent.

- South of I-595 near educational campuses – existing traffic is 36,200 ADT/36,100 peak. Forecasts are for similar traffic flows. Operational improvements may be warranted as widening would be difficult.

Nova Drive

- East of University Drive – existing traffic is 18,400 ADT/22,200 ADT peak and is projected by Broward County to decrease to 13,600 ADT by 2105. LOS D capacity for this segment of the roadway is 10,900 TPD. This scenario is unlikely.

- West of Davie Road – existing traffic is 20,600 ADT/23,400 ADT peak. Broward County does not have a 2015 estimate for this segment of the roadway. LOS D capacity for this segment of the roadway is 10,900 TPD.

SW 39th Street

- East of University Drive – existing traffic is 10,600 ADT/11,700 ADT peak and is projected to increase to 11,500 ADT by 2105. LOS D capacity for this segment of the roadway is 10,900 TPD. The peak volumes currently exceed and are projected to continue to exceed LOS D generalized capacity, therefore, some improvement is warranted for peak conditions.

- West of Davie Road Extension – existing traffic is 10,700 ADT/11,700 ADT peak. Broward County does not have a 2015 estimate for this segment of the roadway. LOS D capacity for this segment of the roadway is 10,900 TPD.

Orange Drive

- East of Davie Road – existing traffic is 12,400 ADT/12,900 ADT peak and is projected to increase to 14,400 ADT by 2105. LOS D capacity for this segment of the roadway is 10,900 TPD.

- West of SR 7/US 441 – existing traffic is 11,300 ADT/12,300 ADT peak. Broward County does not have a 2015 estimate for this segment of the roadway. LOS D capacity for this segment of the roadway is 10,900 TPD.

Sheridan Street

- West of I-75 – existing traffic is 31,500 ADT/33,800 ADT peak and is projected to increase to 50,900 ADT by 2105. LOS D capacity for this segment of the roadway is 32,500 TPD. The peak volumes currently exceed and are projected to continue to exceed LOS D generalized capacity, therefore, some improvement is warranted for peak conditions.

- West of University Drive – existing traffic is 34,100 ADT/41,400 ADT peak and is projected to increase to 43,200 ADT by 2105. LOS D capacity for this segment of the roadway is 35,000 TPD. The peak volumes currently exceed and are projected to continue to exceed LOS D generalized capacity, therefore, some improvement is warranted for peak conditions.

Nob Hill Road

- North of I-595 – existing traffic is 32,600 ADT/37,600 ADT peak and is projected to increase to 45,300 ADT south of I-595. Broward County does not have a 2015 estimate for this segment north of I-595. LOS D capacity for this segment of the roadway is 35,000 TPD. The peak volumes currently exceed and are projected to continue to exceed LOS D generalized capacity, therefore, some improvement is warranted for peak conditions.

Analysis of Internal Consistency Between Elements

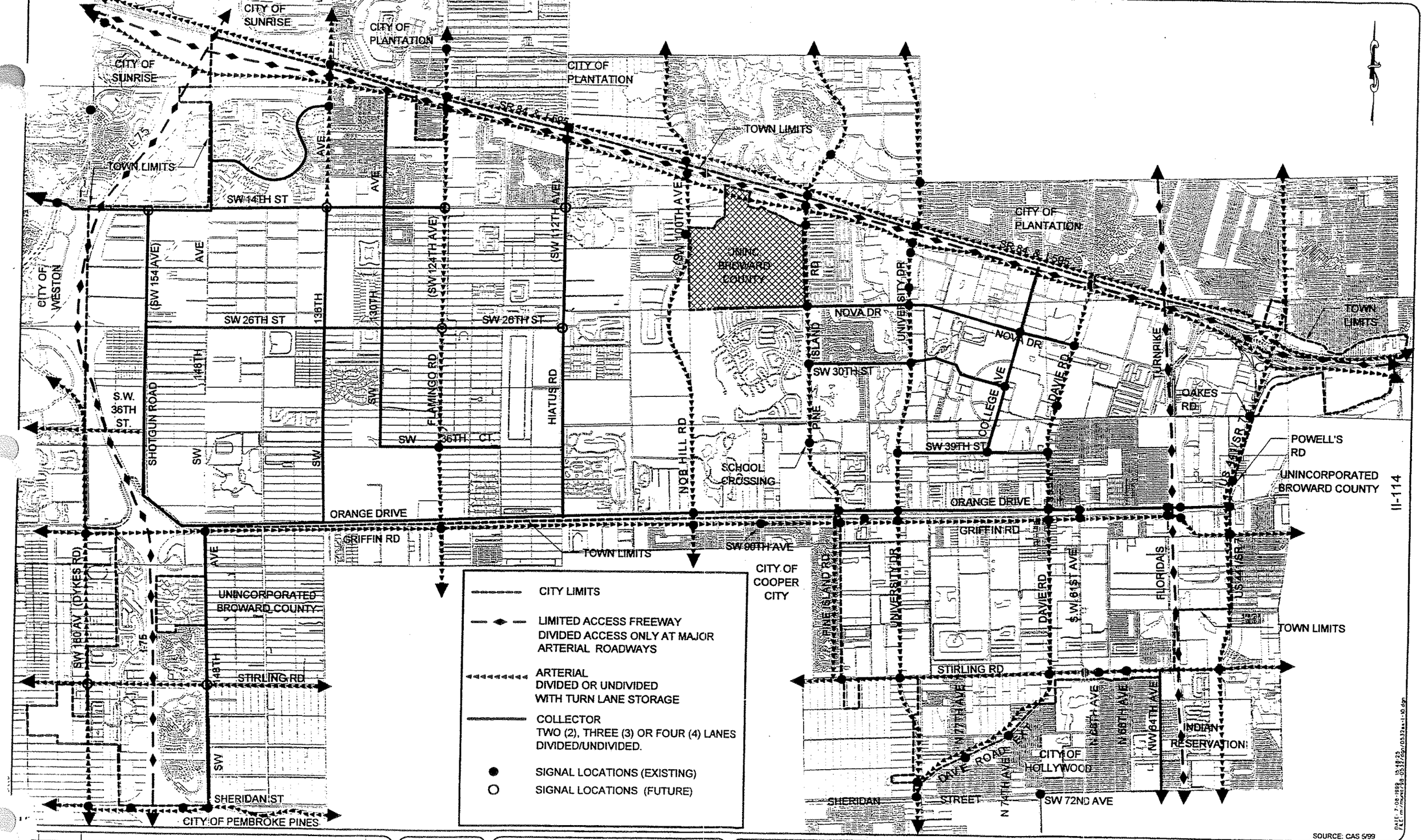
No inconsistencies are known to exist between elements of the Town's adopted Comprehensive Plan. No land use compatibility issues are known to exist related to the various transportation modes.

Analysis of Transportation Management Programs Necessary to Promote and Support Public Transportation Systems

The Town promotes and supports the use of Public Transportation Programs. As an example, the Town supports adequately placed bus stops in attempts to increase ridership. Bus route notices are posted and available at Town Hall. Some land uses have direct access to pedestrian walkways linking public transportation access points. The Town attempts to participate with Broward County and FDOT on programs to the best of their ability given the size and buildout condition of the community. Contained within Broward County's adopted 1998 Transportation Element is Map No. 3-7 which depicts the locations of Broward County's designated Priority Transportation Corridors. Currently Broward County has designated priority transportation corridors along I-75, University Drive and generally along I-595 located generally within and abutting the Town of Davie. Although the County's Element designates these areas as Priority Transportation Corridors, there is no definition of these corridors contained within the Broward County Element. Policy 3.5.7 of the Broward County Element states that Broward County will complete plans for a demonstration project by December, 2000. The Town of Davie will monitor the County's progress towards completion of the Demonstration project and evaluate the results of the project. Upon completion of the

demonstration project and evaluation of the results, the Town of Davie will evaluate the possible participation in such Transportation Corridor planning within the Town limits in accordance with the Broward County Transportation Element.

Appended to this element are copies of Broward County Map 3-7 depicting the map legend and geographic areas around the Town.



SOURCE: CAS 5/99

II-114

NO.	DATE	REVISION	BY

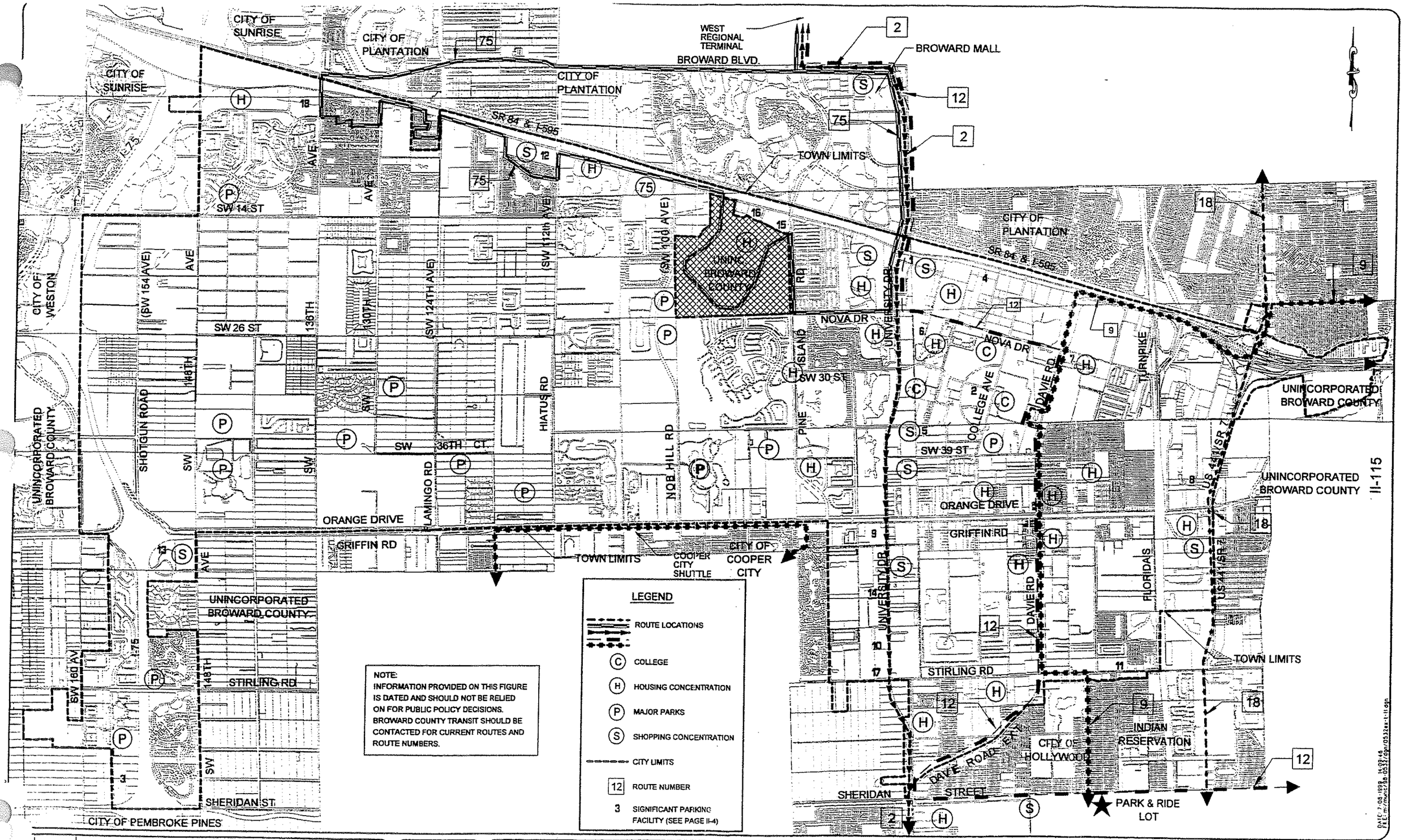
Designed: MM 05/99
Drawn: BU 05/99
Checked: MM 05/99

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-10
FUTURE ROADWAY SYSTEM

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 2 / 2



NO.	DATE	REVISION	BY

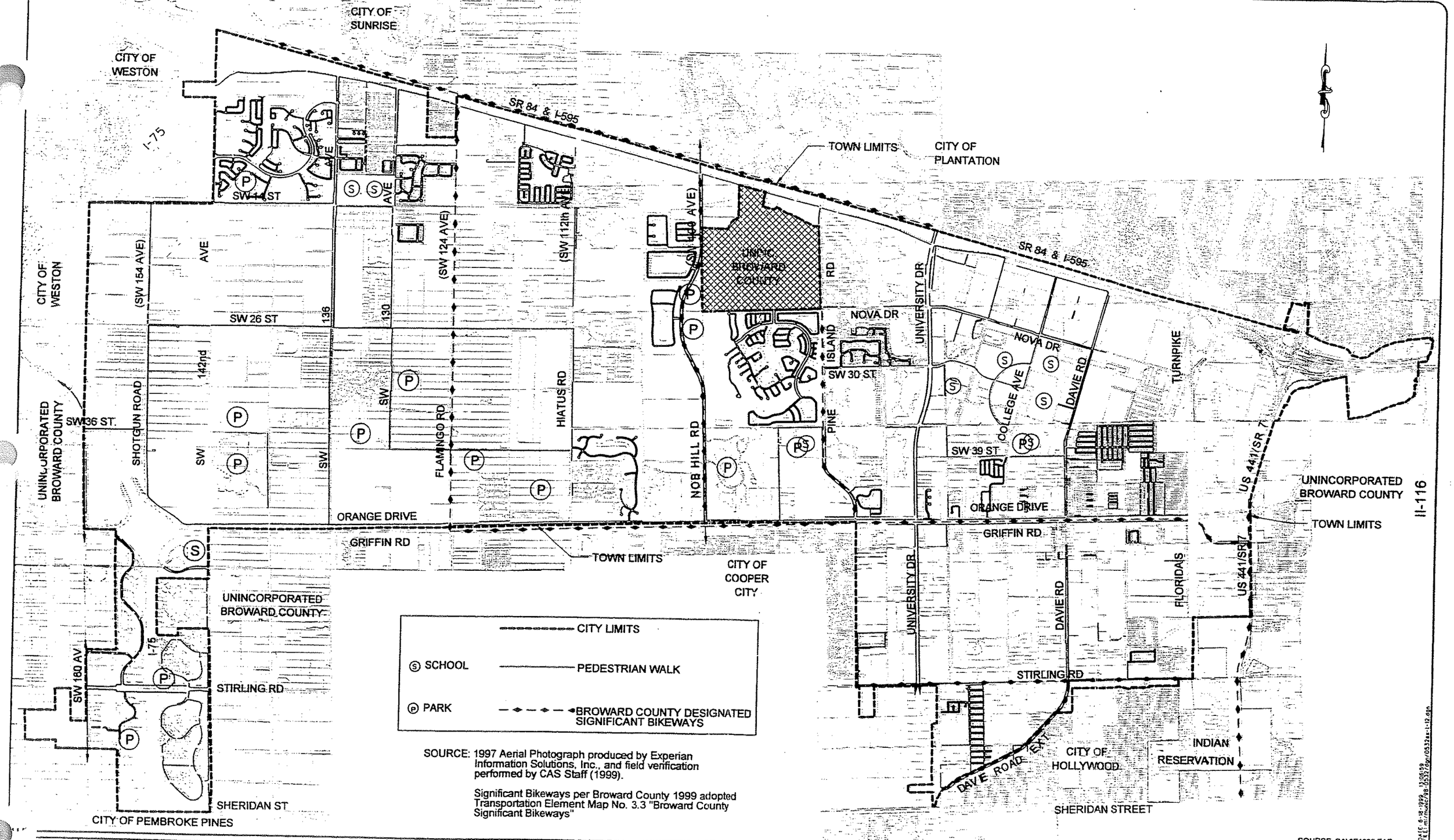
Designed: JDA 02/99
Drawn: BU 06/98
Checked: MM 06/98

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-11
FUTURE PUBLIC TRANSIT SYSTEM

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 2 / 2



SOURCE: 1997 Aerial Photograph produced by Experian Information Solutions, Inc., and field verification performed by CAS Staff (1999).

Significant Bikeways per Broward County 1999 adopted Transportation Element Map No. 3.3 "Broward County Significant Bikeways"

NO.	DATE	REVISION	BY

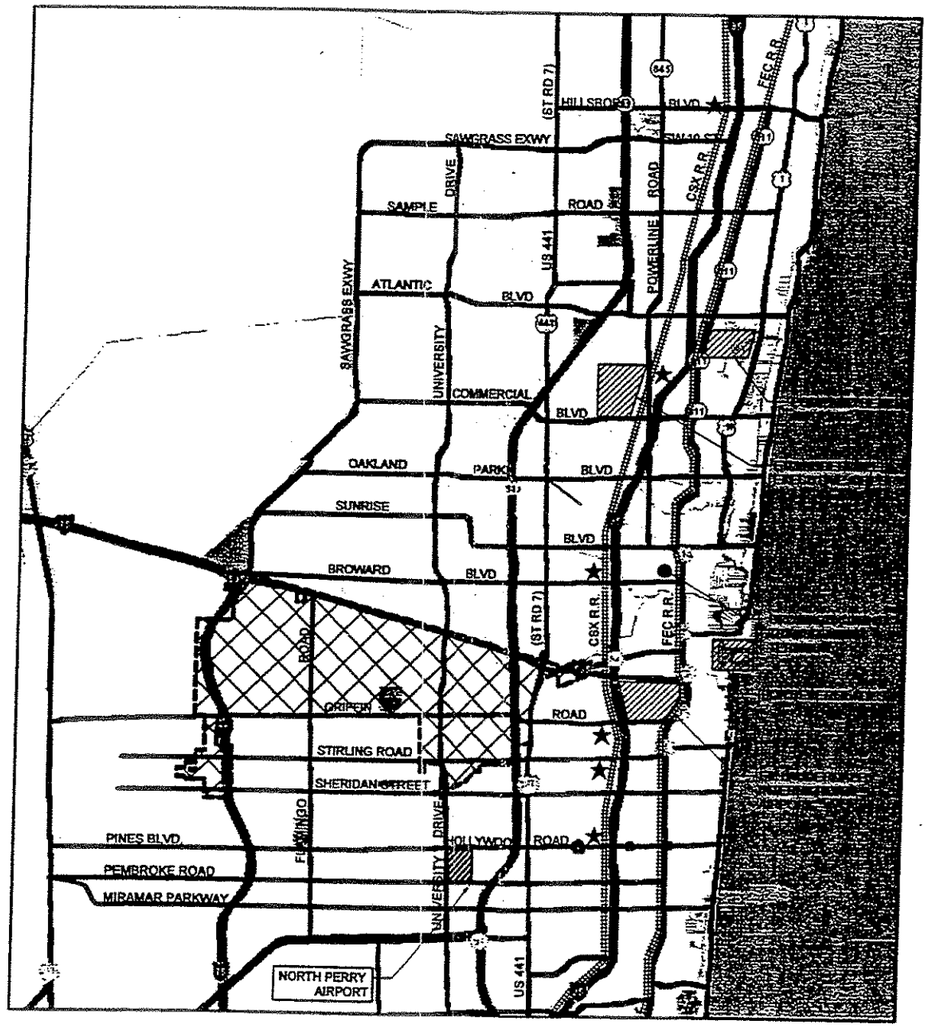
Designed: DJO 02/99
Drawn: BU 05/98
Checked: MM 05/98

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-12
FUTURE PEDESTRIAN AND BICYCLE WAYS

SCALE: 1" = 1900'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 2 / 2



N
W E
S

DISTANCE FROM TOWN TO:

TO PORT EVERGLADES	5.0 MILES
TO FT. LAUDERDALE AIRPORT	2.5 MILES
TO FT. LAUDERDALE EXECUTIVE AIRPORT	8.0 MILES
TO POMPANO BEACH AIRPORT	13 MILES
TO NORTH PERRY AIRPORT	2.0 MILES

LEGEND

- TOWN OF DAVIE
- IDENTIFIED FACILITIES
- ★ INTERMODAL FACILITY (TRI-RAIL,PARK & RIDE LOT)
- CSX & FEC RAILWAYS

II-117

DATE: 8-07-1999 09:24:41
FILE: m:/munic/98-0532/dgn/0532sw-1-13.dgn

SOURCE: CAS AS OF APRIL 1999

NO.	DATE	REVISION	BY

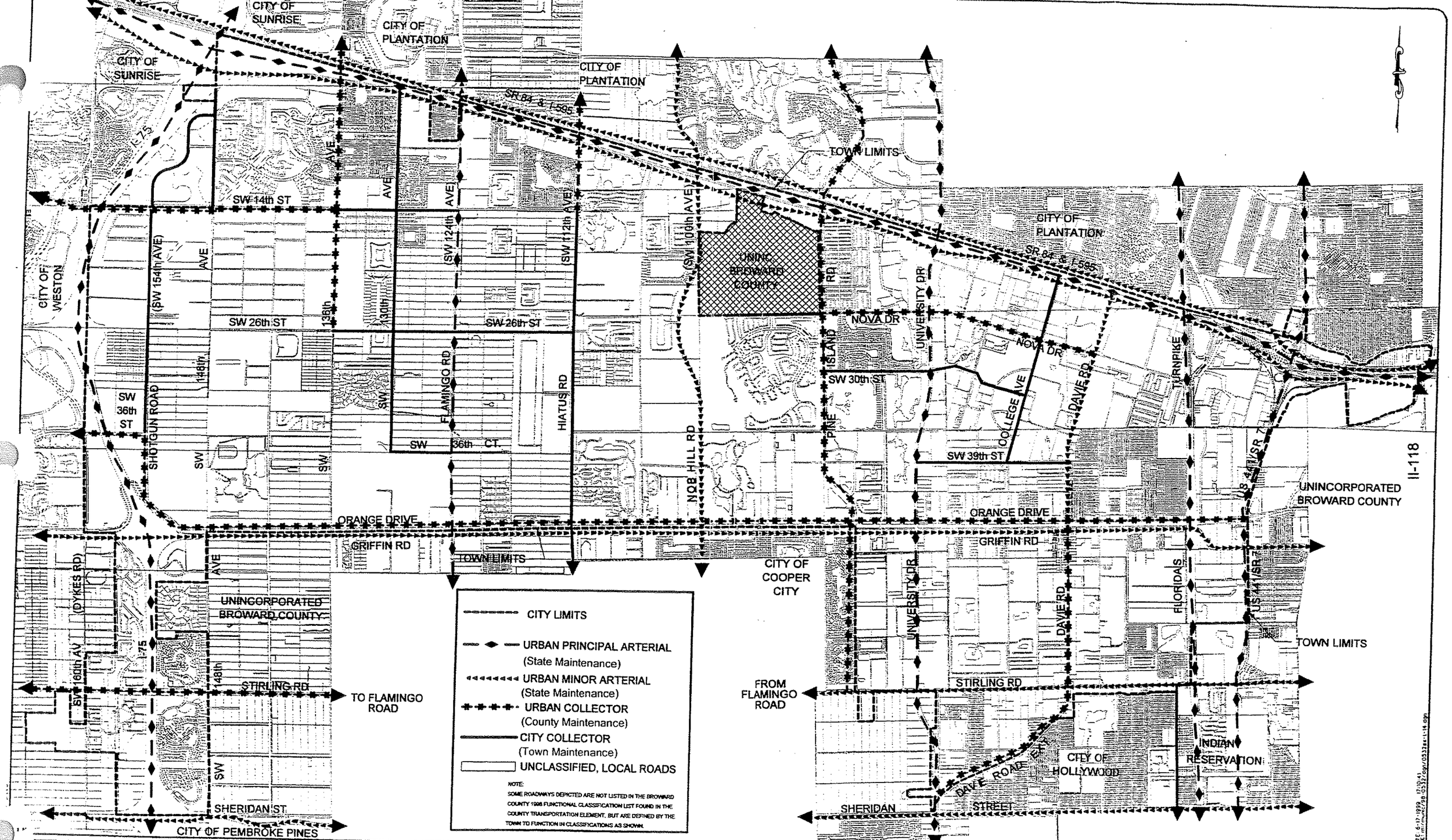
Designed: MM 03/99
Drawn: BU 03/99
Checked: MM 03/99

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-13
FUTURE PORTS, AIRPORT FACILITIES, RAILWAYS, AND INTERMODAL FACILITIES

SCALE: N.T.S.
PROJECT NUMBER: 98-0532
SHEET NUMBER: 2/2



NO.	DATE	REVISION	BY

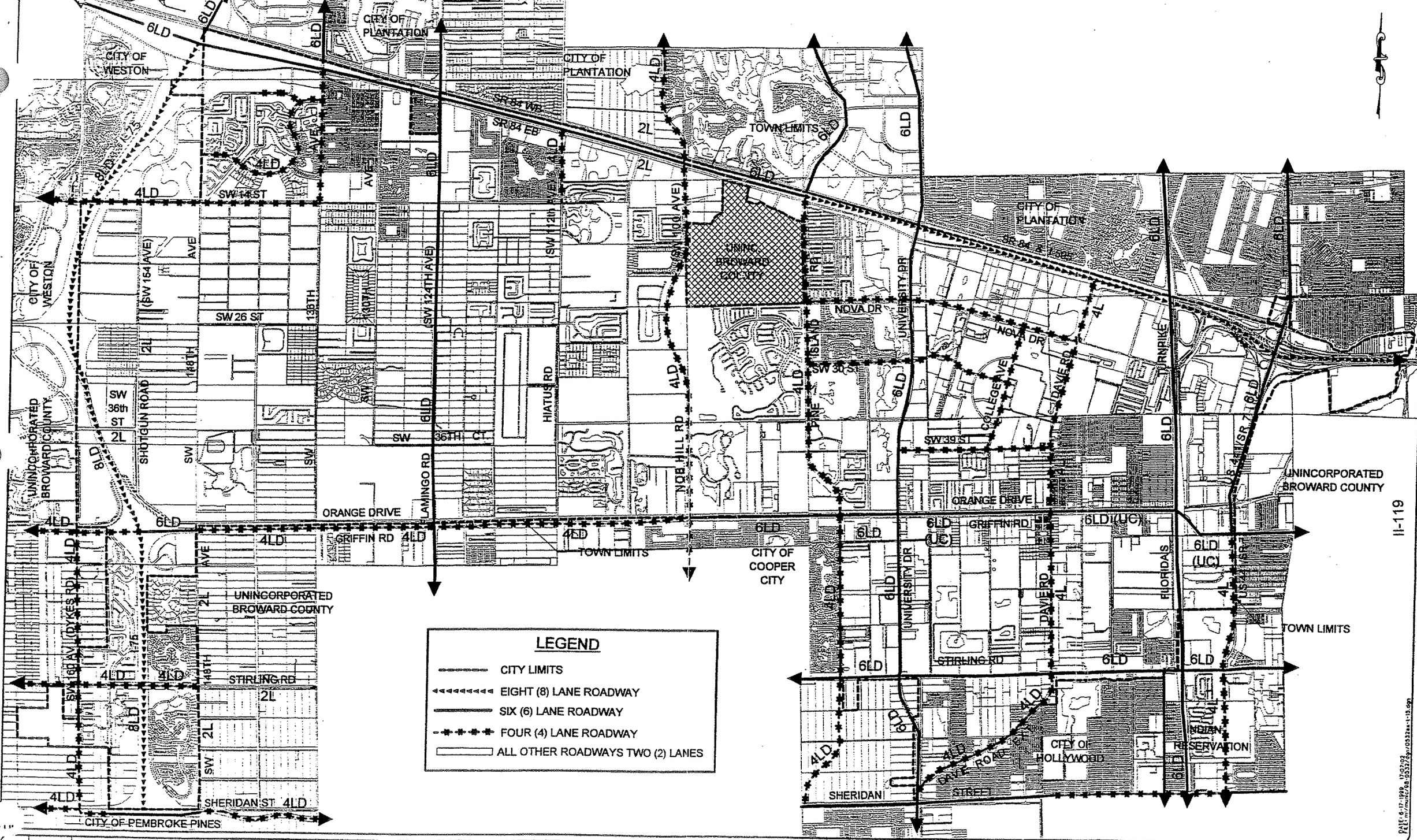
Designed: MJM 04/99
Drawn: BU 04/99
Checked: MM 04/99

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-14
FUTURE FUNCTIONAL CLASSIFICATION OF ROADWAYS

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 2 / 2



NO.	DATE	REVISION	BY

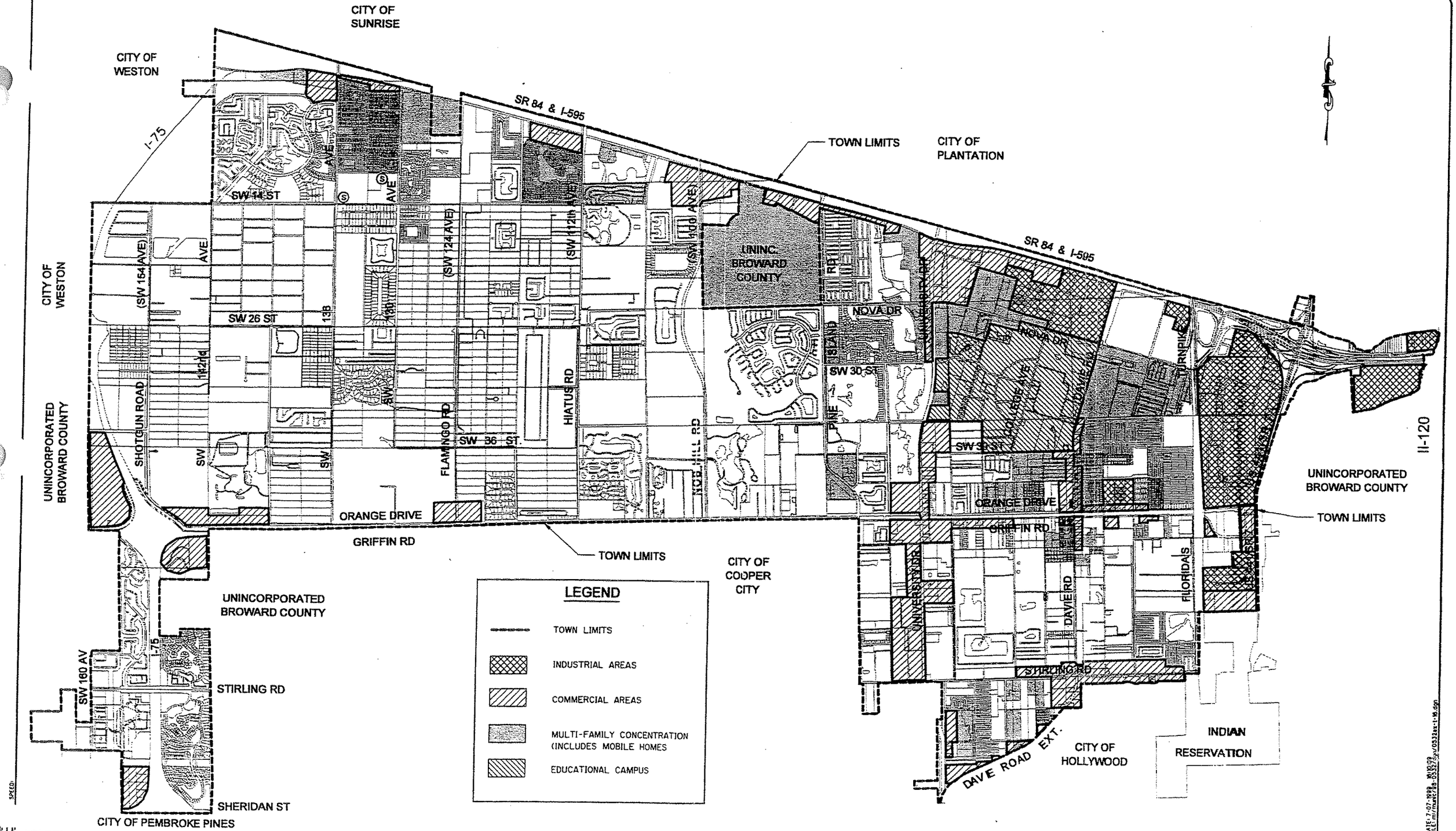
Designed: MM 04/99
Drawn: BU 04/99
Checked: MM 04/99

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

FIGURE T-15
FUTURE NUMBER
OF THROUGH LANES

SCALE 1" = 2000'
PROJECT NUMBER 98-0532
SHEET NUMBER 2/2



SOURCE: CAS 6/99

NO	DATE	REVISION	BY

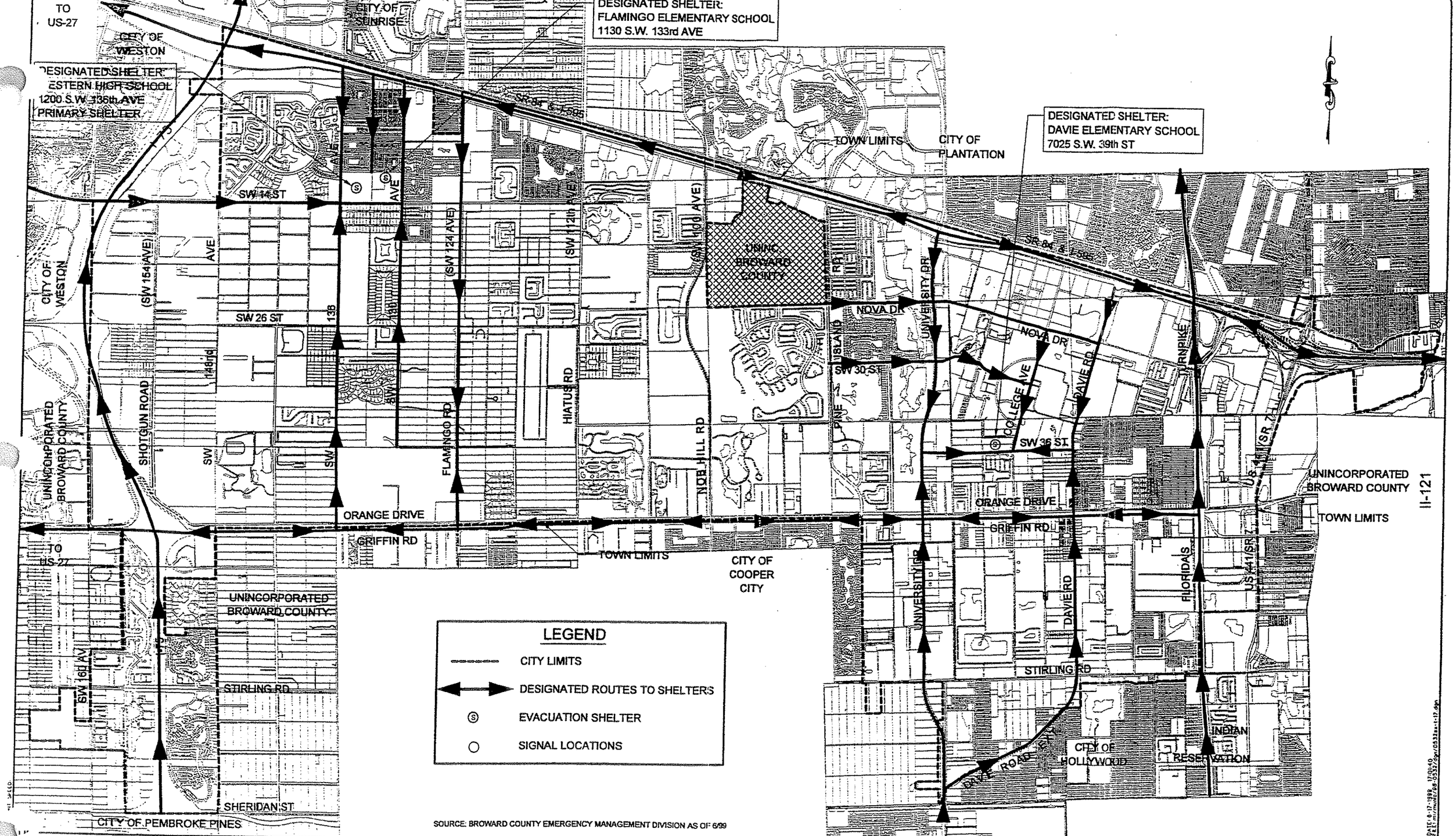
Designed: JDA 02/99
Drawn: BU 06/98
Checked: MM 06/98

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-16
FUTURE MAJOR PUBLIC TRANSIT
TRIP GENERATORS & ATTRACTORS

SCALE	PROJECT NUMBER	SHEET NUMBER
1" = 2000'	98-0532	2 / 2



SOURCE: BROWARD COUNTY EMERGENCY MANAGEMENT DIVISION AS OF 6/99

NO.	DATE	REVISION	BY

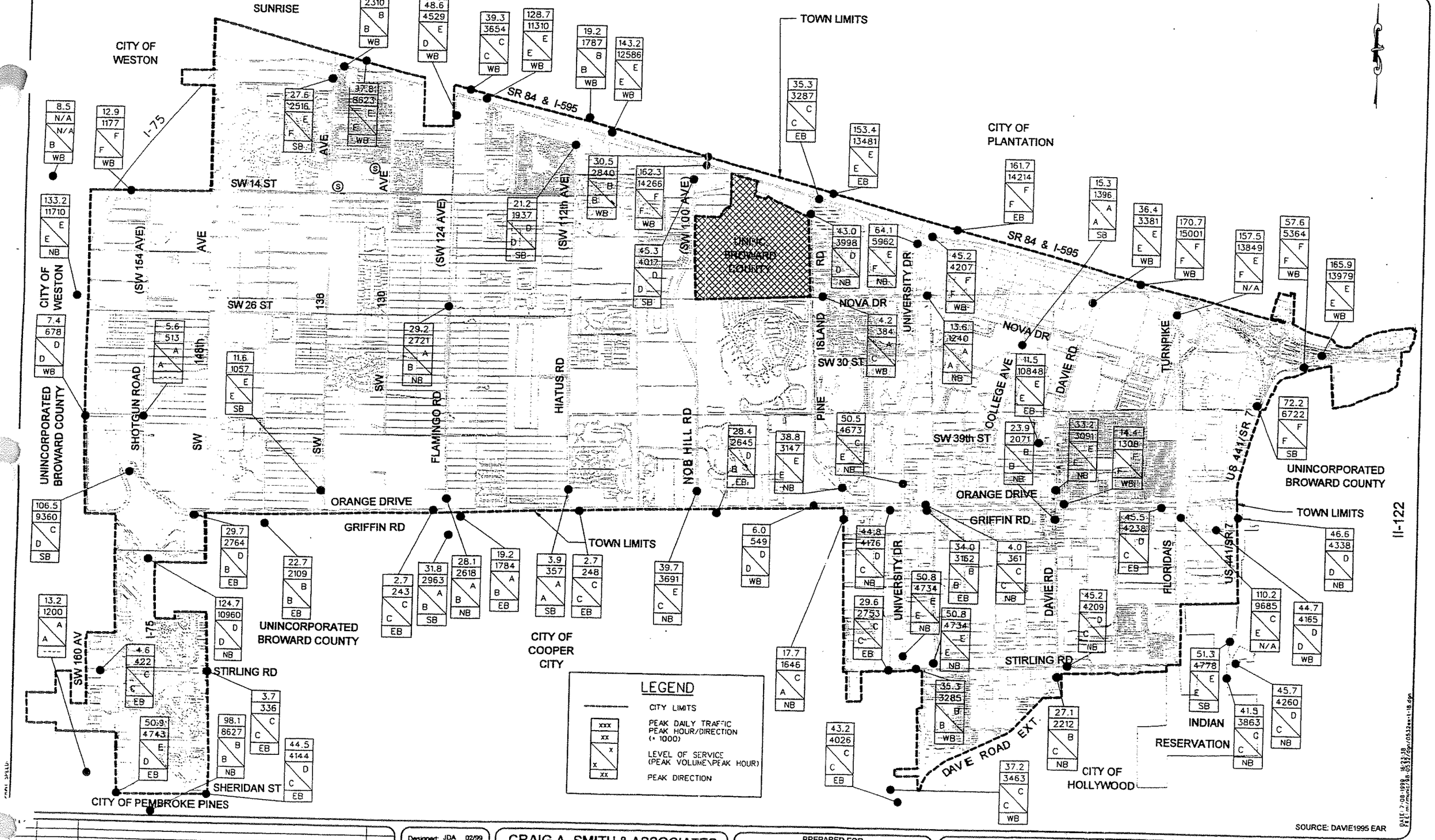
Designed: JDA 02/99
Drawn: BU 05/98
Checked: MM 05/98

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-17
FUTURE EVACUATION ROUTES

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 2/2



SOURCE: DAVIE1995 EAR

NO.	DATE	REVISION	BY

Designed: JDA 02/99
Drawn: BU 06/98
Checked: MM 06/98

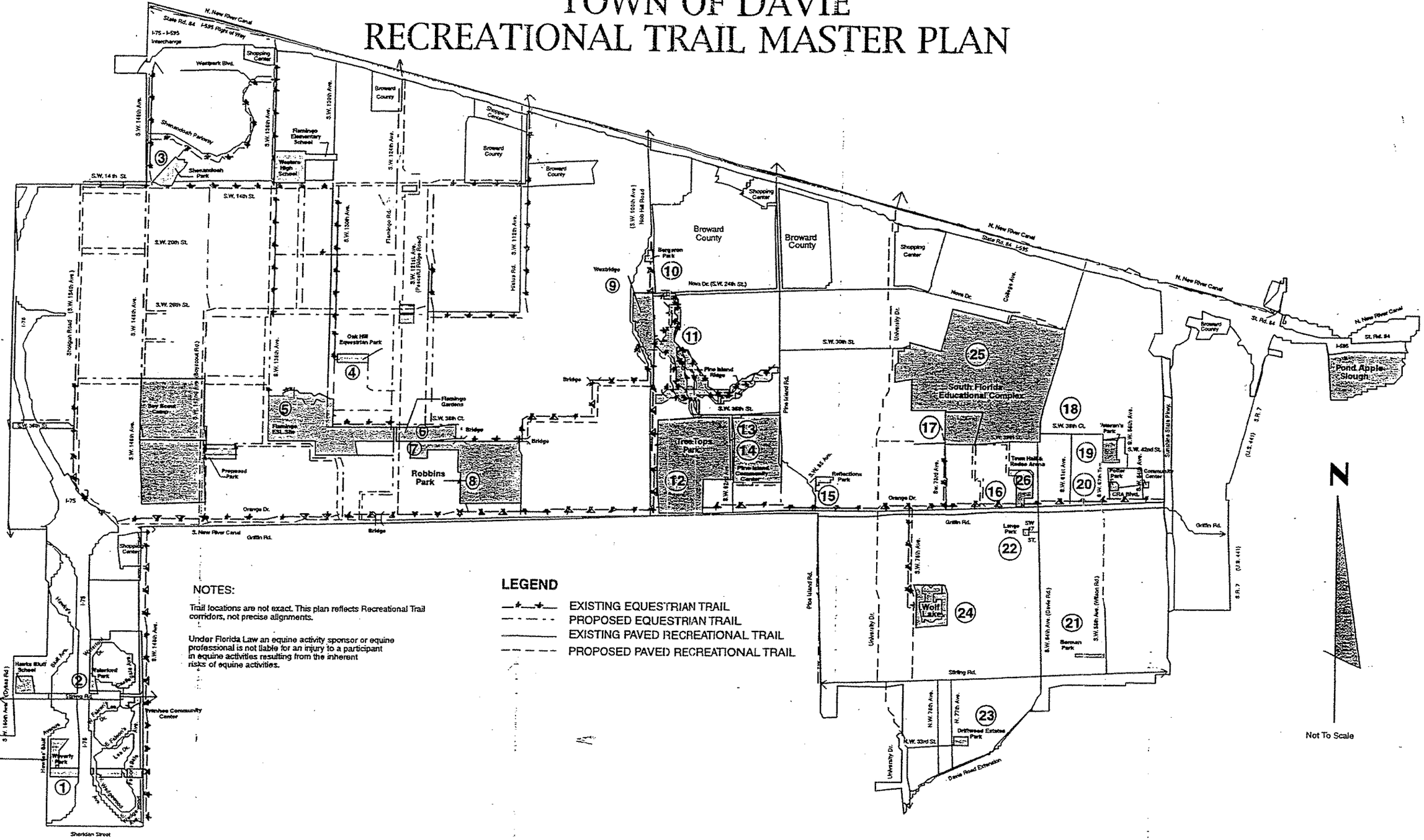
CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
1000 West McNab Road - Pompano Beach
Florida 33069 (954) 782-8222

PREPARED FOR
TOWN OF DAVIE

MAP II-18
FUTURE PEAK ADT, PEAK HOUR, PEAK DIRECTIONAL AND LEVEL OF SERVICE (2015)

SCALE: 1" = 2000'
PROJECT NUMBER: 98-0532
SHEET NUMBER: 2 / 2

TOWN OF DAVIE
RECREATIONAL TRAIL MASTER PLAN



NOTES:

Trail locations are not exact. This plan reflects Recreational Trail corridors, not precise alignments.

Under Florida Law an equine activity sponsor or equine professional is not liable for an injury to a participant in equine activities resulting from the inherent risks of equine activities.

LEGEND

- EXISTING EQUESTRIAN TRAIL
- PROPOSED EQUESTRIAN TRAIL
- EXISTING PAVED RECREATIONAL TRAIL
- PROPOSED PAVED RECREATIONAL TRAIL

TOWN OF DAVIE COMPREHENSIVE PLAN
TRANSPORTATION ELEMENT

GOALS, OBJECTIVES AND POLICIES

Goal 1: **To develop and maintain an overall transportation system which will provide for the transportation needs of all sectors of the community in a safe, efficient, cost effective and aesthetically pleasing manner.**

Objective 1.1: **To the extent that the Town has control, the Town will ensure that transportation facilities and services for those roads identified in this element Plan meet level of service standards established within the Town of Davie Comprehensive Plan.**

Measure - Lane miles operating at an unacceptable level of service.

- Policy 1.1.1: To maintain those level of service standards identified within the Town's Comprehensive Plan, the Town shall, prior to final action on amendments to the Town of Davie Comprehensive Plan, determine whether adequate municipal transportation facilities and services will be available to serve the proposed development.

- Policy 1.1.2: Prior to plat approval, the Town and/or County shall evaluate the transportation facilities and services necessary to meet the level of service standards established within the Town of Davie Comprehensive Plan and will be available concurrent with the impacts of the development consistent with Rule 9J-5.0055(3)(c), F.A.C. and the concurrency management policies included within this element and plan.

- Policy 1.1.3: The Town shall enforce its land development codes and regulations to determine that all new development in the Town of Davie meets the level of service standards established within the Comprehensive Plan.

- Policy 1.1.4: In order to ensure that land development contributes a proportionate share of the cost of transportation facilities, the Town of Davie will continue to urge Broward County to continue to implement the

improvements, dedications and highway impact fee requirements or actual construction in lieu thereof, contained within the Broward County Land Development Code, as amended.

- Policy 1.1.5: The Town will continue to coordinate review of proposed development with Broward County to insure collection of applicable roadway impact fees for properties platted prior to March 20, 1979, using Broward County's TRIPS Model, or as otherwise provided by law, to improve existing and future roadways.

- Policy 1.1.6: The Town will review, at least annually, the Broward County Traffic Review and Impact Planning System (TRIPS) network report provided by Broward County to determine which facilities within the Town of Davie are in compliance with development order intensities and are generating impact fees.

Goal 2: **The Town will coordinate with FDOT and the County, to exceed, by 2004, the regional level of service goal of an overall 10 percent reduction in the lane miles of the Regional Roadway Network within Davie currently operating below level of service "D".**

Utilizing the Florida Department of Transportation's (FDOT) evaluation criteria, the roadways described (as of 6/99) in this element are considered to be over capacity.

Developments proximate to these facilities will require traffic mitigation to the extent that the development degrades the level of service for the facility.

Objective 2.1: **The Town will coordinate transportation improvements with the plans and programs of the BCMPO, Broward County Transit Division, FDOT (including its Five-Year Transportation Plan), and any appropriate resource planning and management plan prepared pursuant to Chapter 380, Florida Statutes, and approved by the Governor and Cabinet.**

Measure – Percentage of lane miles and/or projects built which are consistent with the aforementioned

plans.

- Policy 2.1.1: The Town shall utilize the highway capacity methodology or other approved acceptable methodologies endorsed by the BCMPO and approved by the Broward County Board of County Commissioners to determine the capacities and levels of service on appropriate roadways. The Town recognizes that the data concerning roadway capacities was obtained from the Broward County Transportation Element and the FDOT "Generalized Capacity" tables contained within the FDOT 1998 Level of Service Handbook and may not reflect the actual capacity conditions of a roadway segment (generalized means average conditions). The Town reserves the ability to address detailed capacity determinations by separate link analysis.

- Policy 2.1.2: Unless exempted under other policies, the concurrency management system shall establish the following roadway peak-hour level of service (LOS) standards for the purpose of issuing development orders and permits:

1. For the Florida Intrastate Highway System (FIHS) roadways within the Town of Davie, the generalized two-way peak-hour level of service (LOS) standard established by the Florida Department of Transportation is:

FIHS Roadway	Segment	LOS	Peak Hour Volume
Florida Turnpike	South Town limits to I-595	D	8,900
I-595	I-75 to Pine Island Road Pine Island Road to east of SR 7	D D	12,100 12,200
I-75	Sheridan Street to I-595	D	12,100

Source: Level of Service Manual, Excerpts from Tables 5-4 and 5-7, Florida Department of Transportation, (1998).

2. For non-FIHS transportation facilities and transportation facilities functionally classified as

collector roads or higher, the generalized two-way peak-hour LOS "D" standard volumes depicted on Table 5-7, Level of Service Manual, Florida Department of Transportation, (1998).

3. For transportation facilities previously designated as 110 percent maintain under the 1989 Comprehensive Plan, the generalized two-way peak-hour LOS standard shall be calculated by use of a K_{100} factor, which will be applied to the 110 percent maintain volumes. The 110 percent maintain roadway segments and corresponding LOS standard are depicted in an Appendix to the Broward County Transportation Element Support Document.

- Policy 2.1.3: The Town, through its membership in the BCMPO, will urge responsible State and County implementing agencies to plan their roadway systems to achieve and maintain at least a level of service "D" during peak hour.

- Policy 2.1.4: The Town establishes a minimum peak hour level of service standard of 'D" for locally maintained collector roadways.

- Policy 2.1.5: All other Town-maintained local roads shall provide a minimum peak hour level of service standard of "C".

- Policy 2.1.6: A local street is any roadway not designated as an arterial or collector facility on the Broward County Trafficways Plan.

- Policy 2.1.7: Low cost improvements, such as the addition of turn lanes and more effective signage, will be considered before additional travel lanes are added to any local street. In addition, the impact to the lifestyles of adjacent neighborhoods should also be considered.

- Policy 2.1.8: The Town will work closely with developers and County and State transportation agencies in order to facilitate joint funding of transportation improvements.

- Policy 2.1.9: The Town will coordinate and cooperate with the State and County to improve roadways within the Town of Davie.

- Policy 2.1.10: The Town will continue to participate in the Broward County Technical Coordinating Committee (TCC).

- Policy 2.1.11: The Town shall coordinate with FDOT and/or Broward County to develop action plans for each over capacity roadway within the Town of Davie by December 2000.

- Policy 2.1.12: The Town shall coordinate with Broward County to develop Transportation Demand Management (TDM) and Transportation System Management (TSM) programs to modify peak hour travel demand and reduce the number of vehicle miles traveled per capita within the Town and region. Consistent with the Broward County Transportation Element, TDM strategies may include:

  a. Ridesharing programs – Ridesharing is a form of transportation, other than public transit, in which more than one person shares the use of the vehicle, such as a car or van, to make a trip.

  b. Flexible Work Hours – Allows employees to schedule their work hours so as to avoid driving during peak hours.

  c. Telecommuting – Home-based employees primarily in information-oriented jobs.

  d. Shuttle Services – Buses, vans or cars used to provide transportation from remote parking locations to the workplace.

  e. Parking Management – Includes preferred parking, price parking, parking limitations and shared parking.

  f. Corridor Studies - Coordinated efforts between the County, MPO, FDOT and local governments which consider a wide variety of initiatives to encourage higher public transit use and transit-oriented design development.

  g. Congestion Management Plan (CMP) – Priority strategies serving the County's Urban Infill Area which is east of the Florida Turnpike intended to mitigate congestion and improve operational LOS.

  TMS strategies may include:

  a. Roadway improvements – In lieu of traditional widening and construction, alternative solutions are

proposed to eliminate traffic problems such as corridor studies.

b. Intersection Improvements – Turn lane additions or other geometric improvements.

c. Access Management – Control and spacing/design of driveways, ramps, medians, median openings, traffic signals and intersections on arterial and collector roadways.

d. Signalization – Computerization of signals on roadways to improve traffic flows.

- Policy 2.1.12.1: Through participation in the MPO and coordination with the County and FDOT, work to reduce the per capita vehicle miles traveled (VMT) below the year 2002 projected daily per capita VMT of 19.42 by implementing TDM strategies and to improve operational aspects of transportation facilities by implementing TSM strategies.

- Policy 2.1.13: Evaluate and rank proposed Town Roadway Projects in order of priority in preparing improvement programs according to the following guidelines:

  a) Whether the project is needed to project public health and safety, to fulfill the state's and/or county's commitment to provide facilities and services, or to preserve or achieve full use of existing facilities;

  b) Whether the project increases efficiency of use of existing facilities, prevents or reduces future improvement cost, provides service to developed area lacking full service, or promotes in-fill development;

  c) Whether the project represents a logical extension of facilities and services within a designated service area; and

  d) Whether the project represents a development requirement for the approval of a project within an undeveloped area.

- Policy 2.1.14: The Town shall implement 110% Maintain as the level of service for the purpose of issuing

development permits for road segments which are constrained facilities and are operating below LOS D according to the TRIPS model as of November 1, 1999.

Objective 2.2: **The Town will enforce a concurrency management system which monitors and manages new growth in conformance with Florida's Local Government Comprehensive Planning and Land Development Regulation Act.**

Measure - Percentage of developments with facilities in place concurrent with the impacts of development pursuant to Policy 2.2.1 a-e below.

- Policy 2.2.1: The Town of Davie development review and approval process will ensure that necessary facilities and services will be available concurrent with the impacts of development consistent with Rule 9J-5.0055(3)(c) through any of the following situations. Development Action includes any land use change, site plan approval, building permit, zoning permit, subdivision plat approval, rezoning, special exception, variance, or any other official action of the Town Council or other appropriate Town official.

(a) the necessary transportation facilities are in place at the time a Development Action is approved by the Town Council or other appropriate Town officials or the Development Action is approved subject to the condition that the necessary transportation facilities will be in place consistent with Town Code provisions;

(b) the necessary transportation facilities are under construction at the time a Development Action is approved by the City Commission, or other appropriate City officials.

(c) the necessary transportation facilities are the subject of a binding contract executed for the construction of those necessary transportation facilities at the time a Development Action is approved by the Town Council, or other appropriate Town officials.

(d) the necessary transportation facilities have been

included in the Municipal, County or State annual budget at the time a Development Action is approved by the Town Council, or other appropriate Town officials although the facilities are not yet the subject of a binding contract for their construction; and/or,

(e) at the time a Development Action is approved by the Town Council, or other appropriate Town officials, the Town is able to assure that the necessary transportation facilities will be in place within a reasonable period of time consistent with the requirements of Rule 9J-5.0055(3)(c), F.A.C. At a minimum, the necessary transportation facilities are to be included within a financially feasible Capital Improvements Element or an alternative implementation plan which is determined by the Florida Department of Community Affairs to be in compliance with Rule 9J-5 of the Florida Administrative Code and supported by all necessary implementing land development regulations and a concurrency monitoring system.

- Policy 2.2.2: The Town shall maintain a concurrency monitoring system to ascertain whether necessary transportation facilities identified within the Capital Improvements Element of the Town of Davie Comprehensive Plan are being constructed in accordance with the schedules in the Plan and to measure the capacity of such transportation facilities in a given area at a given time.

Goal 3: **The Town will actively promote the provision of a safe, convenient and efficient transportation system for motorized and non-motorized modes of travel.**

Objective 3.1: **Parallel frontage roads, interconnected driveways, or their design equivalent shall be encouraged to reduce conflicts between local and through traffic.**

Measure - Number of curb-cuts/median openings/parking lot interconnections during the planning period.

- Policy 3.1.1: By 2001, the Town will modify, if necessary, existing Land Development Regulations based on urban

design for transportation facilities to encourage the utilization of parallel frontage roads, interconnected driveways, or their design equivalent to reduce conflicts between local and through traffic.

Objective 3.2: **The Town will continue the implementation of a safe and enjoyable bikeway/walkway system which will include land use and other strategies to promote the use of bicycles and walking.**

Measure - Linear feet of bikeways/walkways established annually.

- Policy 3.2.1: The Town Council shall develop a Master Bikeway/Walkway Plan which will include components from the Town's Recreational Trails Master Plan.
- Policy 3.2.2: The Master Bikeway/Walkway Plan, once developed, will be periodically reviewed, and recommendations for additions, deletions and/or corrections shall be made to the Town Council for adoption.
- Policy 3.2.3: At the time of plat or site plan approval, developers shall be required to dedicate, construct and/or resurface adjacent bikeways/walkways in accordance with the Land Development Code.
- Policy 3.2.4: At the time of plat or site plan approval, the Town Council may require additional bikeways/walkways should the proposed subdivision contain a roadway pattern whereby the provision of additional bikeways/walkways would improve public safety or convenience.
- Policy 3.2.5: Bikeways/walkways shall be designed to link parks, recreational, educational and other public facilities with nearby residential areas.
- Policy 3.2.6: At time of site plan review, the Town will encourage the provision of ample and secure bicycle parking at schools, libraries, recreational facilities, and significant commercial and multi family developments.
- Policy 3.2.7: The Town will continue to work cooperatively with FDOT and Broward County to provide wide curb lanes

to accommodate bicycles and provide parallel sidewalks as part of arterial roadway construction projects.

- Policy 3.2.8: The Town will coordinate with land owners and developers to study the feasibility of adding an equestrian and bicycle lane to the SW 36th Street bridge over I-75 which would be separated from the travel lanes.

- Policy 3.2.9: The Town will coordinate with FDOT and Broward County to ensure that crossing signals for equestrians use, dual light buttons for equestrians (high) and for pedestrian/bicyclist (low) at trails/street intersections and guard rail cuts are provided on major roadways in order that bicycles, equestrians and pedestrians can access the roadway shoulders for safe travel.

- Policy 3.2.10: The Town shall review all proposed development for accommodation of equestrian traffic needs and review facilities if deemed appropriate.

- Policy 3.2.11: The Town shall require or provide pedestrian displays at signal installations and signal modifications where crosswalks are provided.

- Policy 3.2.12: The Town shall provide or require bicycle, pedestrian and equestrian ways connecting all new residential areas to recreational areas, schools, and shopping areas within neighborhoods; and pedestrian ways for access to major transit stops.

- Policy 3.2.13: The Town shall review all proposed development for its accommodation of bicycle, pedestrian, and equestrian traffic needs and said review shall be consistent with the pathway network of the Open Space Program.

- Policy 3.2.14: The Town shall require the construction of missing links in the existing sidewalk system as appropriate (adjacent to or in close proximity to) new and or redevelopment in conjunction with the issuance of development permits for new and/or redevelopment.

Objective 3.3: **The Town will continue to work with State, County and other local agencies to improve traffic safety involving vehicles, pedestrians and/or cyclists, and take appropriate steps to maintain level of service.**

Measure - Number of accidents per location per year.

- Policy 3.3.1: Traffic signalization, roadway signage and operational capacities (including curb cuts and turn lanes) shall be designed to optimize traffic flows and levels of service. These improvements shall always be considered prior to adding travel lanes.

- Policy 3.3.2: The Town shall prohibit on-street parking on all arterial and major collector roads unless onstreet parking is utilized as a traffic calming device to compliment downtown district and encourage pedestrian activity.

- Policy 3.3.3: The Town will modify, if necessary, existing Land Development Regulations based on urban design for transportation facilities to accommodate the implementation of the Regional Activity Center Area.

- Policy 3.3.4: The Town shall investigate expanding the Concurrency Exception Area for properties within the Regional Activity Center (RAC).

- Policy 3.3.5: The Town may utilize traffic calming design features after a study is performed to address local neighborhood concerns.

Objective 3.4: **The Town will promote timely resurfacing and repair of roads and bridges to minimize costly reconstruction and to enhance safety.**

Measure - Linear feet resurfaced/linear feet reconstructed annually.

- Policy 3.4.1: At a minimum, the Town will continue annual roadway maintenance budget funding at existing levels.

- Policy 3.4.2: On an annual basis, the Town Public Works Department will produce evaluation criteria and an inventory of municipal roadways which are in need of resurfacing and/or reconstruction.

- Policy 3.4.3: The evaluation criteria and the inventory of roadways requiring resurfacing and/or reconstruction, along with the funding necessary to complete the desired projects, will be forwarded to the Town Council for determination of which projects may be included in a resurfacing/reconstruction program.

- Policy 3.4.4: A formal resurfacing/reconstruction program will be initiated following the Town Council's review of the inventory.

Objective 3.5: **The Town will enforce existing regulations to: 1) reduce the number of access points onto adjacent roads; 2) provide adequate on-site motorized and non-motorized circulation; and 3) provide adequate off-street parking relative to existing and planned commercial and multi-family development.**

Measure - Number of site plans approved annually which meet existing Land Development Regulation standards.

- Policy 3.5.1: The Town will enforce regulations relating to the location of driveways, access points and connections to roadways which are at least as strict as Broward County and State standards. This shall not prohibit the approval of connections and access points not totally consistent with those standards based upon a traffic study.

- Policy 3.5.2: The Town shall enforce the off-street parking requirements contained in the Land Development Code for all land uses, particularly industrial, commercial and multi-family developments.

- Policy 3.5.3: The Town shall enforce design criteria for on-site motorized and non-motorized circulation.

Goal 4: **Coordinate transportation and land use planning activities to ensure adequate facilities and services are available to meet existing and future needs of Davie's population and economy.**

Objective 4.1: **The Town will coordinate transportation planning**

activities with land use decisions, ensuring that transportation planning and land use planning activities are properly coordinated in the Town, as shown on the Future Land Use Map.

Measure/Actions –

1) Coordinate with BCt so that at least 80% of all transit stops shall be proximate to development with higher intensity and mixed-use land uses as defined within this element by December 31, 2000.

2) Identify the number of bus stops with functional access to surrounding land uses by June 30,2000.

- Policy 4.1.1: The Town shall consider the individual and cumulative impacts of land use plan amendments on the existing and planned transportation facilities within the Town.

- Policy 4.1.2: To minimize the impact on locally-maintained transportation facilities, land uses which generate or attract high traffic volumes will be located adjacent to, or have safe and adequate access to, principal arterials, expressways, or other regionally-significant roadway facilities.

- Policy 4.1.3: Transportation facilities will be planned and located in a manner which minimizes the potential for adverse impacts on adjacent land uses.

- Policy 4.1.4: The Town shall reserve the ability of acquiring lands and constructing parking facilities such as garages or surface parking areas separately or in partnerships.

- Policy 4.1.5: The Town will study the feasibility of creating an incentive program such as density bonuses or credits for development activities within the RAC by December, 2000.

- Policy 4.1.6: The Town will continue to maintain and enforce a concurrency management system consistent with the Future Land Use Element to assure that development orders and permits are not issued unless transportation facilities are available.

- Policy 4.1.7: Residential densities below 10 DUA should be located with access to existing or proposed minor arterial,

collector and local streets.

- Policy 4.1.8: Residential densities above 10 DUA should be located with adequate access to major or minor arterial roadways, expressways and public transit routes.

- Policy 4.1.9: The Town shall designate sufficient acreage on the FLUM to provide a range of housing opportunities and a mix of land uses so that housing opportunities are within close proximity to employment areas and public transit routes.

- Policy 4.1.10: Regional or community facilities and other public facilities shall be located in areas of concentrated activities, such as the RAC, in order to provide easy access by public transit and to economize on parking facilities.

- Policy 4.1.11: Commercial and/or Industrial development shall be located with adequate access to major transportation facilities.

- Policy 4.1.12: Transportation facilities and services shall be developed in a manner that encourages infill development and that promotes the efficient use of urban services.

Objective 4.2: **In conjunction with Broward County the Town shall ensure development does not encroach upon existing rights-of-way and shall ensure future development does not encroach upon future rights-of-way as provided in the Broward County Trafficways Plan and Town Right of Way Protection Plan.**

Measure – Number of developments encroaching upon planned or vested right of way.

- Policy 4.2.1: In order to protect the rights-of-way necessary for the establishment of the Regional Roadway Network, the Town will continue to support implementation of the Broward County Trafficways Plan.

- Policy 4.2.2: In order to protect the corridors identified on the Broward County Trafficways Plan, the Town shall not

issue building permits for construction of buildings within identified rights-of-way.

- Policy 4.2.3: During BCPC's authorized periods of municipal review, the Town Council may formally submit requests for additions, deletions, or modifications to the Broward County Trafficways Plan.

- Policy 4.2.4: The Town will continue the practice of obtaining necessary right-of-way, in conformance with adopted right-of-way plans, including the Broward County Trafficways Plan, at time of issuance of development permits.

- Policy 4.2.5: Adopt the following provisions as Town minimum public right-of-way requirements for new roadways:

  a) Arterial roadways – Principal: 200 foot right-of-way
     Major: 120 foot right-of-way
     Minor: 110 foot right-of-way

  b) County and Town collector roadways – 80 foot right-of-way

  c) Local roads (bikeway or trail corridors) – 60 foot right-of-way

  d) Local road – 50 foot right-of-way

Goal 5: **Encourage a transportation system which minimizes environmental impacts, conserves energy, and conserves the Town's lifestyle in addition to moving traffic safely and efficiently.**

Objective 5.1: **The Town shall continue to provide or encourage alternatives to single-occupancy and other automobile travel to minimize negative environmental impacts.**

Measure - Number of programs, trail miles and bike lane miles implemented or constructed.

- Policy 5.1.1: The Town will continue to make information regarding ride sharing, mass transit, and commuter rail services available to its citizens.

- Policy 5.1.2: The Town will cooperate with the implementing agencies to explore the feasibility of locating park and ride lots in proximity to, or within, the Town which may service transit services, such as the High Speed Rail System, the Tri-County Rail System and Express Bus Services.

- Policy 5.1.3: The Town will not permit, unless appropriate mitigation measures are taken, the construction of transportation improvements which would negatively impact environmentally-sensitive areas such as wetlands.

- Policy 5.1.4: The Town shall discourage unnecessary traffic signalization.

Goal 6: **Continue developing a high level of transit service which provides safe, economical, efficient, and convenient travel for the citizens of the Town of Davie.**

Objective 6.1: **The Town shall work cooperatively with Broward County and the Florida Department of Transportation to increase the level of annual BCt Transit ridership to 25 million unlinked trips by the year 2000.**

Measure - A proportionate annual increase in transit riders within Davie.

- Policy 6.1.1: The concurrency management system shall provide that for the purpose of issuing development orders and permits, the adopted public transit level of service shall be for the BCt to provide fixed-route transit service to at least 70 percent of all residences and employment locations during the peak hour.

- Policy 6.1.2: As Davie continues to develop, the Town shall urge the County to provide bus service to generally achieve the County Transit Development Plan (TDP) level of service standards.

- Policy 6.1.3: The Town, with financial assistance from the County, will make special efforts to increase transit ridership by providing bus shelters, benches, detailed signage, and other amenities at high transit usage bus stops.

- Policy 6.1.4: The Town shall support the Broward County and the FDOT continued funding of local mass transit service consistent with existing service standards.

- Policy 6.1.5: The Town shall coordinate with the Broward County MPO, Broward County Division of Mass Transit and Tri-Rail to ensure the required transit services area available to meet the level of service criteria.

- Policy 6.1.6: The Town shall encourage the identification of persons with special transportation needs for shopping, recreational and hurricane evacuation purposes.

Objective 6.2: **Through the Town's seat on the Metropolitan Planning Organization, the Town shall continue to request that Broward County provide transit service to all present and future major trip generators and attractors.**

Measure - Percentage of major trip generators and attractions served by mass transit.

- Policy 6.2.1: The Town shall coordinate and cooperate with the implementing agencies to determine the feasibility of locating a feeder parking lot and associated County bus service in proximity to Davie to complement the Tri-County Commuter Rail Service, and the Florida High Speed Rail Service.

- Policy 6.2.2: The Town shall coordinate and cooperate with the implementing agencies to determine the feasibility of locating, within Davie, Park and Ride locations for regional sports and cultural activities.

- Policy 6.2.3: The Town shall coordinate and cooperate with the implementing agencies to determine the feasibility of establishing a BCt transit link between Davie and major transportation terminals, including Miami International Airport, Fort Lauderdale Hollywood International Airport, and Port Everglades.

- Policy 6.2.4: The Town shall coordinate and cooperate with implementing agencies to promote adequate mass transit service to the Educational Campus area.

- Policy 6.2.5: The Town shall coordinate with Broward County modifications to the County Land Development Code that implement local design criteria to improve the aesthetics and comfort at transit facilities.

- Policy 6.2.6: Support funding of Broward County Mass Transit Division and Tri-Rail to maintain local transit facilities.

Objective 6.3: **The Town will ensure adequate rights-of-way as reviewed by Broward County are available to meet Davie's future mass transit and transportation needs.**

Measure – All development proposals shall be reviewed by Broward County and the Town for compliance.

- Policy 6.3.1: In order to protect the rights-of-way necessary for the establishment of the regional mass transit and roadway network, the Town will continue to support the implementation of the Broward County Trafficways Plan.

- Policy 6.3.2: The Town shall support County requests for transit-related improvements as part of the development permitting process.

Objective 6.4: **The Town will coordinate transit improvements with the Comprehensive Plan and the plans and programs of the Broward County Metropolitan Planning Organization, the Broward County Mass Transit Division, the Florida Department of Transportation (including their 5-year Transportation Plan) and any appropriate plan for the transportation disadvantaged.**

Measure - Transit projects which are consistent with the aforementioned plans.

- Policy 6.4.1: The Town will continue to closely monitor the provisions of transit service and when necessary, inform the appropriate state or county agency of the Town's changing needs.

- Policy 6.4.2: The Town will make information available to its citizens

regarding ride sharing as an alternative to the single occupant vehicle.

Goal 7: **Support the BCt development of a level of transit service which provides an alternative to the private automobile for those who wish to change modes.**

Objective 7.1: **The Town shall support integration of the transit system and facilities such as bus pull out bays with the road system, particularly in congested areas.**

Measure - Transit available on all arterials operating below level of service -"D".

- Policy 7.1.1: The Town will work to retain and enhance the bus routes serving the Educational Campus area.
- Policy 7.1.2: The Town will support the Broward County Transit Development Plan (TDP).
- Policy 7.1.3: The Town shall encourage the incorporation of exclusive or shared bus drop off/pick up areas at major public facilities.

Objective 7.2: **The Town shall urge Broward County to provide transit coverage within one-quarter mile of all concentrations of medium and high density residential areas and employment locations of Davie, particularly those with a propensity for transit ridership.**

Measure - Percentage of multi-family developments of 200 units or greater and employment locations with 50 employees or more which have transit service available within one-quarter mile.

- Policy 7.2.1: The Town supports maintenance of the current basic route pattern, of not disturbing single-family neighborhoods, by keeping transit service primarily on County and Town designated trafficways.
- Policy 7.2.2: The Town will, by 2001, coordinate with the County to initiate studies which analyze the feasibility of providing transit service to:

1. Orange Drive between Davie Road and SR 7.

2. Campus area expansion on SW 39th Street and College Avenue.

Goal 8: **Retain and expand transit services for the elderly, handicapped and other transportation disadvantaged groups, with both regular and specialized service.**

Objective 8.1: **The Town shall encourage the County to continue and expand, as appropriate, the ADA Para-Transit Program and facilities.**

Measure - Number of trips which Town residents make by using this service.

- Policy 8.1.1: Via citizen comments, the Town will monitor the "demand-response" service being provided to Davie to assure County compliance with this objective.

Objective 8.2: **The Town shall urge the County to maintain and expand handicapped accessibility on regular routes to provide a reasonable alternative for the handicapped.**

Measure - Number of handicapped-accessible buses serving the Town.

- Policy 8.2.1: The Town will encourage the County to provide wheel-chair-accessible buses on any future bus service provided within Davie.

Goal 9: **Coordinate local land use and traffic circulation planning with regional efforts to provide a convenient, safe and adequate aviation system.**

Objective 9.1: **The Town shall continue to monitor the proposed development of any aviation facilities in close proximity to the Town.**

Measure - Number and type of coordination and/or monitoring efforts made by Town Council or Staff.

- Policy 9.1.1: The Town shall review and comment, as appropriate,

on any Environmental Impact Report, Master Plan or other studies required to construct, expand or modify any airport in close proximity to the Town.

- Policy 9.1.2: The Town shall coordinate with FAA and Airport Planners regarding potential approach oath obstructions and other development of lands within the Town which may affect safe airport operations.

Objective 9.2: **The Town shall enforce Land Development Code provisions regulating the siting and operation of heliports, so as to ensure adequate compatibility to adjacent land uses.**

Measure - Consistency of heliport siting and operation to Land Development Code provisions.

- Policy 9.2.1: Heliport facilities and operations shall be encouraged principally for the purposes of augmenting police and emergency medical transport services and corporate/business functions.

- Policy 9.2.2: Proposed heliport sites shall be restricted to locations in the commercial and industrial Zoning Districts unless otherwise approved the Town Council.

- Policy 9.2.3: The recommendations of adopted Part 150 Study Technical Reports shall be taken under consideration during land use and zoning decisions affecting heliports and their adjacent areas.

Goal 10: **Coordinate with Broward County in the implementation of the countywide Transportation Element recognizing that the Town includes parts of the Regional (County/State) Roadway system and other modes of transportation.**

Objective 10.1: **The Town will coordinate with Broward County in the implementation of their Transportation Element.**

Measure – Continue to meet with the Broward County Transportation Planning Division MPO and TAC to coordinate activities, programs and data.

- Policy 10.1.1: The Town shall maintain its highest intensities of land use along major transportation routes and encourage the clustering of parking areas near major routes and transit stops. The Town does not contain any exclusive designated public transportation corridors, however, the Town does contain two (2) FDOT designated public transit corridors, University Drive and SR7/US441 (proposed). FLUM residential densities of at least 10 DUA should be located along the designated corridors. The Town will coordinate with and will participate in providing data to the County and/or FDOT and coordinate land use decisions, TDM and TSM parking strategies and alternatives to utilizing the FIHS by local traffic.

- Policy 10.1.2: The Town recognizes that Broward County is the agency responsible for mass transit service and overall transportation planning on a countywide basis. The Town will continue to provide service schedules at Town Hall and implement the Land Development Regulations concerning providing mass transit stops for major traffic generators and attractors.

- Policy 10.1.3: The transit Level of Service shall be the provision of County bus routes to at least 70 percent of the total acreage for all residences and employment locations, as shown on the Future Land Use Map during the peak hour.

- Policy 10.1.4: The Broward County Transportation Element contains a map designating the I-75 and University Drive corridors as a Priority Transit Corridors. The County's Element does not define what the corridor is meant to accomplish. The Town reserves the right to participate in or reject projects which may negatively affect the Town's land uses abutting the corridors.

- Policy 10.1.5: The Town opposes the connection of SW 26th Street to I-75.

- Policy 10.1.6: The Town opposes future medians across Orange Drive which would prohibit through movements and generally discourages new bridges across the

South New River Canal connecting Griffin Road and Orange Drive between the proposed Imagination Farms bridge and the eastern Town Limits.

- Policy 10.1.7: Through participation in the MPO, increase the vehicle occupancy rate from 1.37 to 1.43 persons per vehicle through TDM strategies, such as ride sharing programs, preferred parking and High Occupancy Vehicle (HOV) lanes; work to reduce the per capita Vehicle Miles Traveled (VMT) below the year 2002 projected daily per capita VMT of 19.42 by implementing TDM strategies and increasing the public transit modal split from the current 1.15 percent to 1.23 percent by 2002 as specified in Policies 3.3.1 and 3.3.2 of the Broward County Transportation Element.

- Policy 10.1.8: By December 2001, in cooperation with the FDOT and appropriate municipalities, initiate and/or continue to implement strategies to facilitate local traffic to use alternatives to the FIHS as a means of protecting its interregional and interstate functions by helping to implement the following strategies:

  1) Maintain and, where feasible, improve the Level of Service on Town roads and assist the County, if possible, on County roads that are parallel to FIHS roads.
  2) Implement the Congestion Management Plan recommendations with emphasis on those roads parallel to FIHS roads.
  3) Work with the County to synchronize signalization of roads of roads parallel to FIHS roads.
  4) Through membership on the MPO, support implementation of Intelligent Transportation Systems (ITS).
  5) Coordinate with FDOT and the BCPC to identify a public transportation corridor demonstration project.
  6) Coordinate with FDOT and the County to provide informational Kiosks along roads parallel to FIHS roads.
  7) Expand transit service alternatives with the County in areas which would otherwise not qualify

under set standards.

8) Improve pedestrian and bicycle access to transit in all roadway improvement projects.

9) Provide public education on public transit.

10) Promote transit oriented design on roads parallel to FIHS roads.

11) Monitor FIHS LOS and work with the FDOT and County to identify additional strategies.

- Policy 10.1.9: The Town shall coordinate with the County on studying the feasibility of creating multi-modal LOS standards for the Town in conjunction with the County's change from ADT to peak hour concurrency analysis by December 2001.

APPENDIX A

METHOD FOR DETERMINING LEVELS OF SERVICE

The following is a description of how Level of Service (LOS) standards are defined and utilized to determine acceptable operating levels. The Town utilizes LOS definitions common to Broward County. The Florida Department of Transportation (FDOT) establishes LOS for roadways under their jurisdiction.

ANALYSIS OF EXISTING SYSTEM

The existing roadway network has been analyzed to determine average annual daily volumes, peak hour volumes, capacities, peak hour volume to capacity ratios and resulting levels of service. Such an analysis is required in order to establish a basis for adopting Level of Service (LOS) standards at peak hour pursuant to Chapter 9J-5 F.A.C. Traffic counts were provided by the Florida Department of Transportation and Broward County Office of Planning.

LEVEL OF SERVICE

To determine current LOS on the roadway network, peak hourly demand volumes for various roadways were calculated using 1998 Average Daily Traffic (ADT) volume counts. These counts were obtained from the Broward County Office of Planning, and include counts supplied by the Florida Department of Transportation (FDOT) for the arterial roadways on the State system.

Establishing a roadway's LOS is the most common index of traffic congestion. Level of service may denote any number of differing operating conditions that may occur on a given lane or roadway when it is accommodating various traffic volumes. The LOS of a roadway is often defined as ratio of the traffic volumes (V) to the actual capacity (C) of the roadway (V/C ratio).

The following table illustrates the peak hour two-way direction roadway capacities used to calculate the V/C ratios for this analysis of existing roadway conditions in the Town of Davie. Listed below are the V/C ratios used to determine LOS. Both the peak hour capacities and the V/C ratios are consistent with those used by the SFRPC, FDOT and Broward County. Specific peak hour volumes were calculated utilizing data provided by the Broward County Office of Planning.

The descriptions of service levels used are as follows:

V/C	LOS	DESCRIPTION
0 - .65	LOS A	Free flow traffic at average travel speeds.
.66 - .75	LOS B	Stable flow with the presence of other users in traffic stream being noticeable.
.76 - .85	LOS C	Uncongested with other users in traffic stream causing significant interactions.
.86 - .95	LOS D	Congested stable flow with major delays.
.96 - 1.15	LOS E	Very congested with traffic at or near capacity.
1.16 +	LOS F	Extremely congested with breakdown flow (major delays occurring frequently).

The Florida Department of Transportation adopted an updated Level of Service (LOS) Manual in 1998. This manual sets forth minimum accepted LOS Standards for State roadways. Table 2.1 "Statewide Minimum of Level of Service Standards for the State Highway System" states that for roadways such as the Florida Turnpike, I-75, I-595, SR 7 and University Drive, which are within urbanized areas with population characteristics over 500,000, the adopted LOS is "D". A local government cannot establish a higher level of service for state roadways. The Town has adopted a LOS Standard of "C" for all local roadways in the Town and LOS "D" for all Town arterial and collector roads.

SERVICE VOLUMES/AVERAGE TRAVEL SPEED

Roadway capacities for different levels of service are referred to as service volumes and vary by the type of roadway analyzed, the number of signals per mile and the number of lanes. Using figures developed by the Florida Department of Transportation, the following Tables lists the daily service volumes for different roadway types.

The values provided in Table II-3 are based on the methods and definitions provided in the Level of Service Manual prepared by the Florida Department of Transportation, 1998 update. The Level of Service Manual measures, or determines, level of service based on average travel speed consistent with the 1985 Highway Capacity Manual. Table 5-4 provides the general relationship between the level of service letters (A, B, C, D, E and F) and the annual average daily volumes on typical highways in Florida.

Peak Hour Analysis

Similar to the Link Analysis conducted for average daily traffic (ADT) conditions, the peak hour directional (PHD) analysis concentrates on peak hour directional volumes instead of average daily traffic volumes. Two-way peak hour directional service volumes are provided in Table 5-7 from the Florida Department of Transportation's Level of Service Manual 1998 Update. The methods and definitions are provided in the 1998 Highway Capacity Manual.

Transportation level of service (LOS) standards. Florida law requires transportation level of service standards be adopted for roads and public transit facilities within the local government's jurisdiction. Level of service standards for other transportation facilities, such as bikeways and airports, are optional. Broward County applies transportation LOS standards through its Concurrency Management System only to roadways and public transit.

Florida Intrastate Highway System. Rule 9J-5.0055(2)(c), FAC, requires local governments to adopt the LOS standards established by the Florida Department of Transportation by rule for facilities on the Florida Intrastate Highway System (FIHS). The following Table provides the generalized two-way peak hour volumes for these FIHS roadways. It is based on a LOS "D" standard for urbanized areas with population over 500,000.

Generalized Peak Hour Volumes, LOS "D"
Urban Principal Arterials (Limited Access)

ROADWAY	LINK	TWO-WAY PEAK HOUR VOLUMES	LANES
I-75	N. of Miami-Dade Co. Line to Sawgrass Xway	10,900	8
FTPK	N. of Miami-Dade Co. Line to Palm Beach Co. Line	8,200	6
I-595	Urban Boundary to SR 7	8,200	6
I-95	SR 7 to US 1	8,500	6

Source: Level of Service Manual, Table F-1 & F-3, Florida Department of Transportation, 1995.

Other non-local and non-municipal roadways. Rule 9J-5.0055(2)(c), FAC, requires local governments to adopt adequate LOS standards for local roads. Broward County proposes to adopt the generalized two-way peak hour volumes for Florida's Urbanized Areas at the LOS "D" standard, as shown in Table 3-41. In the 1989 Traffic Circulation Element, the roadway LOS "D" standard was measured by the average annual daily traffic (AADT) volumes; however, state

law now requires the LOS standard be measured by peak-hour volumes. The Town of Davie will continue to use the LOS "D" standard as the roadway concurrency standard. The two-way peak hour LOS "D" standard volumes are calculated by multiplying the ANNUAL Average Daily Traffic (AADT) volumes by the statewide average of 0.093. This average is also the Planning Analysis Hour Factor or K factor (K_{100}). According to the FDOT 1998 Level of Service Manual, it is "the 100th highest demand volume hour of the year for a roadway section" or "the ratio of the 100th highest volume hour of the year to the annual average daily traffic." Broward County is using the two-way peak hour volumes instead of the directional peak hour volumes because the FDOT also uses two-way peak hour volumes.

Generalized Two-Way Peak Hour Volumes
For LOS D

LANES	2 LANE UNDIV.	4 LANE DIV.	6 LANE DIV.	8 LANE DIV.	10 LANE DIV.	12 LANE
State 2-way Arterials Uninterrupted Flow	2,260	5,470	8,210	—	—	—
Interrupted Flow Class Ia (0 to 2.49)	1,550	3,320	5,000	6,120	—	—
Interrupted Flow Class Ib (2.5 to 4.5)	1,330	2,890	4,420	5,390	—	—
Interrupted Flow Class III	1,220	2,170	4,130	5,030	—	—
Freeways, Group 1	—	5,950	8,500	11,300	14,800	16,900
Freeways, Group 2	—	5,700	8,200	10,900	14,300	16,300
Non-State Roadways Major City/County Rd	1,290	2,820	4,320	—	—	—
Other Signalized Rds.	930	2,060	—	—	—	—

Source: Level of Service Manual, Table F-1, Florida Department of Transportation, 1998.

It should be mentioned that the FDOT Tables are "generalized" numbers and FDOT statisticians have suggested that if specific roadways are in question, a traffic engineer can prepare a study to determine more specific capacity numbers. Broward County continues to utilize ADT data for concurrency purposes and has established a schedule to convert to peak hour standards. The Town will coordinate with Broward County as the evolution occurs.

F:\A Project Files\'99-jobs\99-1104\trans-davie.doc

1998 LEVEL OF SERVICE

[redacted]

& Standards

[redacted]

Florida Department of Transportation
Systems Planning Office

Table 2 -1

STATEWIDE MINIMUM LEVEL OF SERVICE STANDARDS FOR THE STATE HIGHWAY SYSTEM[1]

	Rural Areas[2]	Transitioning Urbanized Areas[3], Urban Areas[4], or Communities[5]	Urbanized Areas[6] under 500,000	Urbanized Areas over 500,000	Roadways Parallel to Exclusive Transit Facilities[7]	Inside Transportation Concurrency Management Areas[8]	Constrained[9] and Backlogged[10] Roadways
INTRASTATE[11]							
Limited Access Highway (Freeway)[12]	B	C	C(D)	D(E)	D(E)	D(E)	Maintain[15]
Controlled Access Highway[13]	B	C	C	D	E	E	Maintain
OTHER STATE ROADS[14]							
Other Multilane	B	C	D	D	E	*[16]	Maintain
Two-Lane	C	C	D	D	E	*	Maintain

Level of service standards inside of parentheses apply to general use lanes only when exclusive through lanes exist.

1. The indicated **levels of service** designate lowest quality operating conditions for the 100th highest volume hour of the year in the predominant traffic flow direction from the present through a 20-year planning horizon. The 100th highest hour approximates the typical peak hour during the peak season. Definitions and measurement criteria used for minimum level of service standards are based on the most recent updates of the Transportation Research Board Highway Capacity Manual "Special Report 209". All level of service evaluations are to be based on "Special Report 209", or a methodology which has been accepted by FDOT as having comparable reliability.

2. **Rural areas** are areas not included in a transportation concurrency management area, an urbanized area, a transitioning urbanized area, an urban area or a community.

3. **Transitioning urbanized areas** are the areas outside urbanized areas that are planned to be included within the urbanized areas within the next 20 years based primarily on the U.S. Bureau of Census urbanized criteria of a population density of at least 1,000 people per square mile.

4. **Urban Areas** are places with a population of at least 5,000 and are not included in urbanized areas. The applicable boundary encompasses the 1990 urban area as well as the surrounding geographical area as agreed upon by FDOT, local government, and Federal Highway Administration (FHWA). The boundaries are commonly called FHWA Urban Area Boundaries and include areas expected to have medium density development before the next decennial census.

5. **Communities** are incorporated places outside urban or urbanized areas, or unincorporated developed areas having 500 population or more identified by local governments in their local government comprehensive plans and located outside of urban or urbanized areas.

6. **Urbanized areas** are the 1990 urbanized areas designated by the U.S. Bureau of Census as well as the surrounding geographical areas as agreed upon by the FDOT, Metropolitan Planning Organization (MPO), and Federal Highway Administration (FHWA), commonly called FHWA Urbanized Area Boundaries. The over or under 500,000 classifications distinguish urbanized areas with a population over or under 500,000 based on the 1990 U.S. Census.

7. **Roadways parallel to exclusive transit facilities** are roads generally parallel to and within one-half mile of a physically separated rail or roadway lane reserved for multi-passenger use by rail cars or buses serving large volumes of home/work trips during peak travel hours. Exclusive transit facilities do not include downtown people movers, or high occupancy vehicle lanes unless physically separated from other travel lanes.

8. **Transportation Concurrency Management Areas** are geographically compact areas designated in local government comprehensive plans where intensive development exists or is planned in a manner that will ensure an adequate level of mobility and further the achievement of identified important state planning goals and policies, including discouraging the proliferation of urban sprawl, encouraging the revitalization of existing downtowns and designated redevelopment areas, protecting natural resources, protecting historic resources, maximizing the efficient use of existing public facilities, and promoting public transit, bicycling, walking and other alternatives to the single occupant automobile. Transportation concurrency management areas may be established in a comprehensive plan in accordance with Rule 9J-5.0057, Florida Administrative Code.

9. **Constrained roadways** are roads on the State Highway System which FDOT has determined will not be expanded by the addition of two or more through lanes because of physical, environmental or policy constraints. Physical constraints primarily occur when intensive land use development is immediately adjacent to roads, thus making expansion costs prohibitive. Environmental and policy constraints primarily occur when decisions are made not to expand a road based on environmental, historical, archaeological, aesthetic or social impact considerations.

10. **Backlogged roadways** are roads on the State Highway System operating at a level of service below the minimum level of service standards, not programmed for construction in the first three years of FDOT's adopted work program or the five year schedule of improvements contained in a local government's capital improvements element, and not constrained.

11. **Intrastate** means the Florida Intrastate Highway System (FIHS) which comprises a statewide network of limited and controlled access highways. The primary function of the system is for high speed and high volume traffic movements within the state. Access to abutting land is subordinate to this function and such access must be prohibited or highly regulated. Highways included as part of this system are designated in the Florida Transportation Plan. **General use lanes** are intrastate roadway lanes not exclusively designated for long distance high speed travel. In urbanized areas general use lanes include high occupancy vehicle lanes not physically separated from other travel lanes. **Exclusive through lanes** are roadway lanes exclusively designated for intrastate travel, which are physically separated from general use lanes and to which access is highly regulated. These lanes may be used for high occupancy vehicles and express buses during peak hours if the level of service standards can be maintained.

12. **Limited access highways (freeways)** are multilane divided highways having a minimum of two lanes for exclusive use of traffic in each direction and full control of ingress and egress; this includes freeways and all fully controlled access roadways.

13. **Controlled access highways** are non-limited access arterial facilities where access connections, median openings and traffic signals are highly regulated. The standards shown are the ultimate standards to be achieved for controlled access facilities on the Florida Intrastate Highway System (FIHS) within a 20 year period. For rural two-lane FIHS facilities, the standard is "C" until such time as the facility is improved to four or more lanes when the "B" standard would apply. Signalized intersections are to be minimized on these facilities within 20 years making an uninterrupted flow standard generally applicable. Controlled access facilities on the FIHS currently not meeting the ultimate standards shall be allowed to remain on the FIHS with a "maintain" status.

14. **Other state roads** are roads on the State Highway System which are not part of the Florida Intrastate Highway System.

15. **Maintain** means continuing operating conditions at a level such that significant degradation does not occur based on conditions existing at the time of local government comprehensive plan adoption. For roadways in rural areas, transitioning urbanized areas, urban areas or communities, significant degradation means (1) an increase in average annual daily traffic volume of 5 percent above the maximum service volume, or (2) a reduction in operating speed for the peak direction in the 100th highest hour of 5 percent below the speed, of the adopted LOS standard. For roadways in urbanized areas, for roadways parallel to exclusive transit facilities, or for intrastate roadways in transportation concurrency management areas, significant degradation means (1) an increase in average annual daily traffic volume of 10 percent above the maximum service volume, or (2) a reduction in operating speed for the peak direction in the 100th highest hour of 10 percent below the speed, of the adopted LOS standard. For other state roads in transportation concurrency management areas, significant degradation means that amount defined in the transportation mobility element. For constrained roadways meeting or exceeding the level of service standards, "maintain" does not apply until the roadway is operating below the applicable minimum level of service standard.

16. * means the level of service standard will be set in a transportation mobility element that meets the requirements of Rule 9J-5.0057.

Table 5-4

GENERALIZED ANNUAL AVERAGE DAILY VOLUMES FOR FLORIDA'S URBANIZED AREAS*

STATE TWO-WAY ARTERIALS

UNINTERRUPTED FLOW

Unsignalized

Lanes/ Divided	Level of Service A	B	C	D	E
2 Undivided	8,900	13,900	18,900	24,800	33,100
4 Divided	21,500	35,800	50,100	60,100	71,600
6 Divided	32,200	53,700	75,200	90,200	107,400

INTERRUPTED FLOW

Class I (>0.00 to 1.99 signalized intersections per mile)

Lanes/ Divided	Level of Service A**	B	C	D***	E***
2 Undivided	N/A	10,800	15,600	16,600	16,600
4 Divided	N/A	23,500	33,200	35,000	35,000
6 Divided	N/A	35,800	49,900	52,500	52,500
8 Divided	N/A	45,300	61,400	64,400	64,400

Class II (2.00 to 4.50 signalized intersections per mile)

Lanes/ Divided	Level of Service A**	B**	C	D	E
2 Undivided	N/A	N/A	9,900	14,900	16,200
4 Divided	N/A	N/A	22,900	32,500	34,300
6 Divided	N/A	N/A	35,500	48,900	51,700
8 Divided	N/A	N/A	44,700	60,100	63,400

Class III (more than 4.50 signalized intersections per mile and not within primary city central business district of urbanized area over 500,000)

Lanes/ Divided	Level of Service A**	B**	C	D	E
2 Undivided	N/A	N/A	3,300	12,100	15,800
4 Divided	N/A	N/A	7,800	27,800	33,600
6 Divided	N/A	N/A	12,100	43,300	50,500
8 Divided	N/A	N/A	15,300	54,200	62,100

Class IV (more than 4.50 signalized intersections per mile and within primary city central business district of urbanized area over 500,000)

Lanes/ Divided	Level of Service A**	B**	C	D	E
2 Undivided	N/A	N/A	3,700	13,800	15,300
4 Divided	N/A	N/A	8,900	29,900	32,600
6 Divided	N/A	N/A	14,000	45,500	49,000
8 Divided	N/A	N/A	17,500	56,200	60,100

FREEWAYS

Group 1 (within urbanized area over 500,000 and leading to or passing within 5 miles of the primary city central business district)

Lanes	Level of Service A	B	C	D	E
4	21,200	34,300	51,500	66,200	81,700
6	32,600	52,700	79,000	101,600	125,400
8	44,500	71,800	107,800	138,600	171,100
10	55,600	89,800	134,700	173,200	213,800
12	65,200	105,400	158,100	203,200	250,900

Group 2 (within urbanized area and not in Group 1)

Lanes	Level of Service A	B	C	D	E
4	20,900	32,800	49,200	62,600	74,500
6	32,100	50,400	75,600	96,200	114,500
8	43,800	68,800	103,200	131,300	156,300
10	54,700	86,000	129,000	164,200	195,400
12	64,100	100,600	151,200	192,400	229,100

NON-STATE ROADWAYS

MAJOR CITY/COUNTY ROADWAYS

Lanes	Level of Service A**	B**	C	D	E
2 Undivided	N/A	N/A	8,600	14,600	16,000
4 Divided	N/A	N/A	19,800	31,700	33,900
6 Divided	N/A	N/A	30,800	47,800	51,000

OTHER SIGNALIZED ROADWAYS
(signalized intersection analysis)

Lanes	A**	B**	C	D	E
2 Undivided	N/A	N/A	4,800	10,900	11,900
4 Divided	N/A	N/A	11,600	23,800	25,400

ADJUSTMENTS

DIVIDED/UNDIVIDED

(alter corresponding two-way volume indicated percent)

Lanes	Median	Left Turn Bays	Adjustment Factors
2	Divided	Yes	+5%
2	Undivided	No	-20%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

ONE-WAY

(alter corresponding two-way volume indicated percent)

One-Way Lanes	Equivalent Two-Way Lanes	Adjustment Factors
2	4	- 40%
3	6	- 40%
4	8	- 40%
5	8	-25%

Source: The Florida Department of Transportation
Systems Planning Office
605 Suwannee Street - Mail Station 19
Tallahassee, Florida 32399-0450

http://www.dot.state.fl.us/planning

* The table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Values shown are annual average daily volumes (based on K100 factors, not peak-to-daily ratios) for levels of service, and are based on the 1997 Update to the Highway Capacity Manual and Florida traffic, roadway, and signalization data. The table's input value assumptions and level of service criteria appear on the following page.

** Cannot be achieved.

*** Volumes are comparable because intersection capacities have been reached.

September 1998

Table 5-4 (Continued)

INPUT VALUE ASSUMPTIONS

CHARACTERISTIC	STATE TWO-WAY ARTERIALS														
	UNINTERRUPTED		Class I			Class II			Class III			Class IV			
Number of Through Lanes	2 Ln	4-6 Ln	2 Ln	4-6 Ln	6 Ln	2 Ln	4-6 Ln	6 Ln	2 Ln	4-6 Ln	6 Ln	2 Ln	4-6 Ln	6 Ln	
Planning Analysis Hour Factor (K100)	0.091	0.091	0.093	0.093	0.093	0.093	0.093	0.093	0.092	0.092	0.092	0.092	0.092	0.092	
Directional Distribution Factor (D)	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	
Peak Hour Factor (PHF)	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	
Adjusted Saturation Flow Rate	1,850	2,000	1,850	1,850	1,700	1,850	1,850	1,700	1,850	1,850	1,700	1,800	1,800	1,650	
% Turns from Exclusive Lanes			12	12	12	12	12	12	12	12	12	12	12	12	
Urbanized, Transitioning/Urban, Rural	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Arterial Class			1	1	1	2	2	2	3	3	3	4	4	4	
Free Flow Speed (mph)	50	50	50	50	50	45	45	45	35	35	35	30	30	30	
Base Length of Arterial (mi.)			1	1	1	1	1	1	1	1	1	1	1	1	
Medians (Y/N)	N	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y	
Left Turn Bays (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Signalized Intersections			1	1	1	3	3	3	5	5	5	8	8	8	
Arrival Type			3	3	3	4	4	4	4	4	4	4	4	4	
Signal Type			A	A	A	S	S	S	S	S	S	S	S	S	
Cycle Length (C)			120	120	120	120	120	120	120	120	120	120	120	120	
Weighted Effective Green Ratio (g/C)			0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	

CHARACTERISTIC	FREEWAYS								Non-State Roadways			
	Group I				Group II				Major City / Co.		Other Signalized	
Number of Through Lanes	4 Ln	6 Ln	8-10 Ln	12 Ln	4 Ln	6 Ln	8-10 Ln	12 Ln	2 Ln	4-6 Ln	2 Ln	4-6 Ln
Planning Analysis Hour Factor (K100)	0.088	0.088	0.088	0.088	0.092	0.092	0.092	0.092	0.091	0.091	0.091	0.091
Directional Distribution Factor (D)	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568
Peak Hour Factor (PHF)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.925	0.925	0.925	0.925
Adjusted Saturation Flow Rate	2,150	2,200	2,250	2,200	2,050	2,100	2,150	2,100	1,850	1,850	1,800	1,800
% Turns from Exclusive Lanes									14	14	16	16
Urbanized, Transitioning/Urban, Rural									U	U	U	U
Arterial Class									2	2		
Free Flow Speed (mph)	60	60	60	60	65	65	65	65	40	40		
Base Length of Arterial (mi.)									1	1		
Medians (Y/N)									N	Y	N	Y
Left Turn Bays (Y/N)									Y	Y	Y	Y
Signalized Intersections									2.5	2.5		
Arrival Type									4	4	3	3
Signal Type									S	S	S	S
Cycle Length (C)									120	120	120	120
Weighted Effective Green Ratio (g/C)									0.41	0.41	0.31	0.31

LEVEL OF SERVICE THRESHOLDS

Level of Service	STATE TWO-WAY ARTERIALS											
	Uninterrupted (vol./cap.)	Class I (avg. travel speed)		Class II (avg. travel speed)		Class III (avg. travel speed)		Class IV (avg. travel speed)	
A	≤ 0.30	≥ 42	mph	≥ 35	mph	≥ 30	mph	≥ 25	mph
B	≤ 0.50	≥ 34	mph	≥ 28	mph	≥ 24	mph	≥ 19	mph
C	≤ 0.70	≥ 27	mph	≥ 22	mph	≥ 18	mph	≥ 13	mph
D	≤ 0.84	≥ 21	mph	≥ 17	mph	≥ 14	mph	≥ 9	mph
E	≤ 1.00	≥ 16	mph	≥ 13	mph	≥ 10	mph	≥ 7	mph
F	> 1.00	< 16	mph	< 13	mph	< 10	mph	< 7	mph

Level of Service	FREEWAYS		Non-State Roadways	
	Group I (vol./cap.)	Group II (vol./cap.)	Major City / Co. (avg. travel speed)	Other Signalized (control delay)
A	≤ 0.26	≤ 0.28	Same as State Arterials	≤ 10 sec
B	≤ 0.42	≤ 0.44		≤ 20 sec
C	≤ 0.63	≤ 0.66		≤ 35 sec
D	≤ 0.81	≤ 0.84		≤ 55 sec
E	≤ 1.00	≤ 1.00		≤ 80 sec
F	> 1.00	> 1.00		> 80 sec

Table 5-7

GENERALIZED TWO WAY PEAK HOUR VOLUMES FOR FLORIDA'S URBANIZED AREAS*

STATE TWO-WAY ARTERIALS

UNINTERRUPTED FLOW

Unsignalized

Lanes/ Divided	Level of Service A	B	C	D	E
2 Undivided	810	1,270	1,720	2,260	3,010
4 Divided	1,950	3,260	4,560	5,470	6,510
6 Divided	2,930	4,890	6,840	8,210	9,770

INTERRUPTED FLOW

Class I (>0.00 to 1.99 signalized intersections per mile)

Lanes/ Divided	Level of Service A**	B	C	D***	E***
2 Undivided	N/A	1,000	1,450	1,550	1,550
4 Divided	N/A	2,190	3,080	3,260	3,260
6 Divided	N/A	3,330	4,640	4,890	4,890
8 Divided	N/A	4,210	5,710	5,990	5,990

Class II (2.00 to 4.50 signalized intersections per mile)

Lanes/ Divided	Level of Service A**	B**	C	D	E
2 Undivided	N/A	N/A	920	1,390	1,500
4 Divided	N/A	N/A	2,130	3,020	3,190
6 Divided	N/A	N/A	3,300	4,550	4,810
8 Divided	N/A	N/A	4,160	5,590	5,900

Class III (more than 4.50 signalized intersections per mile and not within primary city central business district of urbanized area over 500,000)

Lanes/ Divided	Level of Service A**	B**	C	D	E
2 Undivided	N/A	N/A	310	1,110	1,450
4 Divided	N/A	N/A	720	2,560	3,090
6 Divided	N/A	N/A	1,120	3,980	4,650
8 Divided	N/A	N/A	1,410	4,990	5,710

Class IV (more than 4.50 signalized intersections per mile and within primary city central business district of urbanized area over 500,000)

Lanes/ Divided	Level of Service A**	B**	C	D	E
2 Undivided	N/A	N/A	340	1,270	1,410
4 Divided	N/A	N/A	820	2,750	2,990
6 Divided	N/A	N/A	1,290	4,190	4,510
8 Divided	N/A	N/A	1,610	5,170	5,530

FREEWAYS

Group 1 (within urbanized area over 500,000 and leading to or passing within 5 miles of the primary city central business district)

Lanes	Level of Service A	B	C	D	E
4	1,900	3,000	4,500	5,800	7,200
6	2,900	4,600	7,000	8,900	11,000
8	3,900	6,300	9,500	12,200	15,100
10	4,900	7,900	11,900	15,200	18,800
12	5,700	9,300	13,900	17,900	22,100

Group 2 (within urbanized area and not in Group 1)

Lanes	Level of Service A	B	C	D	E
4	1,900	3,000	4,500	5,800	6,900
6	3,000	4,600	7,000	8,900	10,500
8	4,000	6,300	9,500	12,100	14,400
10	5,000	7,900	11,900	15,100	18,000
12	5,900	9,300	13,900	17,700	21,100

NON-STATE ROADWAYS

MAJOR CITY/COUNTY ROADWAYS

Lanes	Level of Service A**	B**	C	D	E
2 Undivided	N/A	N/A	780	1,330	1,450
4 Divided	N/A	N/A	1,810	2,880	3,080
6 Divided	N/A	N/A	2,800	4,350	4,640

OTHER SIGNALIZED ROADWAYS
(signalized intersection analysis)

Lanes	A**	B**	C	D	E
2 Undivided	N/A	N/A	430	990	1,090
4 Divided	N/A	N/A	1,060	2,170	2,310

ADJUSTMENTS

DIVIDED/UNDIVIDED

(alter corresponding two-way volume indicated percent)

Lanes	Median	Left Turn Bays	Adjustment Factors
2	Divided	Yes	+5%
2	Undivided	No	-20%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

ONE-WAY

(alter corresponding two-way volume indicated percent)

One-Way Lanes	Equivalent Two-Way Lanes	Adjustment Factors
2	4	- 40%
3	6	- 40%
4	8	- 40%
5	8	-25%

Source: The Florida Department of Transportation
Systems Planning Office
605 Suwannee Street - Mail Station 19
Tallahassee, Florida 32399-0450

http://www.dot.state.fl.us/planning

* The table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Values shown are two-way hourly maximum volumes for levels of service, and are based on the 1997 Update to the Highway Capacity Manual and Florida traffic, roadway, and signalization data. To convert to annual average daily traffic volumes, these volumes must be divided by an appropriate K100 factor (not peak-to-daily ratio). The table's input value assumptions and level of service criteria appear on the following page.

** Cannot be achieved.

*** Volumes are comparable because intersection capacities have been reached.

September 1998

Table 5-7 (Continued)

INPUT VALUE ASSUMPTIONS

CHARACTERISTIC	STATE TWO-WAY ARTERIALS														FREEWAYS								Non-State Roadways			
	UNINTERRUPTED		Class I			Class II			Class III			Class IV			Group I				Group II				Major City / Co.		Other Signalized	
Number of Through Lanes	2 Ln	4-6 Ln	2 Ln	4-6 Ln	8 Ln	2 Ln	4-6 Ln	8 Ln	2 Ln	4-6 Ln	8 Ln	2 Ln	4-6 Ln	8 Ln	4 Ln	6 Ln	8-10 Ln	12 Ln	4 Ln	6 Ln	8-10 Ln	12 Ln	2 Ln	4-6 Ln	2 Ln	4-6 Ln
Planning Analysis Hour Factor (K100)	0.091	0.091	0.093	0.093	0.093	0.093	0.093	0.093	0.092	0.092	0.092	0.092	0.092	0.092	0.088	0.088	0.088	0.088	0.092	0.092	0.092	0.092	0.091	0.091	0.091	0.091
Directional Distribution Factor (D)	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568	0.568
Peak Hour Factor (PHF)	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.925	0.925	0.925	0.925
Adjusted Saturation Flow Rate	1,850	2,000	1,850	1,850	1,700	1,850	1,850	1,700	1,850	1,850	1,700	1,800	1,800	1,650	2,150	2,200	2,250	2,200	2,050	2,100	2,150	2,100	1,850	1,850	1,800	1,800
% Turns from Exclusive Lanes			12	12	12	12	12	12	12	12	12	12	12	12									14	14	16	16
Urbanized, Transitioning/Urban, Rural	U	U	U	U	U	U	U	U	U	U	U	U	U	U									U	U	U	U
Arterial Class			1	1	1	2	2	2	3	3	3	4	4	4									2	2		
Free Flow Speed (mph)	50	50	50	50	50	45	45	45	35	35	35	30	30	30	60	60	60	60	65	65	65	65	40	40		
Base Length of Arterial (mi.)			1	1	1	1	1	1	1	1	1	1	1	1									1	1		
Medians (Y/N)	N	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y									N	Y	N	Y
Left Turn Bays (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y									Y	Y	Y	Y
Signalized Intersections			1	1	1	3	3	3	5	5	5	8	8	8									2.5	2.5		
Arrival Type			3	3	3	4	4	4	4	4	4	4	4	4									4	4	3	3
Signal Type			A	A	A	S	S	S	S	S	S	S	S	S									S	S	S	S
Cycle Length (C)			120	120	120	120	120	120	120	120	120	120	120	120									120	120	120	120
Weighted Effective Green Ratio (g/C)			0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44									0.41	0.41	0.31	0.31

LEVEL OF SERVICE THRESHOLDS

Level of Service	STATE TWO-WAY ARTERIALS					FREEWAYS		Non-State Roadways	
	Uninterrupted (vol./cap.)	Class I (avg. travel speed)	Class II (avg. travel speed)	Class III (avg. travel speed)	Class IV (avg. travel speed)	Group I (vol./cap.)	Group II (vol./cap.)	Major City / Co. (avg. travel speed)	Other Signalized (control delay)
A	≤ 0.30	≥ 42 mph	≥ 35 mph	≥ 30 mph	≥ 25 mph	≤ 0.26	≤ 0.28	Same as State Arterials	≤ 10 sec
B	≤ 0.50	≥ 34 mph	≥ 28 mph	≥ 24 mph	≥ 19 mph	≤ 0.42	≤ 0.44		≤ 20 sec
C	≤ 0.70	≥ 27 mph	≥ 22 mph	≥ 18 mph	≥ 13 mph	≤ 0.63	≤ 0.66		≤ 35 sec
D	≤ 0.84	≥ 21 mph	≥ 17 mph	≥ 14 mph	≥ 9 mph	≤ 0.81	≤ 0.84		≤ 55 sec
E	≤ 1.00	≥ 16 mph	≥ 13 mph	≥ 10 mph	≥ 7 mph	≤ 1.00	≤ 1.00		≤ 80 sec
F	> 1.00	< 16 mph	< 13 mph	< 10 mph	< 7 mph	> 1.00	> 1.00		> 80 sec

Map No. 3-7

BROWARD COUNTY FUTURE PUBLIC TRANSIT, RAILWAY, & INTERMODAL FACILITIES MAP

BROWARD COUNTY

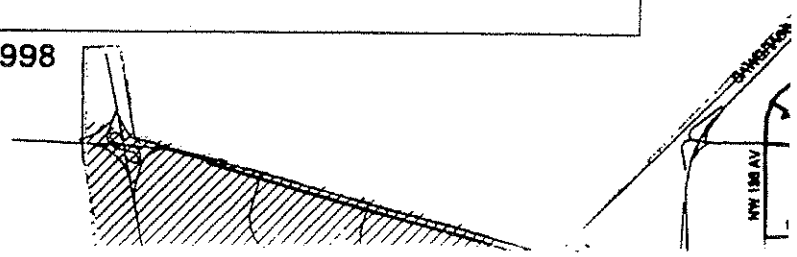
Legend

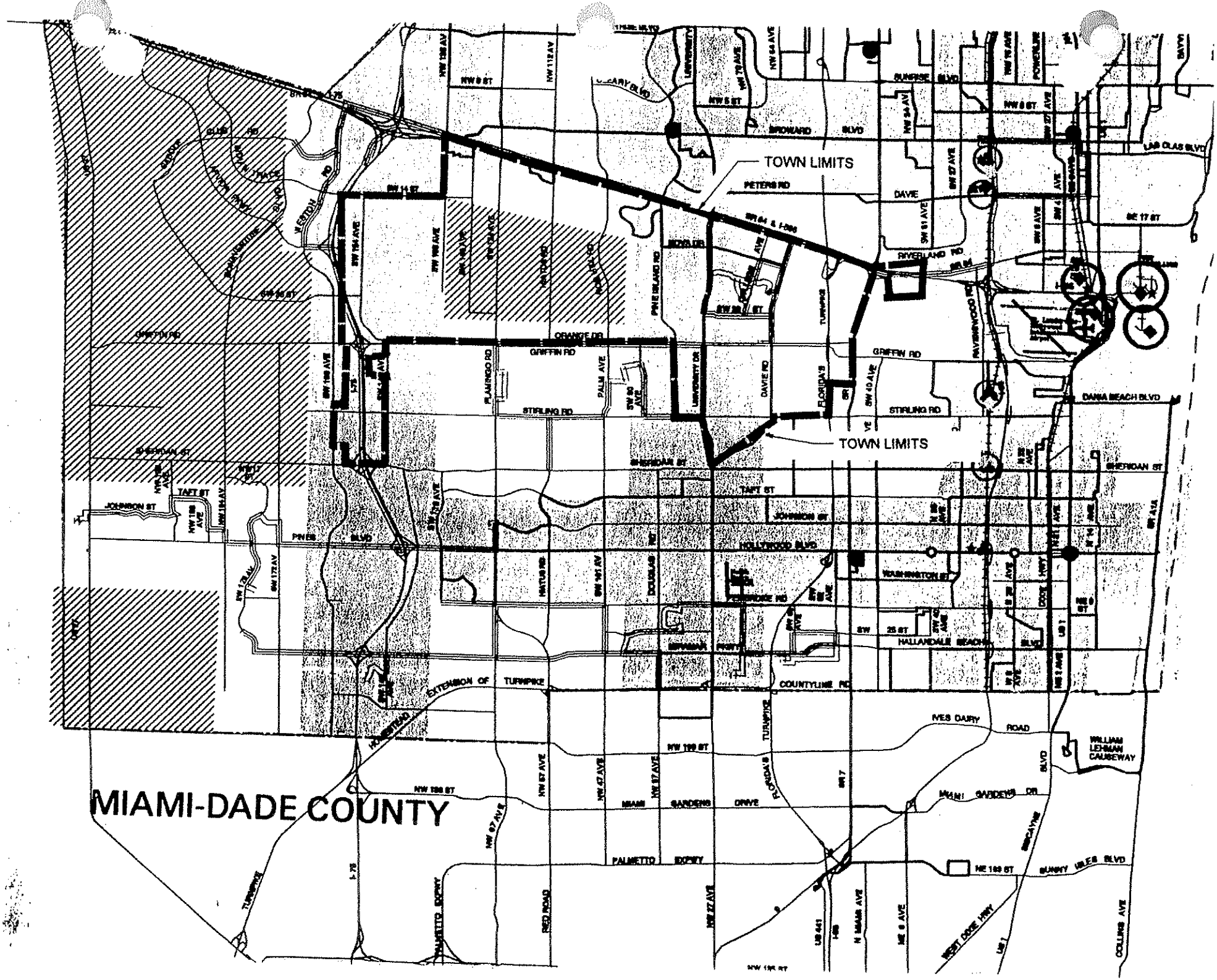
- EXISTING TRANSIT ROUTE
- COMMUNITY BUS SERVICE
- RAILROAD
- FUTURE TRANSIT SERVICE AREA
- PRIORITY TRANSIT CORRIDOR
- MAJOR BUS TRANSFER LOCATION
- MAJOR BUS TRANSFER TERMINAL
- FUTURE MAJOR TRANSFER STATION
- BCT ADMINISTRATION AND MAINTENANCE FACILITY
- TRI-RAIL STATION
- INTERMODAL FACILITY
- FREIGHT RAIL INTERMODAL FACILITY
- PASSENGER RAIL INTERMODAL FACILITY
- TRUCK TRANSFER SERVICES
- BUS/SHUTTLE SERVICE
- AIR PASSENGER
- AIR FREIGHT
- WATER PASSENGER
- WATER FREIGHT

N

0 1 2
SCALE IN MILES

JULY, 1998




TOWN LIMITS
TOWN LIMITS
MIAMI-DADE COUNTY
BROWARD BLVD
SUNRISE BLVD
LAS OLAS BLVD
PETERS RD
DAVIE
RIVERLAND RD
ORANGE DR
GRIFFIN RD
STIRLING RD
SHERIDAN ST
TAFT ST
JOHNSON ST
PINES BLVD
HOLLYWOOD BLVD
WASHINGTON ST
HALLANDALE BEACH BLVD
DANIA BEACH BLVD
COUNTYLINE RD
IVES DAIRY ROAD
WILLIAM LEHMAN CAUSEWAY
MIAMI GARDENS DRIVE
PALMETTO EXPWY
SUNNY ISLES BLVD
NW 199 ST
NE 163 ST
NE 17 ST
EXTENSION OF TURNPIKE
HOMESTEAD
FLORIDA'S TURNPIKE
I-75
I-95
I-595
I-95 & I-595
NW 67 AVE
NW 57 AVE
NW 27 AVE
NW 7
NW 7 AVE
NW 17 AVE
NW 31 AVE
NW 41 AVE
NW 51 AVE
NW 61 AVE
NW 71 AVE
NW 81 AVE
NW 91 AVE
NW 101 AVE
NW 121 AVE
NW 141 AVE
NW 161 AVE
NW 171 AVE
NW 181 AVE
NW 191 AVE
NW 201 AVE
NW 211 AVE
NW 221 AVE
NW 231 AVE
NW 241 AVE
NW 251 AVE
NW 261 AVE
NW 271 AVE
NW 281 AVE
NW 291 AVE
NW 301 AVE
NW 311 AVE
NW 321 AVE
NW 331 AVE
NW 341 AVE
NW 351 AVE
NW 361 AVE
NW 371 AVE
NW 381 AVE
NW 391 AVE
NW 401 AVE
NW 411 AVE
NW 421 AVE
NW 431 AVE
NW 441 AVE
NW 451 AVE
NW 461 AVE
NW 471 AVE
NW 481 AVE
NW 491 AVE
NW 501 AVE
NW 511 AVE
NW 521 AVE
NW 531 AVE
NW 541 AVE
NW 551 AVE
NW 561 AVE
NW 571 AVE
NW 581 AVE
NW 591 AVE
NW 601 AVE
NW 611 AVE
NW 621 AVE
NW 631 AVE
NW 641 AVE
NW 651 AVE
NW 661 AVE
NW 671 AVE
NW 681 AVE
NW 691 AVE
NW 701 AVE
NW 711 AVE
NW 721 AVE
NW 731 AVE
NW 741 AVE
NW 751 AVE
NW 761 AVE
NW 771 AVE
NW 781 AVE
NW 791 AVE
NW 801 AVE
NW 811 AVE
NW 821 AVE
NW 831 AVE
NW 841 AVE
NW 851 AVE
NW 861 AVE
NW 871 AVE
NW 881 AVE
NW 891 AVE
NW 901 AVE
NW 911 AVE
NW 921 AVE
NW 931 AVE
NW 941 AVE
NW 951 AVE
NW 961 AVE
NW 971 AVE
NW 981 AVE
NW 991 AVE
NW 1001 AVE
NW 1011 AVE
NW 1021 AVE
NW 1031 AVE
NW 1041 AVE
NW 1051 AVE
NW 1061 AVE
NW 1071 AVE
NW 1081 AVE
NW 1091 AVE
NW 1101 AVE
NW 1111 AVE
NW 1121 AVE
NW 1131 AVE
NW 1141 AVE
NW 1151 AVE
NW 1161 AVE
NW 1171 AVE
NW 1181 AVE
NW 1191 AVE
NW 1201 AVE
NW 1211 AVE
NW 1221 AVE
NW 1231 AVE
NW 1241 AVE
NW 1251 AVE
NW 1261 AVE
NW 1271 AVE
NW 1281 AVE
NW 1291 AVE
NW 1301 AVE
NW 1311 AVE
NW 1321 AVE
NW 1331 AVE
NW 1341 AVE
NW 1351 AVE
NW 1361 AVE
NW 1371 AVE
NW 1381 AVE
NW 1391 AVE
NW 1401 AVE
NW 1411 AVE
NW 1421 AVE
NW 1431 AVE
NW 1441 AVE
NW 1451 AVE
NW 1461 AVE
NW 1471 AVE
NW 1481 AVE
NW 1491 AVE
NW 1501 AVE
NW 1511 AVE
NW 1521 AVE
NW 1531 AVE
NW 1541 AVE
NW 1551 AVE
NW 1561 AVE
NW 1571 AVE
NW 1581 AVE
NW 1591 AVE
NW 1601 AVE
NW 1611 AVE
NW 1621 AVE
NW 1631 AVE
NW 1641 AVE
NW 1651 AVE
NW 1661 AVE
NW 1671 AVE
NW 1681 AVE
NW 1691 AVE
NW 1701 AVE
NW 1711 AVE
NW 1721 AVE
NW 1731 AVE
NW 1741 AVE
NW 1751 AVE
NW 1761 AVE
NW 1771 AVE
NW 1781 AVE
NW 1791 AVE
NW 1801 AVE
NW 1811 AVE
NW 1821 AVE
NW 1831 AVE
NW 1841 AVE
NW 1851 AVE
NW 1861 AVE
NW 1871 AVE
NW 1881 AVE
NW 1891 AVE
NW 1901 AVE
NW 1911 AVE
NW 1921 AVE
NW 1931 AVE
NW 1941 AVE
NW 1951 AVE
NW 1961 AVE
NW 1971 AVE
NW 1981 AVE
NW 1991 AVE
NW 2001 AVE
NW 2011 AVE
NW 2021 AVE
NW 2031 AVE
NW 2041 AVE
NW 2051 AVE
NW 2061 AVE
NW 2071 AVE
NW 2081 AVE
NW 2091 AVE
NW 2101 AVE
NW 2111 AVE
NW 2121 AVE
NW 2131 AVE
NW 2141 AVE
NW 2151 AVE
NW 2161 AVE
NW 2171 AVE
NW 2181 AVE
NW 2191 AVE
NW 2201 AVE
NW 2211 AVE
NW 2221 AVE
NW 2231 AVE
NW 2241 AVE
NW 2251 AVE
NW 2261 AVE
NW 2271 AVE
NW 2281 AVE
NW 2291 AVE
NW 2301 AVE
NW 2311 AVE
NW 2321 AVE
NW 2331 AVE
NW 2341 AVE
NW 2351 AVE
NW 2361 AVE
NW 2371 AVE
NW 2381 AVE
NW 2391 AVE
NW 2401 AVE
NW 2411 AVE
NW 2421 AVE
NW 2431 AVE
NW 2441 AVE
NW 2451 AVE
NW 2461 AVE
NW 2471 AVE
NW 2481 AVE
NW 2491 AVE
NW 2501 AVE
NW 2511 AVE
NW 2521 AVE
NW 2531 AVE
NW 2541 AVE
NW 2551 AVE
NW 2561 AVE
NW 2571 AVE
NW 2581 AVE
NW 2591 AVE
NW 2601 AVE
NW 2611 AVE
NW 2621 AVE
NW 2631 AVE
NW 2641 AVE
NW 2651 AVE
NW 2661 AVE
NW 2671 AVE
NW 2681 AVE
NW 2691 AVE
NW 2701 AVE
NW 2711 AVE
NW 2721 AVE
NW 2731 AVE
NW 2741 AVE
NW 2751 AVE
NW 2761 AVE
NW 2771 AVE
NW 2781 AVE
NW 2791 AVE
NW 2801 AVE
NW 2811 AVE
NW 2821 AVE
NW 2831 AVE
NW 2841 AVE
NW 2851 AVE
NW 2861 AVE
NW 2871 AVE
NW 2881 AVE
NW 2891 AVE
NW 2901 AVE
NW 2911 AVE
NW 2921 AVE
NW 2931 AVE
NW 2941 AVE
NW 2951 AVE
NW 2961 AVE
NW 2971 AVE
NW 2981 AVE
NW 2991 AVE
NW 3001 AVE
NW 3011 AVE
NW 3021 AVE
NW 3031 AVE
NW 3041 AVE
NW 3051 AVE
NW 3061 AVE
NW 3071 AVE
NW 3081 AVE
NW 3091 AVE
NW 3101 AVE
NW 3111 AVE
NW 3121 AVE
NW 3131 AVE
NW 3141 AVE
NW 3151 AVE
NW 3161 AVE
NW 3171 AVE
NW 3181 AVE
NW 3191 AVE
NW 3201 AVE
NW 3211 AVE
NW 3221 AVE
NW 3231 AVE
NW 3241 AVE
NW 3251 AVE
NW 3261 AVE
NW 3271 AVE
NW 3281 AVE
NW 3291 AVE
NW 3301 AVE
NW 3311 AVE
NW 3321 AVE
NW 3331 AVE
NW 3341 AVE
NW 3351 AVE
NW 3361 AVE
NW 3371 AVE
NW 3381 AVE
NW 3391 AVE
NW 3401 AVE
NW 3411 AVE
NW 3421 AVE
NW 3431 AVE
NW 3441 AVE
NW 3451 AVE
NW 3461 AVE
NW 3471 AVE
NW 3481 AVE
NW 3491 AVE
NW 3501 AVE
NW 3511 AVE
NW 3521 AVE
NW 3531 AVE
NW 3541 AVE
NW 3551 AVE
NW 3561 AVE
NW 3571 AVE
NW 3581 AVE
NW 3591 AVE
NW 3601 AVE
NW 3611 AVE
NW 3621 AVE
NW 3631 AVE
NW 3641 AVE
NW 3651 AVE
NW 3661 AVE
NW 3671 AVE
NW 3681 AVE
NW 3691 AVE
NW 3701 AVE
NW 3711 AVE
NW 3721 AVE
NW 3731 AVE
NW 3741 AVE
NW 3751 AVE
NW 3761 AVE
NW 3771 AVE
NW 3781 AVE
NW 3791 AVE
NW 3801 AVE
NW 3811 AVE
NW 3821 AVE
NW 3831 AVE
NW 3841 AVE
NW 3851 AVE
NW 3861 AVE
NW 3871 AVE
NW 3881 AVE
NW 3891 AVE
NW 3901 AVE
NW 3911 AVE
NW 3921 AVE
NW 3931 AVE
NW 3941 AVE
NW 3951 AVE
NW 3961 AVE
NW 3971 AVE
NW 3981 AVE
NW 3991 AVE
NW 4001 AVE
NW 4011 AVE
NW 4021 AVE
NW 4031 AVE
NW 4041 AVE
NW 4051 AVE
NW 4061 AVE
NW 4071 AVE
NW 4081 AVE
NW 4091 AVE
NW 4101 AVE
NW 4111 AVE
NW 4121 AVE
NW 4131 AVE
NW 4141 AVE
NW 4151 AVE
NW 4161 AVE
NW 4171 AVE
NW 4181 AVE
NW 4191 AVE
NW 4201 AVE
NW 4211 AVE
NW 4221 AVE
NW 4231 AVE
NW 4241 AVE
NW 4251 AVE
NW 4261 AVE
NW 4271 AVE
NW 4281 AVE
NW 4291 AVE
NW 4301 AVE
NW 4311 AVE
NW 4321 AVE
NW 4331 AVE
NW 4341 AVE
NW 4351 AVE
NW 4361 AVE
NW 4371 AVE
NW 4381 AVE
NW 4391 AVE
NW 4401 AVE
NW 4411 AVE
NW 4421 AVE
NW 4431 AVE
NW 4441 AVE
NW 4451 AVE
NW 4461 AVE
NW 4471 AVE
NW 4481 AVE
NW 4491 AVE
NW 4501 AVE
NW 4511 AVE
NW 4521 AVE
NW 4531 AVE
NW 4541 AVE
NW 4551 AVE
NW 4561 AVE
NW 4571 AVE
NW 4581 AVE
NW 4591 AVE
NW 4601 AVE
NW 4611 AVE
NW 4621 AVE
NW 4631 AVE
NW 4641 AVE
NW 4651 AVE
NW 4661 AVE
NW 4671 AVE
NW 4681 AVE
NW 4691 AVE
NW 4701 AVE
NW 4711 AVE
NW 4721 AVE
NW 4731 AVE
NW 4741 AVE
NW 4751 AVE
NW 4761 AVE
NW 4771 AVE
NW 4781 AVE
NW 4791 AVE
NW 4801 AVE
NW 4811 AVE
NW 4821 AVE
NW 4831 AVE
NW 4841 AVE
NW 4851 AVE
NW 4861 AVE
NW 4871 AVE
NW 4881 AVE
NW 4891 AVE
NW 4901 AVE
NW 4911 AVE
NW 4921 AVE
NW 4931 AVE
NW 4941 AVE
NW 4951 AVE
NW 4961 AVE
NW 4971 AVE
NW 4981 AVE
NW 4991 AVE
NW 5001 AVE
NW 5011 AVE
NW 5021 AVE
NW 5031 AVE
NW 5041 AVE
NW 5051 AVE
NW 5061 AVE
NW 5071 AVE
NW 5081 AVE
NW 5091 AVE
NW 5101 AVE
NW 5111 AVE
NW 5121 AVE
NW 5131 AVE
NW 5141 AVE
NW 5151 AVE
NW 5161 AVE
NW 5171 AVE
NW 5181 AVE
NW 5191 AVE
NW 5201 AVE
NW 5211 AVE
NW 5221 AVE
NW 5231 AVE
NW 5241 AVE
NW 5251 AVE
NW 5261 AVE
NW 5271 AVE
NW 5281 AVE
NW 5291 AVE
NW 5301 AVE
NW 5311 AVE
NW 5321 AVE
NW 5331 AVE
NW 5341 AVE
NW 5351 AVE
NW 5361 AVE
NW 5371 AVE
NW 5381 AVE
NW 5391 AVE
NW 5401 AVE
NW 5411 AVE
NW 5421 AVE
NW 5431 AVE
NW 5441 AVE
NW 5451 AVE
NW 5461 AVE
NW 5471 AVE
NW 5481 AVE
NW 5491 AVE
NW 5501 AVE
NW 5511 AVE
NW 5521 AVE
NW 5531 AVE
NW 5541 AVE
NW 5551 AVE
NW 5561 AVE
NW 5571 AVE
NW 5581 AVE
NW 5591 AVE
NW 5601 AVE
NW 5611 AVE
NW 5621 AVE
NW 5631 AVE
NW 5641 AVE
NW 5651 AVE
NW 5661 AVE
NW 5671 AVE
NW 5681 AVE
NW 5691 AVE
NW 5701 AVE
NW 5711 AVE
NW 5721 AVE
NW 5731 AVE
NW 5741 AVE
NW 5751 AVE
NW 5761 AVE
NW 5771 AVE
NW 5781 AVE
NW 5791 AVE
NW 5801 AVE
NW 5811 AVE
NW 5821 AVE
NW 5831 AVE
NW 5841 AVE
NW 5851 AVE
NW 5861 AVE
NW 5871 AVE
NW 5881 AVE
NW 5891 AVE
NW 5901 AVE
NW 5911 AVE
NW 5921 AVE
NW 5931 AVE
NW 5941 AVE
NW 5951 AVE
NW 5961 AVE
NW 5971 AVE
NW 5981 AVE
NW 5991 AVE
NW 6001 AVE
NW 6011 AVE
NW 6021 AVE
NW 6031 AVE
NW 6041 AVE
NW 6051 AVE
NW 6061 AVE
NW 6071 AVE
NW 6081 AVE
NW 6091 AVE
NW 6101 AVE
NW 6111 AVE
NW 6121 AVE
NW 6131 AVE
NW 6141 AVE
NW 6151 AVE
NW 6161 AVE
NW 6171 AVE
NW 6181 AVE
NW 6191 AVE
NW 6201 AVE
NW 6211 AVE
NW 6221 AVE
NW 6231 AVE
NW 6241 AVE
NW 6251 AVE
NW 6261 AVE
NW 6271 AVE
NW 6281 AVE
NW 6291 AVE
NW 6301 AVE
NW 6311 AVE
NW 6321 AVE
NW 6331 AVE
NW 6341 AVE
NW 6351 AVE
NW 6361 AVE
NW 6371 AVE
NW 6381 AVE
NW 6391 AVE
NW 6401 AVE
NW 6411 AVE
NW 6421 AVE
NW 6431 AVE
NW 6441 AVE
NW 6451 AVE
NW 6461 AVE
NW 6471 AVE
NW 6481 AVE
NW 6491 AVE
NW 6501 AVE
NW 6511 AVE
NW 6521 AVE
NW 6531 AVE
NW 6541 AVE
NW 6551 AVE
NW 6561 AVE
NW 6571 AVE
NW 6581 AVE
NW 6591 AVE
NW 6601 AVE
NW 6611 AVE
NW 6621 AVE
NW 6631 AVE
NW 6641 AVE
NW 6651 AVE
NW 6661 AVE
NW 6671 AVE
NW 6681 AVE
NW 6691 AVE
NW 6701 AVE
NW 6711 AVE
NW 6721 AVE
NW 6731 AVE
NW 6741 AVE
NW 6751 AVE
NW 6761 AVE
NW 6771 AVE
NW 6781 AVE
NW 6791 AVE
NW 6801 AVE
NW 6811 AVE
NW 6821 AVE
NW 6831 AVE
NW 6841 AVE
NW 6851 AVE
NW 6861 AVE
NW 6871 AVE
NW 6881 AVE
NW 6891 AVE
NW 6901 AVE
NW 6911 AVE
NW 6921 AVE
NW 6931 AVE
NW 6941 AVE
NW 6951 AVE
NW 6961 AVE
NW 6971 AVE
NW 6981 AVE
NW 6991 AVE
NW 7001 AVE
NW 7011 AVE
NW 7021 AVE
NW 7031 AVE
NW 7041 AVE
NW 7051 AVE
NW 7061 AVE
NW 7071 AVE
NW 7081 AVE
NW 7091 AVE
NW 7101 AVE
NW 7111 AVE
NW 7121 AVE
NW 7131 AVE
NW 7141 AVE
NW 7151 AVE
NW 7161 AVE
NW 7171 AVE
NW 7181 AVE
NW 7191 AVE
NW 7201 AVE
NW 7211 AVE
NW 7221 AVE
NW 7231 AVE
NW 7241 AVE
NW 7251 AVE
NW 7261 AVE
NW 7271 AVE
NW 7281 AVE
NW 7291 AVE
NW 7301 AVE
NW 7311 AVE
NW 7321 AVE
NW 7331 AVE
NW 7341 AVE
NW 7351 AVE
NW 7361 AVE
NW 7371 AVE
NW 7381 AVE
NW 7391 AVE
NW 7401 AVE
NW 7411 AVE
NW 7421 AVE
NW 7431 AVE
NW 7441 AVE
NW 7451 AVE
NW 7461 AVE
NW 7471 AVE
NW 7481 AVE
NW 7491 AVE
NW 7501 AVE
NW 7511 AVE
NW 7521 AVE
NW 7531 AVE
NW 7541 AVE
NW 7551 AVE
NW 7561 AVE
NW 7571 AVE
NW 7581 AVE
NW 7591 AVE
NW 7601 AVE
NW 7611 AVE
NW 7621 AVE
NW 7631 AVE
NW 7641 AVE
NW 7651 AVE
NW 7661 AVE
NW 7671 AVE
NW 7681 AVE
NW 7691 AVE
NW 7701 AVE
NW 7711 AVE
NW 7721 AVE
NW 7731 AVE
NW 7741 AVE
NW 7751 AVE
NW 7761 AVE
NW 7771 AVE
NW 7781 AVE
NW 7791 AVE
NW 7801 AVE
NW 7811 AVE
NW 7821 AVE
NW 7831 AVE
NW 7841 AVE
NW 7851 AVE
NW 7861 AVE
NW 7871 AVE
NW 7881 AVE
NW 7891 AVE
NW 7901 AVE
NW 7911 AVE
NW 7921 AVE
NW 7931 AVE
NW 7941 AVE
NW 7951 AVE
NW 7961 AVE
NW 7971 AVE
NW 7981 AVE
NW 7991 AVE
NW 8001 AVE
NW 8011 AVE
NW 8021 AVE
NW 8031 AVE
NW 8041 AVE
NW 8051 AVE
NW 8061 AVE
NW 8071 AVE
NW 8081 AVE
NW 8091 AVE
NW 8101 AVE
NW 8111 AVE
NW 8121 AVE
NW 8131 AVE
NW 8141 AVE
NW 8151 AVE
NW 8161 AVE
NW 8171 AVE
NW 8181 AVE
NW 8191 AVE
NW 8201 AVE
NW 8211 AVE
NW 8221 AVE
NW 8231 AVE
NW 8241 AVE
NW 8251 AVE
NW 8261 AVE
NW 8271 AVE
NW 8281 AVE
NW 8291 AVE
NW 8301 AVE
NW 8311 AVE
NW 8321 AVE
NW 8331 AVE
NW 8341 AVE
NW 8351 AVE
NW 8361 AVE
NW 8371 AVE
NW 8381 AVE
NW 8391 AVE
NW 8401 AVE
NW 8411 AVE
NW 8421 AVE
NW 8431 AVE
NW 8441 AVE
NW 8451 AVE
NW 8461 AVE
NW 8471 AVE
NW 8481 AVE
NW 8491 AVE
NW 8501 AVE
NW 8511 AVE
NW 8521 AVE
NW 8531 AVE
NW 8541 AVE
NW 8551 AVE
NW 8561 AVE
NW 8571 AVE
NW 8581 AVE
NW 8591 AVE
NW 8601 AVE
NW 8611 AVE
NW 8621 AVE
NW 8631 AVE
NW 8641 AVE
NW 8651 AVE
NW 8661 AVE
NW 8671 AVE
NW 8681 AVE
NW 8691 AVE
NW 8701 AVE
NW 8711 AVE
NW 8721 AVE
NW 8731 AVE
NW 8741 AVE
NW 8751 AVE
NW 8761 AVE
NW 8771 AVE
NW 8781 AVE
NW 8791 AVE
NW 8801 AVE
NW 8811 AVE
NW 8821 AVE
NW 8831 AVE
NW 8841 AVE
NW 8851 AVE
NW 8861 AVE
NW 8871 AVE
NW 8881 AVE
NW 8891 AVE
NW 8901 AVE
NW 8911 AVE
NW 8921 AVE
NW 8931 AVE
NW 8941 AVE
NW 8951 AVE
NW 8961 AVE
NW 8971 AVE
NW 8981 AVE
NW 8991 AVE
NW 9001 AVE
NW 9011 AVE
NW 9021 AVE
NW 9031 AVE
NW 9041 AVE
NW 9051 AVE
NW 9061 AVE
NW 9071 AVE
NW 9081 AVE
NW 9091 AVE
NW 9101 AVE
NW 9111 AVE
NW 9121 AVE
NW 9131 AVE
NW 9141 AVE
NW 9151 AVE
NW 9161 AVE
NW 9171 AVE
NW 9181 AVE
NW 9191 AVE
NW 9201 AVE
NW 9211 AVE
NW 9221 AVE
NW 9231 AVE
NW 9241 AVE
NW 9251 AVE
NW 9261 AVE
NW 9271 AVE
NW 9281 AVE
NW 9291 AVE
NW 9301 AVE
NW 9311 AVE
NW 9321 AVE
NW 9331 AVE
NW 9341 AVE
NW 9351 AVE
NW 9361 AVE
NW 9371 AVE
NW 9381 AVE
NW 9391 AVE
NW 9401 AVE
NW 9411 AVE
NW 9421 AVE
NW 9431 AVE
NW 9441 AVE
NW 9451 AVE
NW 9461 AVE
NW 9471 AVE
NW 9481 AVE
NW 9491 AVE
NW 9501 AVE
NW 9511 AVE
NW 9521 AVE
NW 9531 AVE
NW 9541 AVE
NW 9551 AVE
NW 9561 AVE
NW 9571 AVE
NW 9581 AVE
NW 9591 AVE
NW 9601 AVE
NW 9611 AVE
NW 9621 AVE
NW 9631 AVE
NW 9641 AVE
NW 9651 AVE
NW 9661 AVE
NW 9671 AVE
NW 9681 AVE
NW 9691 AVE
NW 9701 AVE
NW 9711 AVE
NW 9721 AVE
NW 9731 AVE
NW 9741 AVE
NW 9751 AVE
NW 9761 AVE
NW 9771 AVE
NW 9781 AVE
NW 9791 AVE
NW 9801 AVE
NW 9811 AVE
NW 9821 AVE
NW 9831 AVE
NW 9841 AVE
NW 9851 AVE
NW 9861 AVE
NW 9871 AVE
NW 9881 AVE
NW 9891 AVE
NW 9901 AVE
NW 9911 AVE
NW 9921 AVE
NW 9931 AVE
NW 9941 AVE
NW 9951 AVE
NW 9961 AVE
NW 9971 AVE
NW 9981 AVE
NW 9991 AVE
NW 10001 AVE

UTILITIES ELEMENT

UTILITIES ELEMENT: INTRODUCTION
TABLE OF CONTENTS

TABLE OF CONTENTS....III-i

LIST OF TABLES AND FIGURES....III-ii

INTRODUCTION....III-1

ANALYSIS OF EXISTING CONDITIONS....III-2

NEEDS ANALYSIS....III-25

GOALS, OBJECTIVES AND POLICIES....III-37

PLAN IMPLEMENTATION....III-46

MONITORING AND EVALUATION....III-46

GLOSSARY....II-48

UTILITIES ELEMENT: INTRODUCTION
LIST OF TABLES AND FIGURES

TABLES	DESCRIPTION	
III-1	System II Water and Wastewater Treatment Plant Chronology and Estimated Costs Solid Waste	III-16
III-2	Projected Capacity Surplus for Wastewater and Water Facilities	III-27
III-3	Service Area Population Projections and Level of Service	III-27
III-4	Solid Waste Generation Projections	III-34

FIGURES	DESCRIPTION	
III-1	Utility Service Areas	III-4
III-2	Drainage District Service Area Map	III-5
III-2A	Canal Network	III-6
III-3	Major Water Facilities Map	III-8
III-4	Wastewater Facilities Map	III-10
III-5	General Soils Map	III-19
III-6	Central Broward Drainage District Sub Areas	III-21
III-7	General Location of Wellfield Protection Areas	III-24
III-8	Projected Water Facility Capacity	III-29
III-9	Projected Wastewater Facility Capacity	III-29
III-10	Projected Water Level of Service	III-30
III-11	Projected Wastewater Level of Service	III-30

Utilities Element: Introduction

This element describes the public facilities which serve the existing demand for water and wastewater services, solid waste disposal , and flood control. It projects future needs correlated to land use patterns as set forth in the Future Land Use Plan and as described in the Capital Improvements Element. The element sets levels of service for such facilities, and identifies future facility expansions necessary to accommodate projected increases in demand. Natural groundwater aquifer recharge areas are discussed in terms of preserving our sole source of water supply, the Biscayne Aquifer. Finally, the element sets forth goals, objectives and policies which guide the Town in effectuating plans necessary to accommodate adopted levels of service for existing and future populations.

Utilities Element:
Analysis of Existing Conditions

The Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element will provide an analysis of the availability and impact of these facilities to serve existing and future land uses.

Within the Town of Davie there are four primary service providers for water and wastewater services. The service providers include the Town of Davie, the City of Sunrise, South Broward Utilities Company, and Ferncrest Utilities. See Figure III-1, Utility Service Areas Map.

The Town has executed Interlocal Bulk Water Agreements with the City of Cooper City, the City of Hollywood, the City of Fort Lauderdale, Ferncrest Utilities, and South Broward Utilities. These agreements are largely for the provision of water and wastewater services for fire and emergency purposes. The provision of these services is facilitated by the water and wastewater interconnects the Town maintains with the above providers. With the exception of the City of Fort Lauderdale water system, potable water may be pumped to any location within the Town by any of the other service providers. The Interlocal Agreements provide for reciprocity, where the Town would similarly supply emergency service to other providers.

Water and Wastewater Services

Regulations

Under the Federal Safe Drinking Water Act of 1974, the United States Environmental Protection Agency (E.P.A.) released the National Primary Drinking Water Regulations in 1975. These regulations apply to municipal and non-municipal water systems and establish the maximum allowable levels of inorganic and organic chemicals, turbidity, and radiological and microbiological contaminants.

In accordance with Federal requirements, the Florida Legislature adopted the Florida Safe Drinking Water Act, Sections 403.850-403.864, F.S. This act authorizes the Florida Department of Environmental Protection (F.D.E.P.) to enforce state primary and secondary drinking water regulations. This legislation is applicable to the water system, particularly with respect to required monitoring programs and minimum standards. The Florida Water Act incorporates all standards of the E.P.A. regarding monitoring programs and additional minimum water quality standards.

The South Florida Water Management District (S.F.W.M.D.) regulates withdrawals from the Biscayne Aquifer. The S.F.W.M.D. issues general and individual water use permits for any use, diversion, or withdrawal of any surface or groundwater in the District. The Florida Department of Health and Rehabilitative Services (F.H.R.S.), through its local health unit, issues permits for operation of water plants

subject to compliance with state water quality standards. The primary local drainage districts, the Central Broward Drainage District, and the South Broward Drainage District regulate drainage and indirectly the aquifer recharge. See Figure III-2, Drainage District Service Area map and Figure III-2A, Canal Network map for the jurisdictional responsibility of these districts and canal system.

The Federal Water Pollution Control Act, Public Law 92-500 (1972), is the controlling national legislation relating to provision of sanitary sewer service. This Act is designed to restore and maintain the chemical, physical and biological integrity of the nation's waters. The E.P.A. is responsible for implementing the Act. The state and local regulations have been set forth by the F.D.E.P. under Chapter 403, Florida Statutes, Sec. 17-6, 62-4,62-600, 62-620, 62-660, of the Florida Administrative Code (F.A.C.), which F.D.E.P. monitors, licenses and regulates.

The Broward County Department of Natural Resource Protection (D.N.R.P.), established in 1975 by the Broward County Charter, is responsible for countywide licensing of wastewater treatment plants and monitoring of operating treatment plants to ensure compliance with the D.N.R.P. Code of Regulations. The D.N.R.P. also licenses sludge haulers and ensures that domestic wastewater treatment plant sludge is properly disposed. The F.H.R.S., through its local health unit, issues permits for installation of septic tanks subject to compliance with Chapter 10D-6, F.A.C. and Ordinance 78-50 of the Broward County Code of Ordinances.

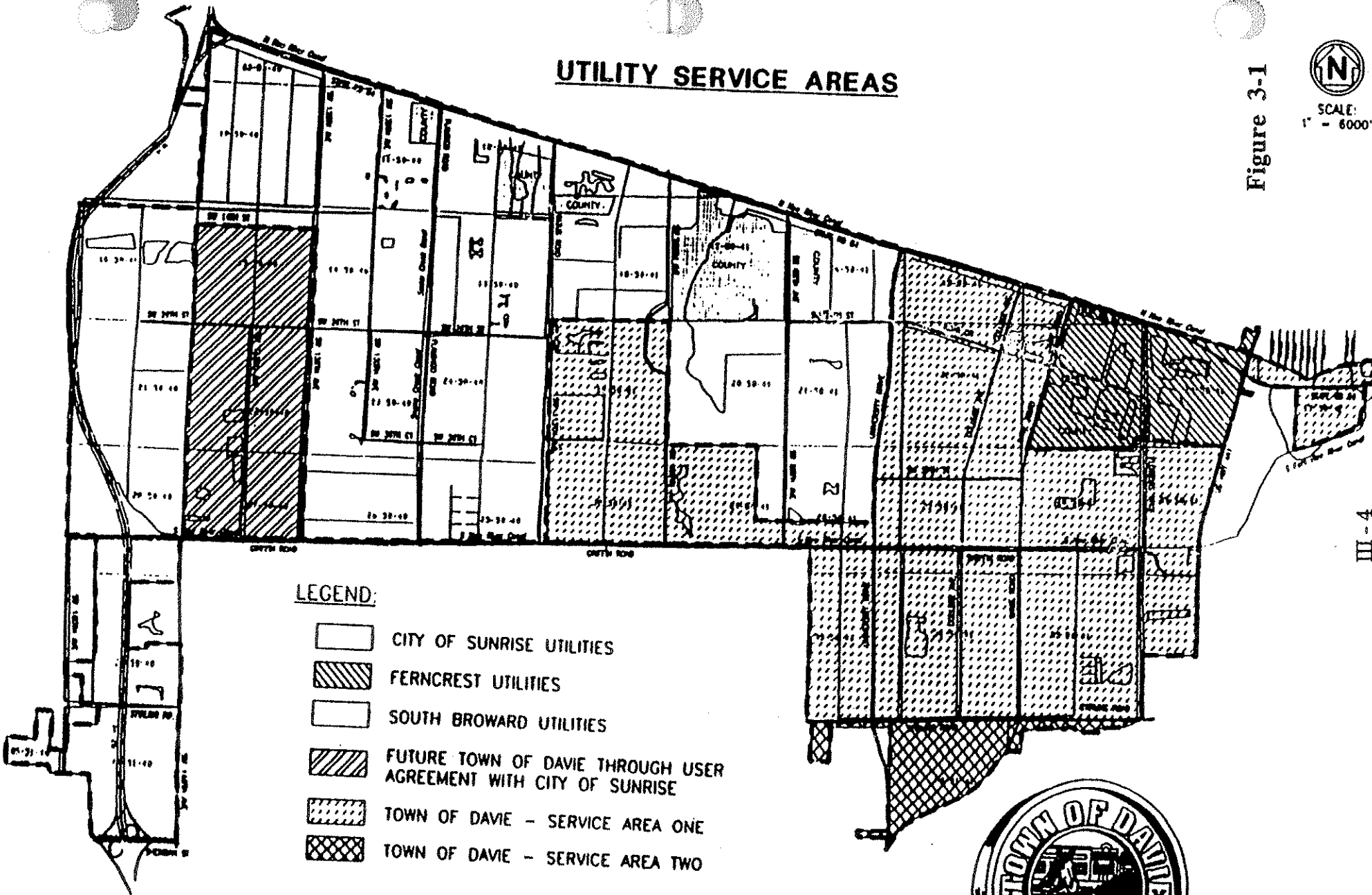
Davie Service Area

The Town began its water and sewer operations by the purchase of two privately owned water and sewer systems. The Town physically integrated the two water and sewer systems through water main and sewer force main interconnections and tie-ins so that the systems now function as fully integrated and unified operating entities (herein the "Utility System"). Likewise, the sewer force main interconnects between the two sewer treatment plants allow wastewater flows to be diverted from one plant to another based on varying demands on the respective plants, thus providing a more efficient integrated operation.

The Town system is divided into two service areas: Service Area One, and Service Area Two. Service Area One can be generally described as the central or original portion of the Town. It is bound on the north by State Road 84, on the south by Stirling Road, on the east by the Florida Turnpike, Ferncrest Utilities, Hacienda Village and the Seminole Indian Reservation; and on the west by University Drive and Pine Island Road. Service Area One contains approximately 8.5 square miles. This area is considered the heart of the Town of Davie and contains the Town Hall, the Downtown Davie District, and the South Florida Education Center. Service Area Two is located along the southern boundary of the Town limits. It is bound on the north by Stirling Road, on the south by Sheridan Street, on the east by the City of Hollywood at Davie Road Extension, and on the west by the Town limits. The area is primarily residential with several large tracts of vacant property.

UTILITY SERVICE AREAS

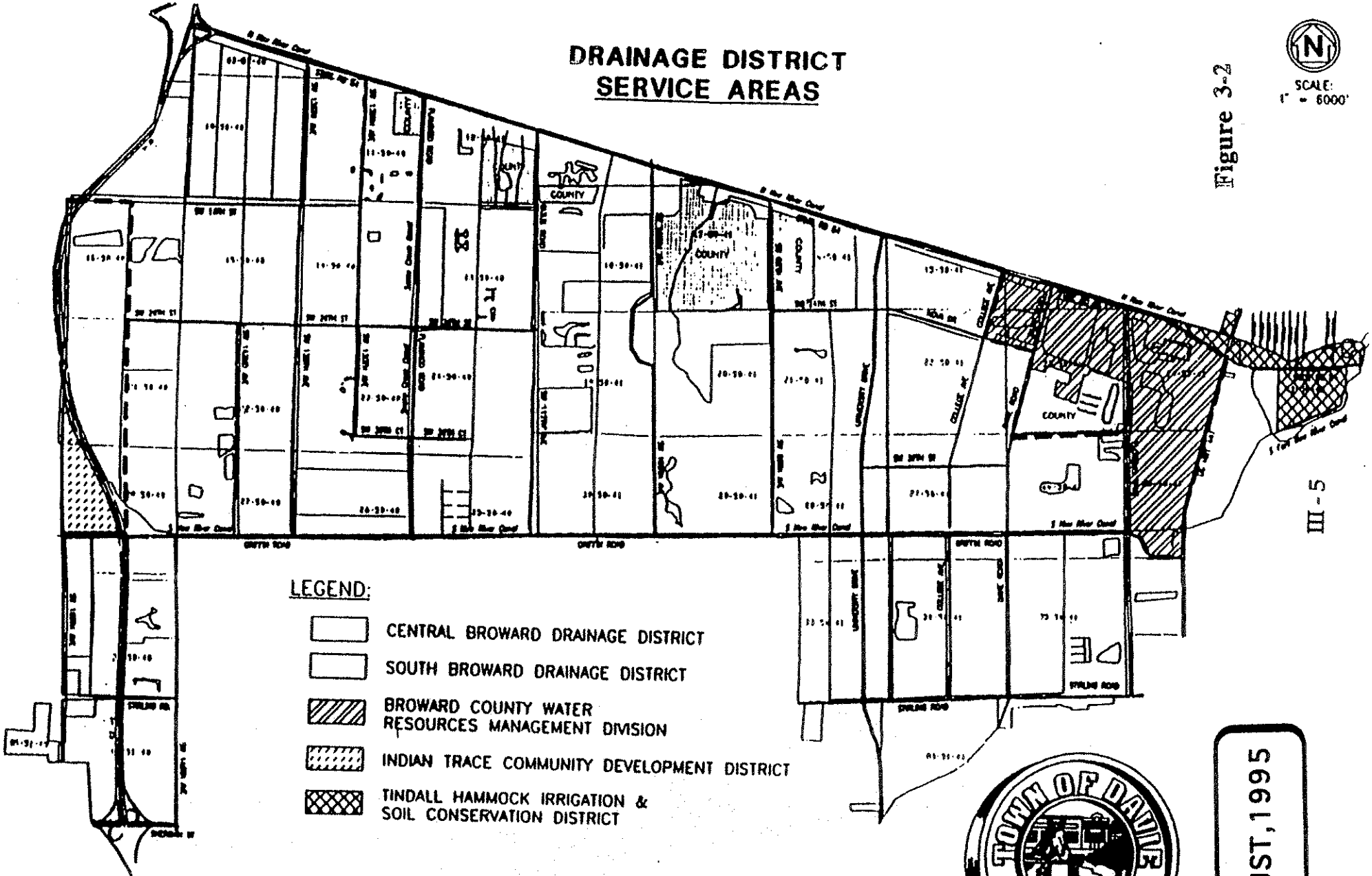
Figure 3-1



DRAINAGE DISTRICT SERVICE AREAS

Figure 3-2

SCALE: 1" = 6000'



TOWN OF DAVIE FLORIDA

AUGUST, 1995

CANAL NETWORK

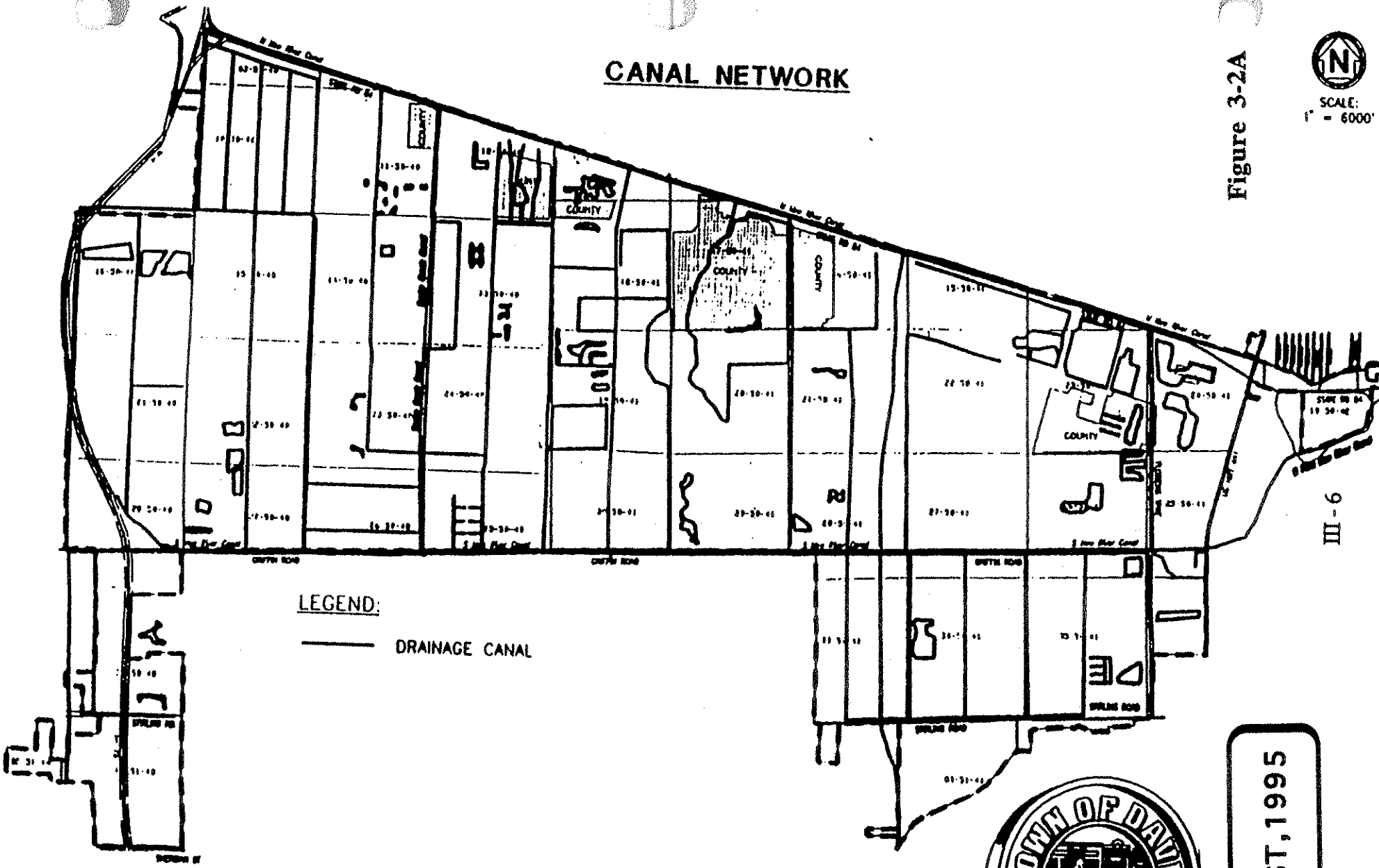


Figure 3-2A

TOWN OF DAVIE FLORIDA

AUGUST, 1995

The Town of Davie has operational responsibility for the following facilities:

System I Water Treatment Plant
System III Water Treatment Plant
System II Wastewater Treatment Plants

These systems are integrated and are hereinafter referred to as "water facilities" and "wastewater facilities". The predominant land use served by the Town facilities is residential.

Water Treatment System

The Town presently operates two water treatment facilities (System I and System III). The treatment process at each plant consists of raw water wells, aeration, coagulation, flocculation, sedimentation, fluoridation, filtration, and disinfection. Chemicals utilized include synthetic polymers for coagulation, lime or softening, chlorine for disinfection and hydrofluosilicic acid for fluoridation. Filter wash water is recovered and returned to the process. Sludge is retained in a holding pond dewatered at system III, and hauled off site after buildup. Finished water is then pumped through the distribution system.

Primary infrastructure consist of the following:

a. Package treatment units
b. Mixed media rapid flow gravity filters
c. Control building which houses offices and instrumentation
d. Laboratory
e. Chlorination equipment
f. Fluoridation equipment
g. Control equipment
h. High service pumping facilities
i. Lime silo and slaking facilities
j. Clearwell and storage
k. Electric power generation

All treatment facilities are in excellent condition, are well operated and maintained, and produce good quality water. The System III wells have been deepened to reduce raw water color. See Figure III-3, Water Facilities map.

The distribution of finished water from the treatment plant to the customer is accomplished by the use of approximately 116 miles of water mains varying in size from 24" diameter down to 6" diameter.

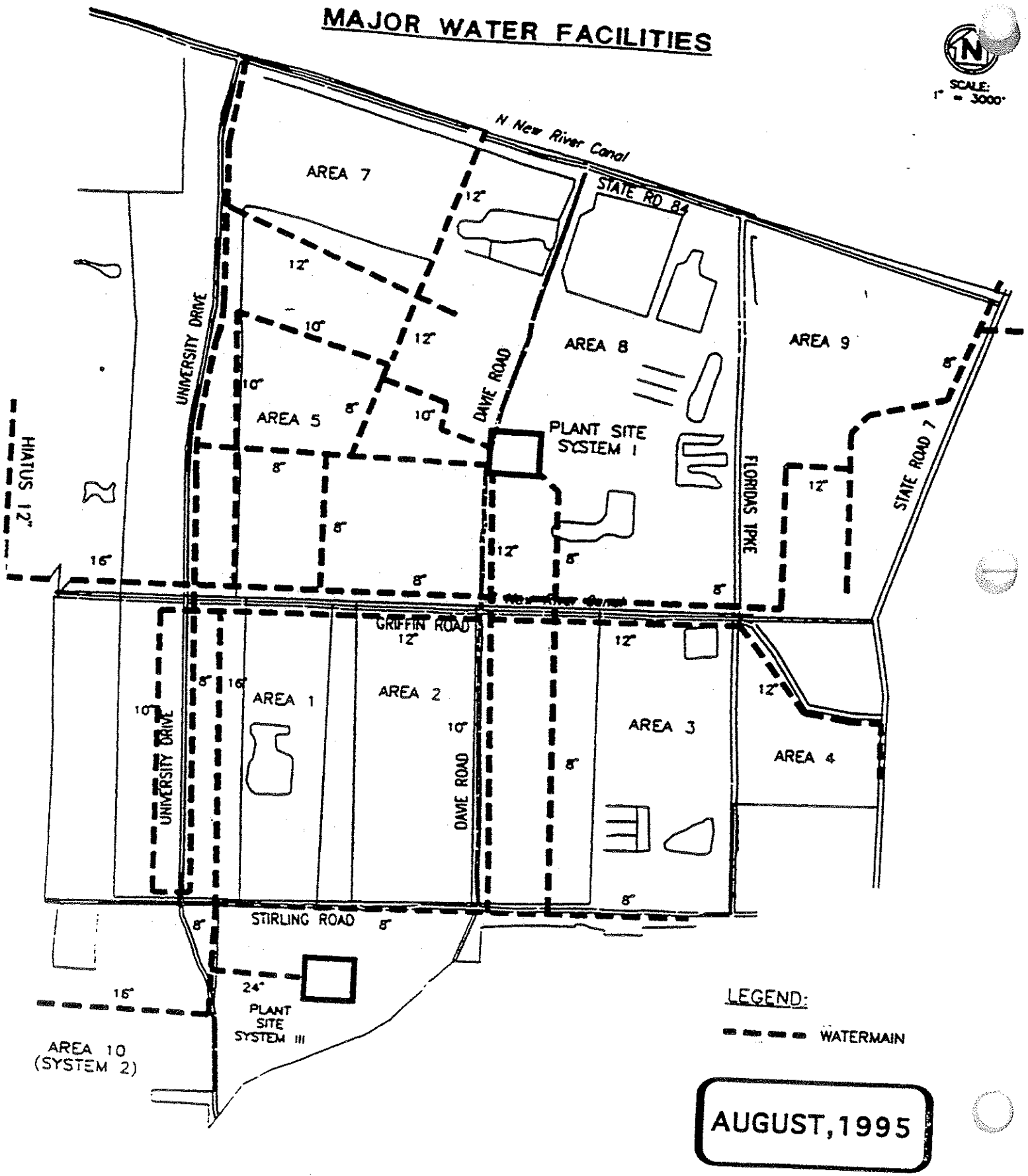

MAJOR WATER FACILITIES
N
SCALE:
1" = 3000'
N New River Canal
STATE RD 84
AREA 7
AREA 8
AREA 9
AREA 5
AREA 1
AREA 2
AREA 3
AREA 4
AREA 10
(SYSTEM 2)
UNIVERSITY DRIVE
DAVIE ROAD
FLORIDAS TPKE
STATE ROAD 7
HIATUS 12"
PLANT SITE
SYSTEM I
GRIFFIN ROAD
STIRLING ROAD
PLANT
SITE
SYSTEM III
LEGEND:
WATERMAIN
AUGUST, 1995

Figure III-3

Water main extensions are primarily funded by developers who are required to construct new lines to their developments in accordance with the Town's master plan for the water system. A review of the distribution system indicates it is in good condition and is well maintained.

Wastewater Treatment System

The existing wastewater collection system consists of approximately thirteen localized collection systems, 23 lift stations, approximately nine miles of force main and over 22 miles of gravity sewer lines varying in size from 8" to 24" diameters. The gravity collection system is maintained in an excellent condition by the Utilities Department. All lift stations are in good condition. Master lift station 13, "Publix", and Master lift station 19, "Nova", were recently refurbished. A new section of force main was completed in conjunction with the lift station refurbishment. The pressures in the force main system are now equalized between the western and eastern half of the Town's force main system. Wastewater treatment for Service Areas One and Two is provided by the System II wastewater treatment plant.

The wastewater treatment plant consists of surge control, treatment within field erected prefabricated steel tanks which include contact stabilization, aeration, clarification, re-aeration, digestion, chlorination and final effluent disposal to the Atlantic Ocean via the use of Hollywood's Ocean Outfall Facility, or reuse by Hollywood. The Town of Davie's wastewater plant is currently being expanded from 3 mgd to 5 mgd capacity.

Department of Environmental Regulations requirements provide that secondary treatment achieve at least 90% removal of 5-day biochemical oxygen demand (BOD[5]) and suspended solids (SS). The plant is currently meeting these requirements.

Waste sludge from the plant is dried on vacuum assisted sludge drying beds and is disposed of in an approved manner. See Figure III-4, Wastewater Facilities map.

Design Capacity for Davie Water and Wastewater Plants

water treatment capacity-Systems I & III	7.8 mgd*
wastewater treatment capacity	3.0 mgd

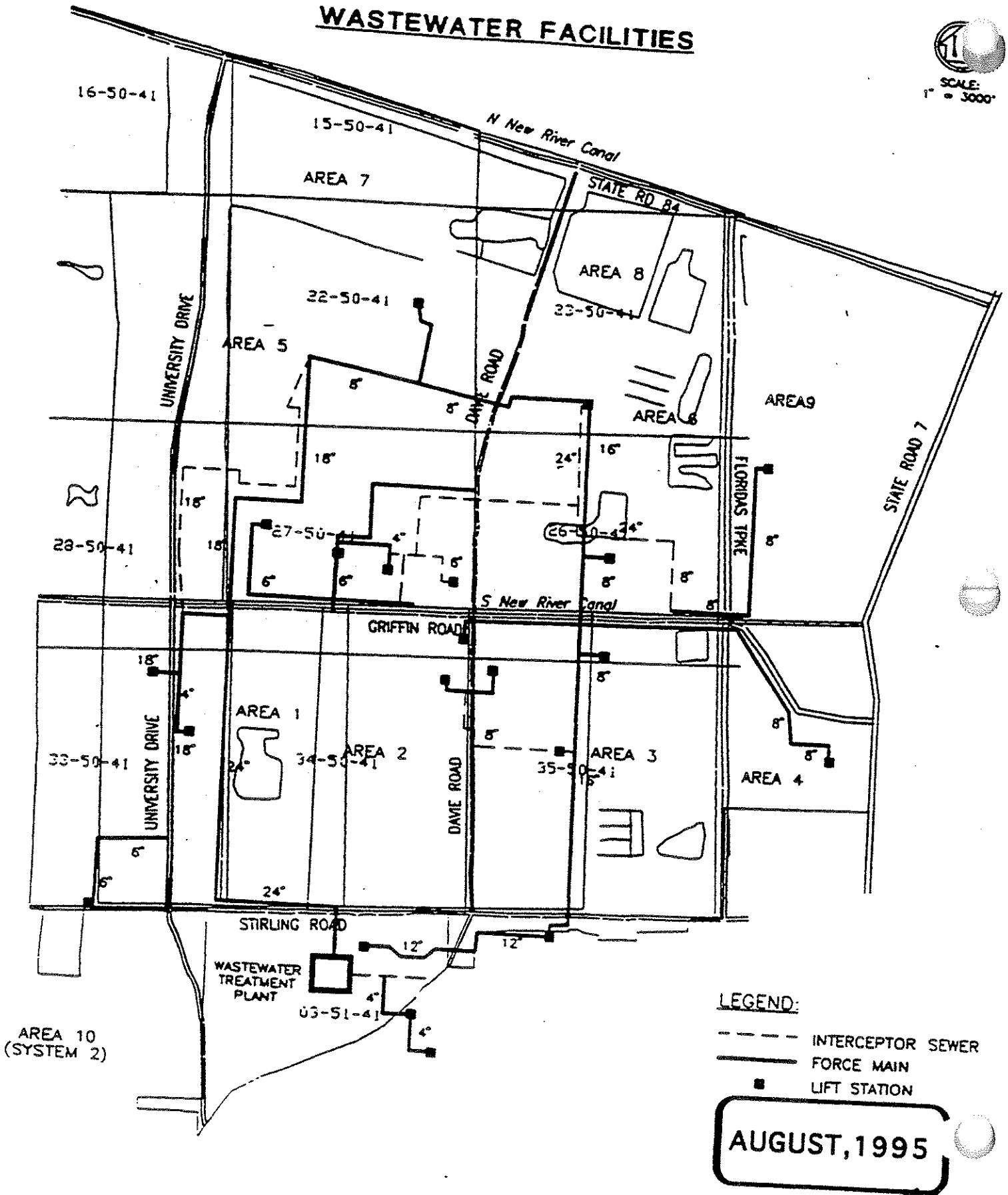

WASTEWATER FACILITIES
SCALE: 1" = 3000'
16-50-41
15-50-41
N New River Canal
AREA 7
STATE RD 84
AREA 8
22-50-41
23-50-41
AREA 5
UNIVERSITY DRIVE
DAVIE ROAD
AREA 6
AREA9
FLORIDAS TPKE
STATE ROAD 7
28-50-41
27-50-41
26-50-41
S New River Canal
GRIFFIN ROAD
AREA 1
AREA 2
AREA 3
AREA 4
33-50-41
34-50-41
35-50-41
STIRLING ROAD
WASTEWATER TREATMENT PLANT
03-51-41
AREA 10 (SYSTEM 2)
LEGEND:
INTERCEPTOR SEWER
FORCE MAIN
LIFT STATION
AUGUST, 1995

Figure III-4

Demand on the Facility Capacity and Proportional Share

Actual water treatment demand	2.7 mgd
-Davie proportional share	100%
Actual wastewater treatment demand	2.1 mgd
-Davie proportional share	100%

* million gallons per day

Existing Level of Service (L.O.S.) Standards

A level of service (L.O.S.) is a quantitative measure of a given city function. Comprehensive plans must adopt these quantitative standards and provide the means to meet them as development adds pressure to the existing capacity. The most useful standard for water treatment and distribution is gallons per capita per day (gpcd). This standard is used by the Town of Davie to measure the adequacy of water and wastewater service in meeting current and projected demands, for both the Davie facilities and other facilities serving the Town. Population projections for the Davie Sewer and Water Service Areas were developed from the Broward County Land Use Map.

The water and wastewater facilities are currently operating at a L.O.S. of 206 and 116 gpcd respectively. These levels of service represent the total design capacities of the systems applied to the persons being served by the respective facilities. The levels of service are adequate to meet existing demand. All facilities meet required standards set forth by the applicable regulatory agencies as discussed earlier.

Water treatment facilities are currently operating at 45 percent of capacity; a 55 percent surplus capacity exists. Wastewater treatment facilities are currently operating at 86 percent of capacity; a 14 percent surplus in capacity exists based on population estimates. Actual plant flows are approximately 2.1 mgd which provides for actual 30% surplus capacity.

General Condition of the Facilities

The existing condition of the facilities is adequate for the service area. The existing wastewater treatment plant is currently undergoing refurbishment in conjunction with the 2 mgd expansion. The facilities are generally in good condition.

Impacts of Facilities on Natural Resources

The projected demand on water supply is not expected to adversely impact domestic irrigation or potable water quality. Computer modeling by Broward County Water Management Division detected no adverse impacts associated with well draw-down. The wells at System III were also test pumped and no adverse impacts were detected (Berry and Calvin Civil Engineers, impacts on lake levels; no adverse impacts are anticipated in the future (Berry and Calvin Civil Engineers, "Engineers Summary Report"; 1992).

The Broward County Study on salt water intrusion indicates the westward movement of the isochlor line to be U.S. 441 during the 100 year drought. The Town's wellfield will have no impact on this as the wellfield is located approximately two miles west of U.S. 441 (Berry and Calvin Civil Engineers, "Engineers Summary Report"; 1992). Sink holes are not prevalent in South Florida due to the geology and high groundwater table.

Analysis of Problems and Opportunities

There are no apparent problems with the sanitary sewer or potable water facilities that have not been addressed by the Town's expansion program. The System I Water Treatment Plant shall continue to operate at its current design capacity of 3.8 mgd. The System III Water Treatment Plant, which replaced the System II Plant in December 1988, is operating with a design capacity of 4.0 mgd. The systems currently maintain a total design capacity of 7.8 mgd until planned expansions occur in 2001 which shall increase capacity by another 4.0 mgd, for a total capacity of 11.8 mgd. This expansion would be warranted by an increase in service area or annexation beyond the current flow and population projections. See Figures III-8 and III-9.

The System II Wastewater Treatment Plant is currently at a design capacity of 3.0 mgd, with planned expansions of 2.0 mgd each to be completed by the years 1997-1998 and 2001, in accordance with the concurrency management system. Therefore, the projected design capacity for the year 2001 shall total 7.0 mgd.

Ferncrest Utilities Services Area

Ferncrest Utilities is a private utility company which has operational responsibility for the Water and Wastewater Treatment facilities located at 3015 Southwest 54 Avenue. The predominant land uses served by the facilities is industrial and residential (mobile home parks). The following information was provided by Ferncrest Utilities representatives.

Design Capacity of the Facility

Water Treatment Plant	1.0 mgd
Wastewater Treatment Plant	.60 mgd

Current Demand on the Facility Capacity

Water Treatment Plant	.35 mgd
-Davie proportional share	<10%
Wastewater Treatment Plant	.20 mgd
-Davie proportional share	<10%

Existing Level of Service and Capacity Surplus

Due to the fact that Ferncrest is primarily an industrial supplier, the LOS for the Ferncrest facilities is not measured in gpcd. All analysis for this Utility System is based on percentage of capacity surplus. The water treatment facility is operating at an acceptable LOS based on the approximate 65% capacity surplus; a current operating capacity of 35%. The wastewater treatment plant is currently operating at an acceptable LOS of approximately 67% capacity surplus: a current operating capacity of 33%.

General Condition of the Facilities

The current condition of the facility is adequate for the service area based on the capacity surplus percentage of 65% and 67% for the water and wastewater facilities respectively. The facilities were built in 1969 and expanded in 1979. In general, the facilities are in fair condition and the life expectancy is twenty years.

Impact of Facilities on Natural Resources

It is anticipated that the water used from the facility's wells will not have an adverse affect on potable water quality or irrigation systems, nor encourage salt water intrusion. Based on the geological strata, the formation of sink holes is highly unlikely in the South Florida area. The well pumping activities should not have an adverse affect on lake or borrow pit water levels in the vicinity.

Analysis of Problems and Opportunities

There are no identified problems with the provision of water or sanitary sewer facilities within this service area. Due to the fact that the majority of the area served by Ferncrest Utilities is developed, and there is currently an adequate level of service to the area, there are no plans for expansion or new facility siting. The only significant addition to the Town of Davie serviced by the utility is the 500 unit Palm Trace apartment complex, and the utility has sufficient capacity to service these units.

South Broward Utility Company Service Area

The South Broward Utility Company (SBU) is a private utility company which has operational responsibility for the facilities located at 15450 Stirling Road, Davie, Florida. Currently the predominant land use served by the facilities is residential; commercial development at the southeast corner of I-75 and Griffin Road is also served by SBU.

Design Capacity

Water treatment facility	2.0 mgd
Wastewater treatment facility	1.0 mgd

Current Demand on the Facility Capacity

Water treatment facility	0.6 mgd
-Davie proportional share	98%
Wastewater treatment facility	0.5 mgd
-Davie proportional share	98%

Existing Levels of Service

Based on plant capacities serving the service area population, the LOS for Water is 286 gpcd and for Sewer Facilities it is 140 gpcd.

Existing Capacity Surplus

The Water Treatment Plant is currently operating at 30% of capacity; there is a 70% capacity surplus. The Waste Water Treatment Plant is currently operating at 50% of capacity; there is a 50% capacity surplus.

The General Condition of the Facility

The current condition of the facility is adequate for the service area based on the capacity surplus of 70% and 50%. Construction of the facilities began in 1984. The general condition of the facilities is excellent and the expected life of the facilities is fifty years.

The Impact of Facilities on Natural Resources
It is anticipated that the water drawn from the wells will not have an adverse effect on potable water or irrigation systems, as well as lake levels. Additionally, it is anticipated that the water drawdown of the wells will not encourage salt water intrusion. Sink holes are not prevalent in the South Florida area due to geological formations.

Analysis of Problems and Opportunities
The Water Treatment Plant for the service area was constructed in two phases. Phase I was completed in 1986 and Phase II completed in 1989. The development within the existing service area is approximately 56% complete at the time this report was completed. Phases I and II of the water treatment plant will have a total capacity of 2.0 mgd and are designed to meet the future demands of the service area, pursuant to the South Florida Water Management District (S.F.W.M.D.) permit application. There are no identified problems with the provision of sanitary sewer or potable water services within this service area.

Sunrise Service Area

The City of Sunrise has operational responsibility for the following facilities which service Davie:

System I: Water Treatment Plant
System II: James Baxter Water and Wastewater Treatment facilities
System III: Wastewater Treatment Plant

The predominant land use served by each facility is residential. The information below was supplied by the City of Sunrise Engineering Department and Montgomery Watson engineers. It reflects the facilities listed above.

Design Capacity	
Water treatment facilities	33.5 mgd
Wastewater treatment facilities	25.0 mgd
Current Demand on the Facility Capacity	
Water treatment facilities	18.0 mgd
Wastewater treatment facilities	8.0 mgd

The Sunrise water treatment facilities, which serve a portion of Davie, currently operate at adequate levels of service based on the operational surplus of 46% for water facilities and 68% for wastewater facilities.

General Condition of the Facilities
The current level of service provided by the facility is adequate for the service area. The Sunrise Systems I & II Water Treatment Plants are in good condition. The Sunrise System II Wastewater Treatment Plant is in satisfactory condition, while the Sunrise System III Wastewater Treatment Plant is in good condition.

The Impact of Facilities on Natural Resources

The impact of the Sunrise System II Water Treatment Plant on natural resources is minimal. Lime sludge is contained on site and backwash water is recycled. The impact of Sunrise Systems II and III Wastewater Treatment Plants on natural resources is minimal.

Analysis of Problems and Opportunities

Systems I, II and III experience significant amounts of infiltration. A new water treatment facility with a 12 mgd capacity was completed in 1991 at Sunrise System I Water Treatment Plant, which is interconnected with System II Water Treatment Plant. This will result in total plant capacities of 33 mgd for Systems I & II. At Sunrise System III Wastewater Plant, a new facility with a 5 mgd capacity is completed and waiting for final operations permits. This resulted in a total plant capacity of 25 mgd. The City of Sunrise Water and Wastewater Systems I & III are integrated, thereby providing service to all areas within the identified Service Area.

Other Systems

City of Hollywood/Town of Davie

Both the City of Hollywood and the Town of Davie provide water services to a small portion of each other's jurisdiction. These service areas evolved over a period of time after which annexations determined municipal boundaries. Insofar as jurisdictional boundaries are now finalized in this area, the existing service systems are not expandable. The Davie proportional demand of the Hollywood water facility accounts for much less than 1/2% of total capacity. As such, a detailed analysis of this facility is not presented in this Element.

TABLE III-1
Town of Davie
System II Water and Wastewater Treatment Plant
Chronology and Estimated Costs

1) 1982 - System II water and wastewater plants acquired from Modern Pollution Control	
2) 1988(complete) - Effluent holding basin and pumping system including transmission main	$5,000,000
3) 1988(complete) - Water treatment plant addition	$4,500,000
4) 1088(complete) - Two MGD wastewater treatment plant expansion (Phase 2)	$2,800,000
5) 1991(complete) - Refurbish original System II one MGD wastewater treatment unit	$335,000
6) 1995(start construction) - Two MGD wastewater treatment plant expansion (Phase 3)	$4,700,000
7) 1995(start construction) - Water treatment plant well deepening	$145,000
8) 1997(start construction) - Water storage tank refurbishment	$100,000
9) 2001(start design) - Two MGD wastewater treatment plant expansion (Phase 4)	$2,100,000

SOLID WASTE

Existing Conditions

The largest portion of the solid waste stream is municipal solid waste which is made up of household discards. Next in volume is trash which consists of bulk items, such as construction debris. Landscaping debris, which is a year round component in South Florida, is the third largest type of solid waste. Last in volume is hazardous waste, which includes toxic and pathological substances, requiring separate handling. Solid waste generation in Broward County and Davie is equal to approximately 7.2 lbs. per capita per day, based upon annual gross tonnage of residential and non-residential refuse disposed in the landfill. The Broward County Solid Waste Section of the Utilities Division estimates that residences, on the average, are producing approximately 3 lbs. per capita per day.

Solid waste disposal in Broward County is a regional function. The current disposal technique utilized in Broward County is resource recovery (incineration and ash landfill). There are resource recovery facilities that service Broward County , including all of the Town of Davie. These facilities are currently processing about 1.0 million tons of solid waste per year. Of this figure, approximately 3.4% is generated from the Town of Davie.

The Town of Davie has entered into an Interlocal Agreement for a Resource Recovery System. The system went on line in 1991 with a capacity to handle 1.34 million tons of solid waste per year in the Broward County geographic area. This system will supplement the 1.4 million ton per year capacity of the existing landfills and will extend the life expectancy of the landfills (2) (estimated to be 20 years). According to the County, a Level of Service Standard to process the estimated 7.2 lbs. per capita per day of solid waste generation will be met through the planning time-frame.

During the period from 1994 to 2000, the need to landfill some garbage may continue until the county expands resource recovery facilities capacity by constructing an additional cell(s) at either of the facilities. A third option, to develop the Western Resource Recovery Facility at the reserved location, is also available (as of June 1995, no expansions were planned)(3).

Analysis of Existing Soil Conditions

Soil Types and Characteristics

Soil is the upper layer of the earth surface. Climate, plants, and animals are the active forces shaping soil formation. They act on the parent material that has accumulated on the weathering of rocks and slowly change it into soil.

Utilizing soil survey information, planners can evaluate their effect on and sensitivity to different land uses and consequently the environmental impact. Such information can help maintain a land use pattern in harmony with natural soil. The same information is helpful to plan for the safe disposal of wastes, and location

of mineral sources.

According to the United States Department of Agriculture and the Soil Conservation Service Soil Survey of Broward County, Florida, Eastern Part the predominant soils within the Town of Davie are Dania Muck, Hallandale Muck, Lauderhill Muck, Margate Muck, Okeelanta Muck, Plantation Muck, Pomello Muck, Pompano Muck, and Sanibel Muck. The Recreation, Open Space and Conservation Element contains a generalized soils map for the Town of Davie (see Figure III-5).

Drainage

Soil properties create limitations on urban uses and development such as poor percolation and instability. These characteristics necessitate the modification, excavation and backfill of building site to ensure adequate drainage and water management needs.

Septic Tanks

The use of septic tanks within the Town of Davie is limited to areas not yet served by sanitary sewer systems. Due to the presence of soils in the Town of Davie that are unsuitable for septic tanks, the Broward County Health Department requires that all such soils be removed from the septic tank site and replaced with sand prior to issuance of a septic tank permit. Therefore, the use of septic tanks within the Town of Davie is not permitted where unsuitable soil has not been removed and replaced with sand.

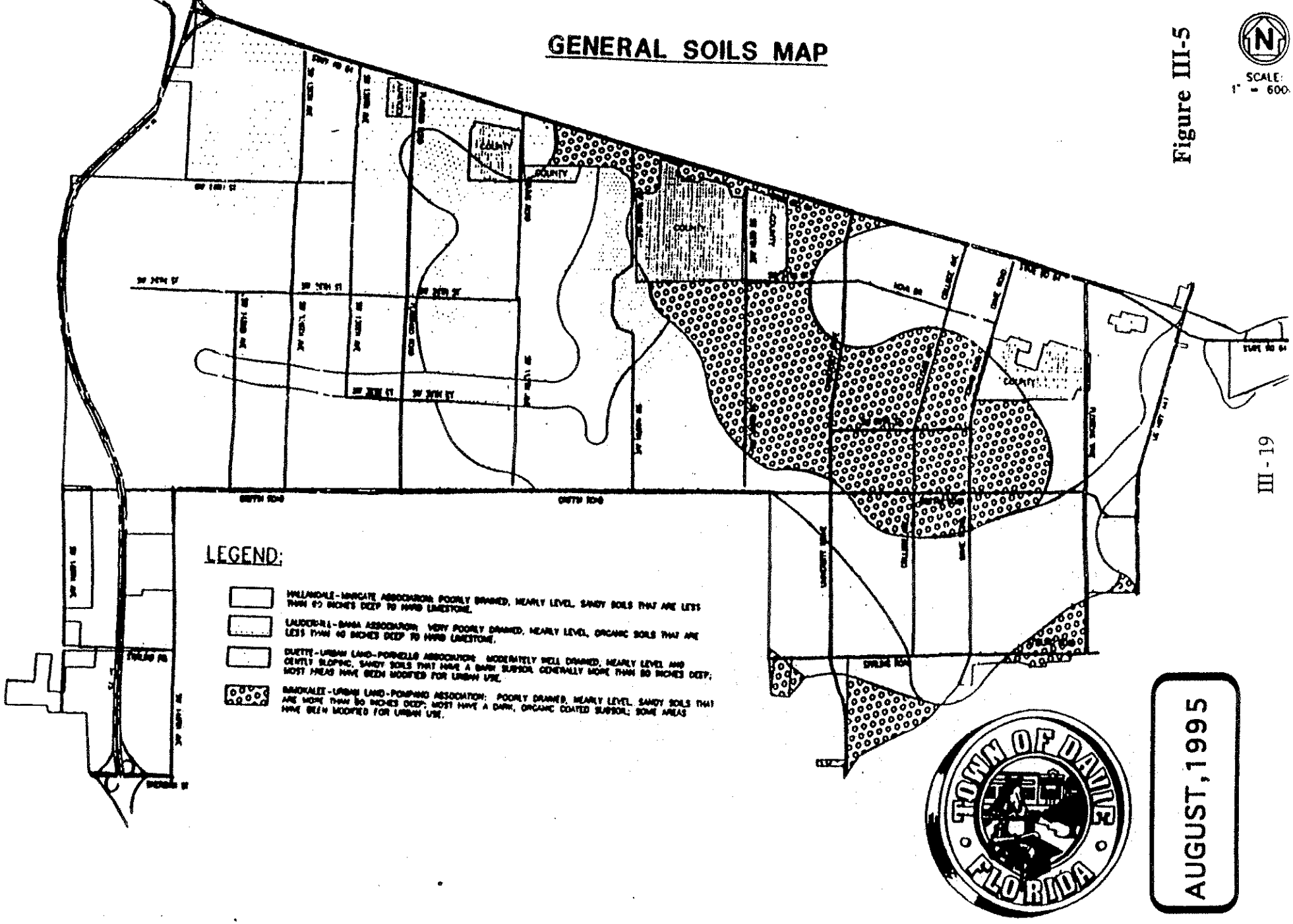
(1) Except for Dania, Hallandale, Pembroke Pines, Pompano Beach and Parkland.

(2) Central disposal sanitary landfill (Pompano Beach) and Broward County Interim Contingency Landfill.

(3) Broward County Office of Integrated Waste Management.

GENERAL SOILS MAP

Figure III-5



AUGUST, 1995

Major Natural Drainage Features and Ground Water Aquifer Recharge Areas

Drainage Features

The primary drainage features within the Town of Davie are the North New River Canal and the South New River Canal (C-11 Canal) and their tributary canals, man-made facilities constructed originally to drain the Everglades, and used to accommodate the flow of water. According to the South Florida Water Management District, all of Broward County is considered a natural groundwater aquifer recharge area for the Biscayne Aquifer, our sole source of water supply. However, no prime recharge areas have been designated by the South Florida Water Management District within Broward County.

The Town of Davie is divided essentially into two basins at SW 100 Avenue (see Figure III-6). The west basin is controlled by a South Florida Water Management District pump station (S-9) located at approximately US-27 and Griffin Road. The Eastern basin is controlled by a pump station (S-13) on the C-11 canal. The 100th Avenue divide is an equalizer known as S-13A. This structure can be opened to control local storms or equalize water levels in the east and west basins.

Development of Man-Made Drainage Features

The Town of Davie Development Review Committee, Central Broward Drainage District, South Florida Water Management District, and the Broward County Water Management Division govern land use and development of drainage features and groundwater recharge areas. The Central Broward Drainage District and the South Broward Drainage District, Broward County, Indian Trace Community Development District and Tindall Hammock Soil and Conservation District maintain jurisdiction with regard to stormwater management. The districts are special taxing districts with authority to regulate and maintain drainage within an area that encompasses the Town and the surrounding canal network.

The Florida Department of Environmental Protection has adopted a Stormwater Rule (Ch. 62-25, F.A.C.) to fulfill part of the state's responsibilities under Section 208 of the Federal Water Pollution Control Act. The rule's basic objective is to achieve 80-95 percent removal of stormwater pollutants before discharge to receiving waters. This rule requires treatment of the runoff from the first one inch of rainfall; or for facilities with a drainage area less than 100 acres, the first one-half inch of runoff. Implementation of the stormwater rule is achieved through a permitting process. The F.D.E.P. has delegated permitting responsibility to the South Florida Water Management District which has jurisdiction over the Town of Davie Area. The Town of Davie requires the involvement of drainage districts, including the Central Broward Drainage District, Tindall Hammock Soil and Water Conservation District, and South Broward Drainage District, in the development review process. For a map of these Drainage District Service Areas, see FIGURE III-2. The function of the districts in the insert basins mapreview process is to evaluate proposed improvements to land, to insure the provision and maintenance of adequate drainage facilities to satisfy the current and future needs of the area. The

CENTRAL BROWARD DRAINAGE DISTRICT
SUB AREAS

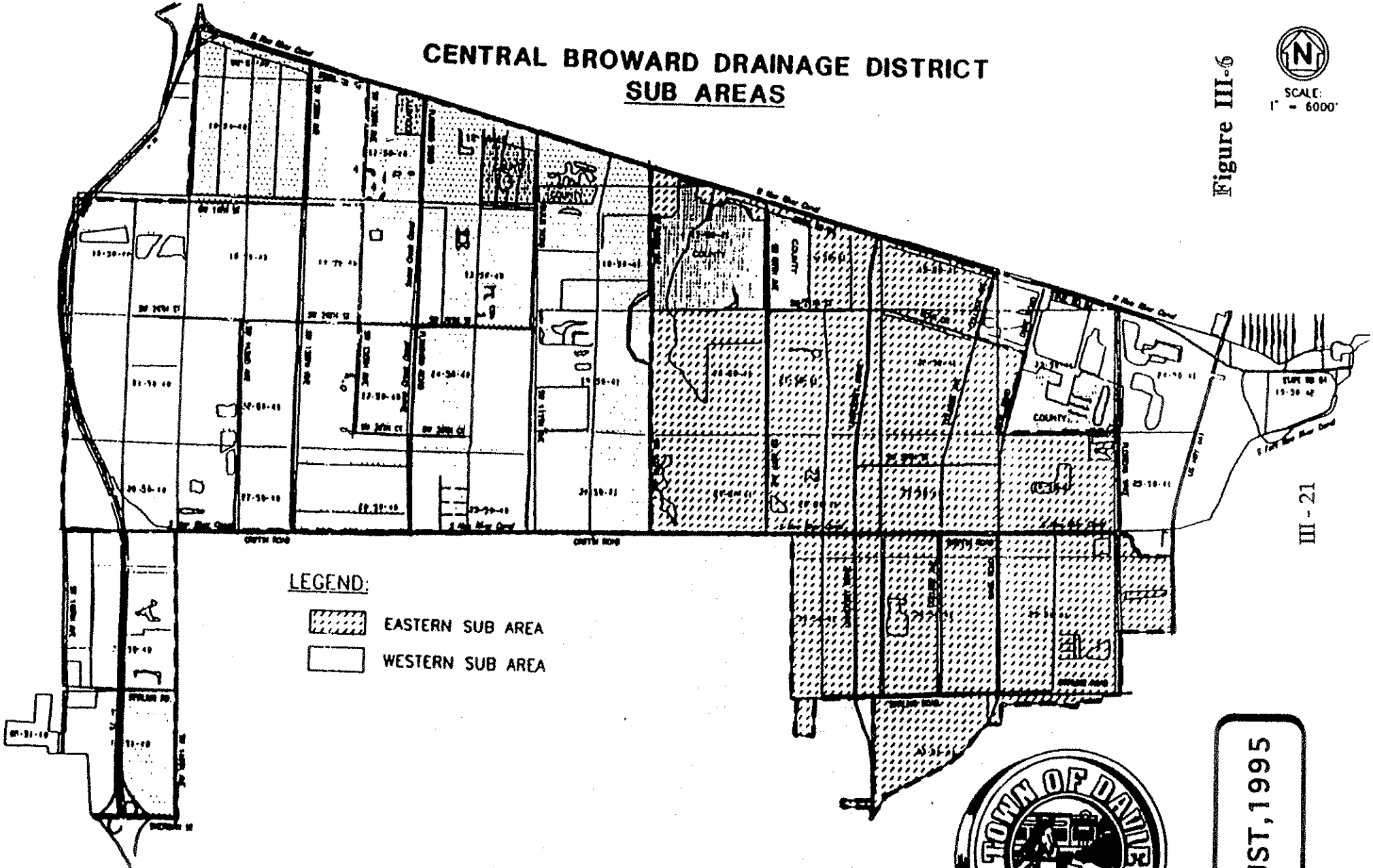


Figure III-6

TOWN OF DAVIE FLORIDA

AUGUST, 1995

appropriate drainage district reviews all plats and paving plans prior to the Town's review and/or issuance, for compliance with paving and drainage regulations.

Minimum standards for road crowns and finished floors are dictated by Broward County Water Resources Management Division. These standards are adopted by the drainage districts and the Town of Davie. These standards generally range from 5' to 7.5' above mean seal level for road crown elevations and from 7' to 8' above mean sea level for floor elevations, and are in compliance with Federal Emergency Management Agency (F.E.M.A.) regulations.

In general, the regulations of the drainage districts provide sufficient flood protection for the Town of Davie. Central Broward Drainage District personnel serve on the Development Review Committee, affording the Town a good opportunity for coordination regarding drainage issues.

Design Capacity for Storm Return Frequency. The existing canal network of the Central Broward Drainage District is fashioned on a minimum grid of 1/2 mile, unobstructed, connections into the South Florida Water Management's C-11 canal. The Drainage Districts provide a primary level of service for open flow protection into C-11 by gravity. This service is regulated by South Florida Water Management District's area design of maximum allowable discharges of 3/4" per acre per day for properties west of 100th Avenue and 1 1/2" per acre per day for properties east of 100th Avenue. (See Figure III-2A, Canal Network).

General Condition of Drainage Features. In general, the Town's drainage system operates smoothly and provides adequate protection from flooding. The system requires constant maintenance of debris and silt management and aquatic weed control. The Drainage Districts are currently performing these tasks. Water quality within the system of canals is generally good, but regulation is by Broward County. The Town and the Drainage Districts have adopted the dictates of the county standards and maintain compliance with same. On-site retention improvements necessary to accommodate development are identified and required in conjunction with plat, site plan and/or building permit review.

Development of Major Natural Drainage Features

There are no major natural drainage features located within the Town of Davie. Several minor features, such as small wetland sites, a disturbed oak hammock and a disturbed
slough site, exist and are being evaluated for their productivity and contribution to the natural ecosystem (please refer to the Recreation, Open Space and Conservation Element). Development of these natural areas is severely restricted by existing land development regulations.

Natural Groundwater Aquifer Recharge Area

Water quality standards for both surface waters and groundwaters are established and enforced by the DNRP as part of its responsibilities for water pollution control and abatement. It maintains a surface water and ground water quality monitoring network throughout the County and regulates wastewater discharge. For a description of parameters and monitoring results of the DNRP C-11 monitoring station, see the Recreation, Open Space Conservation Element. The DNRP has also promulgated storage tank and hazardous materials regulations intended to prevent contamination of the aquifer. A license is required from the DNRP for any dredging and filling within the "waters of Broward County" as defined in Chapter 27-11 of the DNRP Code of Regulations.

Regulations. Additional protection for groundwater recharge and wellfields has been provided through the Countywide application of the Wellfield Protection Program. Through County ordinances, all potable water wells and accepted proposed potable water well sites are protected from activities that utilize or create, as a by-product, hazardous or toxic materials. The Wellfield Protection Ordinance provides for three "zones of influence" surrounding each well, which correspond to the travel time within the aquifer. The use, handling and storage of listed toxic materials has been excluded from the innermost zone with monitoring and other protective measures applied in the middle and outer zones. Prior to inclusion in the program, wells and proposed well sites must be modeled, mapped and approved by the County Commission. Wellfields within the Town of Davie are located on Figure III-7 on the following page.

Existing Conditions. Broward County is underlain by two major aquifers; the Biscayne aquifer and the Floridian aquifer. The Biscayne aquifer is the only reliable source of potable water in the County. It is one of the most productive unconfined aquifers in the United States and one of the most permeable aquifers in the world. It underlies all of Broward County except the most westerly sections.

The S.F.W.M.D. has not designated any area within Broward County as a "prime groundwater recharge area". A major source of recharge to the Biscayne aquifer in Broward County the Everglades Water Conservation Areas. The three Water Conservation Areas (2a, 2b, and 3a) total 790 square miles and comprise approximately two-thirds of the County's total land area. Recharge occurs naturally as stormwater, which is stored and purified in the Conservation Areas, seeps into the aquifer.

Other major sources of recharge include the system of canals in the developable areas of the County. The land surface itself is also a major source of aquifer recharge. Generally, soil conditions in the County are conducive to recharge of the Aquifer. With the exception of those areas in southwest Broward with thick muck soils, movement of water into the ground is rapid. Recharge also may be obtained through injection and spray irrigation.

GENERAL LOCATION OF WELLFIELD PROTECTION AREAS

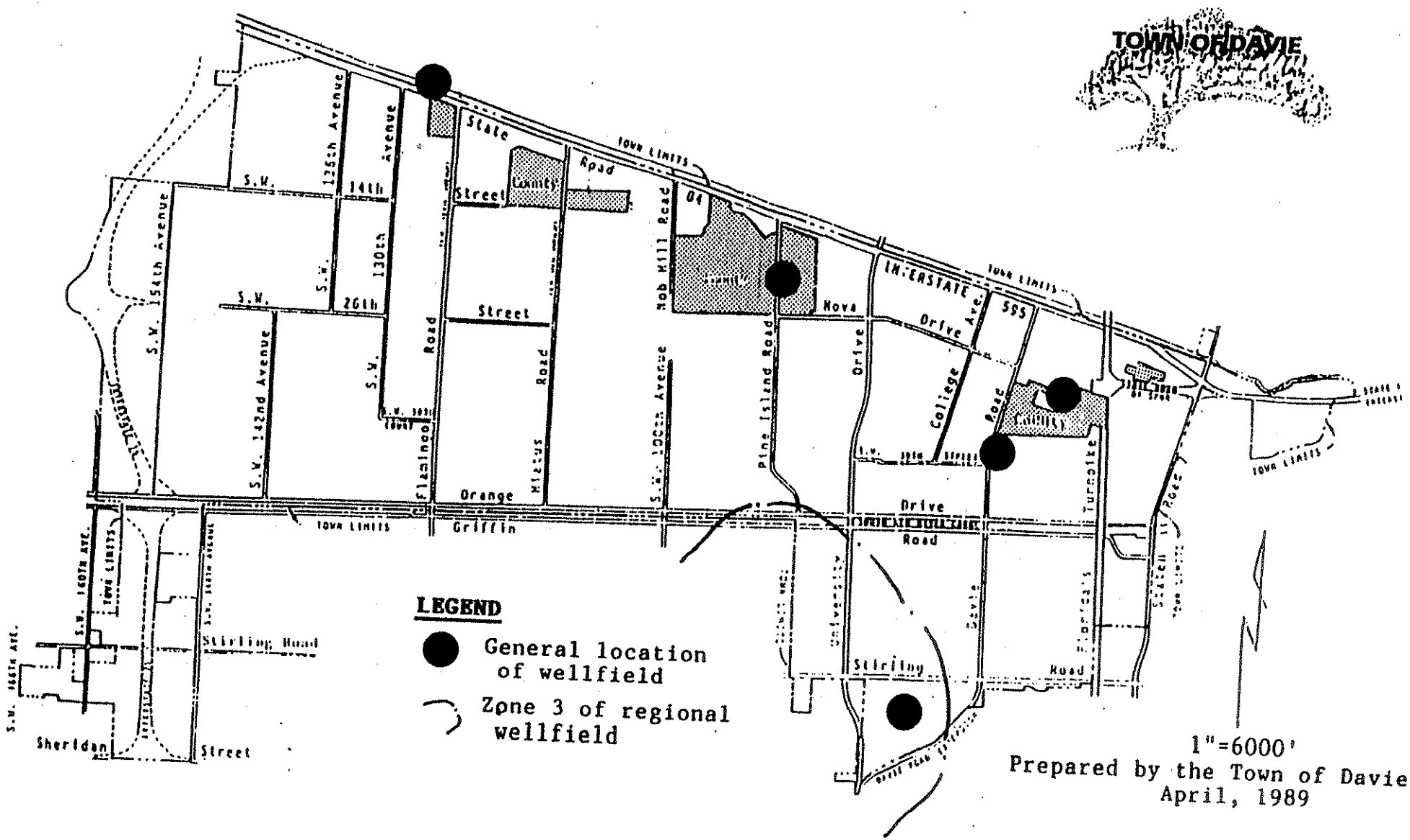


FIGURE III-7

Utilities Element: Needs Analysis

Water and Wastewater Service

The following section provides an analysis of the availability of the water and wastewater treatment facilities to meet projected demand on capacity. The analysis evaluates the availability of services based on the improvements and expansion of the facilities referenced in the Inventory of Existing Conditions. The analysis contained herein is based on an initial planning period of five years to the year 2000, and a long range time frame of ten years to the year 2005.

DAVIE SERVICE AREA:

• Initial Planning Period-1995-2000

2000 Design Capacity of the Facilities

Water treatment facilities	11.8 mgd
Wastewater treatment facilities	5.0 mgd

2000 Projected Demand on the Facility Capacity (Davie Proportional Demand 100%)

Water treatment facilities	4.2 mgd
Water treatment capacity surplus	64%
Wastewater treatment facilities	2.87 mgd
Wastewater treatment capacity surplus	43%

• Long Range Planning Period 1995-2005

2005 Design Capacity of the Facilities

Water treatment facilities	11.8 mgd
Wastewater treatment facilities	7.0 mgd

2005 Projected Demand on the Facility Capacity (Davie proportional capacity 100%)

Water treatment facilities	4.6 mgd
Water treatment capacity surplus	61%
Wastewater treatment facilities	3.14 mgd
Wastewater treatment capacity surplus	55%

Facility Capacity Analysis and Projected Levels of Service

In order to project Levels of Service throughout the short and long range timeframes, basic water demand and wastewater flow projections were derived from the population projections for the water and wastewater service areas. As mentioned earlier, the population projections for these areas were developed from the Broward County Land Use Plan Map. The estimated population projections

were determined based upon the maximum densities permitted under each particular land use designation. The projections for water demand were based on the maximum dwelling units per acre, number of persons (capita) per dwelling unit and a per capita consumption of 100 gallons per day. The projections for wastewater flows were based upon 110 gallons per capita per day. These figures for demand and flows are based on studies of flows in the South Florida area. Future plant expansion needs can be determined by comparing existing design capacities with projected demand and flows. The Town of Davie has planned its capital improvement needs around these projections. As shown in Table III-1, Davie is planning to expand the Water Treatment Plant by 4 million gallons per day in 2001, which will increase the total design capacity to 11.8 million gallons per day. Programmed Wastewater Treatment Plant expansions include an additional 2 million gallons per day currently being added and again in 2001 for a total design capacity of 7 million gallons per day.

Table III-2 and Figures III - 8-11 illustrates the existing and projected Levels of Service for the Water and Wastewater systems through the initial and long range planning periods. The Levels of Service, reflected in gallons per capita per day (gpcd), are projected by dividing total plant capacities by the number of persons being served by the respective plants. As is shown in the tables and graphs, the projected Levels of Service will fluctuate based upon the future planned expansions and the population growth in the service areas. The Town will maintain or exceed a Level of Service of 116 gpcd for wastewater service until the planned 2 mgd plant expansion in 1998, at which time a Level of Service of 190 gpcd will be provided. In 2001, when the second 2 mgd plant expansion is completed, the Level of Service will rise to 234 gpcd.

Table III-3 reflects the fact that water Levels of Service during the 10 year planning time frame will fluctuate between 197 and 292 gpcd, again, the fluctuation being determined by the proposed 4 mgd plant expansion in 2001 and the population growth rate in the service area.

TABLE III-2. PROJECTED CAPACITY SURPLUS FOR WASTEWATER AND WATER FACILITIES

	WASTEWATER			WATER		
	CAPACITY (mgd)	DEMAND (mgd)	% OF CAPACITY	CAPACITY (mgd)	DEMAND (mgd)	% OF CAPACITY
1995	3.00	2.58	86	7.8	3.79	49
1996	3.00	2.64	88	7.8	3.87	50
1997	3.00	2.70	90	7.8	3.96	51
1998	5.00	2.75	55	7.80	4.04	52
1999	5.00	2.81	56	7.80	4.13	53
2000	5.00	2.87	57	7.80	4.21	54
2001	5.00	2.92	58	11.80	4.29	36
2002	7.00	2.98	43	11.80	4.37	37
2003	7.00	3.03	43	11.80	4.45	38
2004	7.00	3.09	44	11.80	4.53	38
2005	7.00	3.14	45	11.80	4.61	39

Notes: 1. Wastewater demand projections based upon 110 gpcd.
2. Water demand projections based upon 100 gpcd.

Source: Town of Davie Department of Development Services provided the population figures.

TABLE III-3. SERVICE AREA POPULATION PROJECTIONS AND LEVEL OF SERVICE (gpcd)

	WASTEWATER		WATER	
	Population	LOS	Population	LOS
1995	25,808	116	37,887	206
1996	26,383	114	38,731	201
1997	26,958	111	39,575	197
1998	27,532	182	40,419	193
1999	28,107	178	41,262	189
2000	28,682	174	42,106	280
2001	29,232	171	42,913	275
2002	29,782	235	43,721	270
2003	30,332	231	44,528	265
2004	30,882	227	45,336	260
2005	31,432	223	46,143	256

Source: Town of Davie Department of Development Services provided the population figures.

The Town of Davie has programmed its water and wastewater plant expansions in advance of need to meet the projected demand and flows of the system through the 5 and 10 year planning periods. As for the wastewater facility, the programmed expansions for 1997-1998 and 2001 are planned to maintain, at a minimum, a LOS of 171 gpcd.

The programmed 4 mgd water facility expansion in 2001 was also planned well in advance of actual need. This facility expansion will assure a LOS of at least 185 gpcd is maintained throughout the planning periods. This will also assure a minimum of 42% facility surplus for wastewater and a 46% capacity surplus for water through the planning periods.

Adequacy of Service is based upon the demonstration that an existing water or wastewater treatment facility has sufficient capacity to provide for the needs of the new development and other developments in the service area. These Levels of Service, which represent total plant capacities divided by the number of persons served by the plants, are adequate to serve the needs of the service areas throughout the initial and long range planning periods.

FIGURE III - 8
Projected Water Facility Capacity

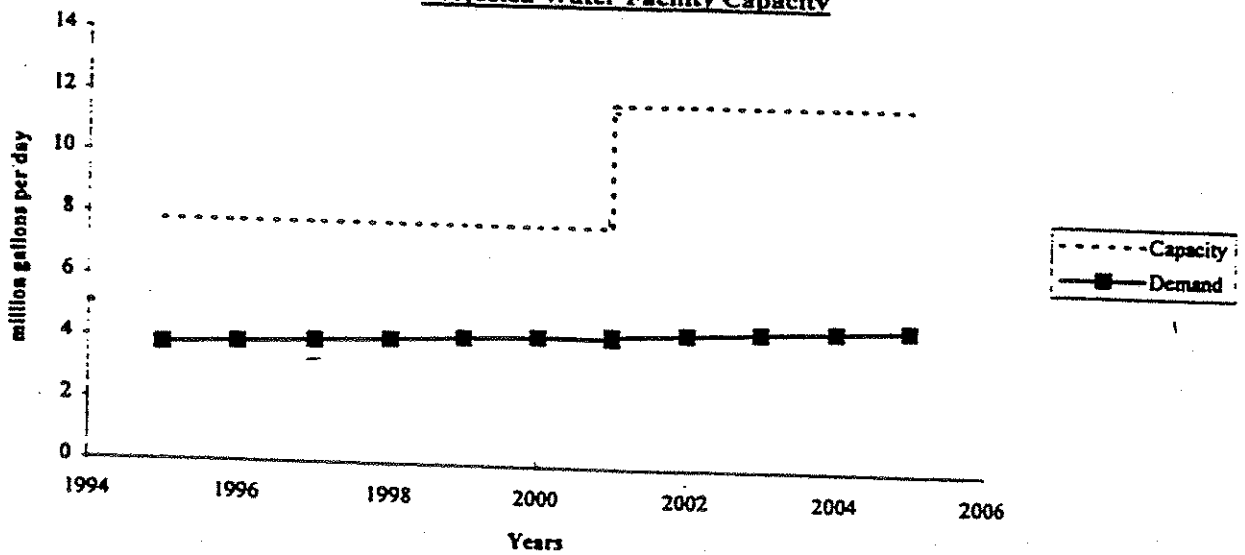


FIGURE III - 9
Projected Wastewater Facility Capacity

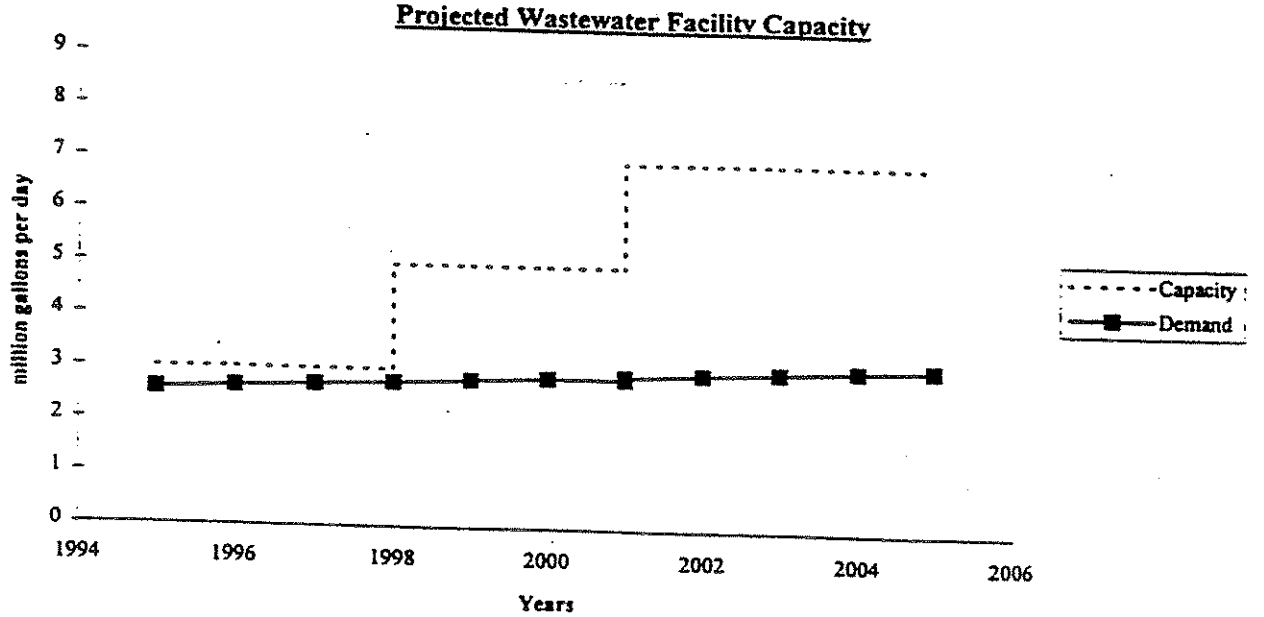


FIGURE III - 10
Projected Water Level of Service

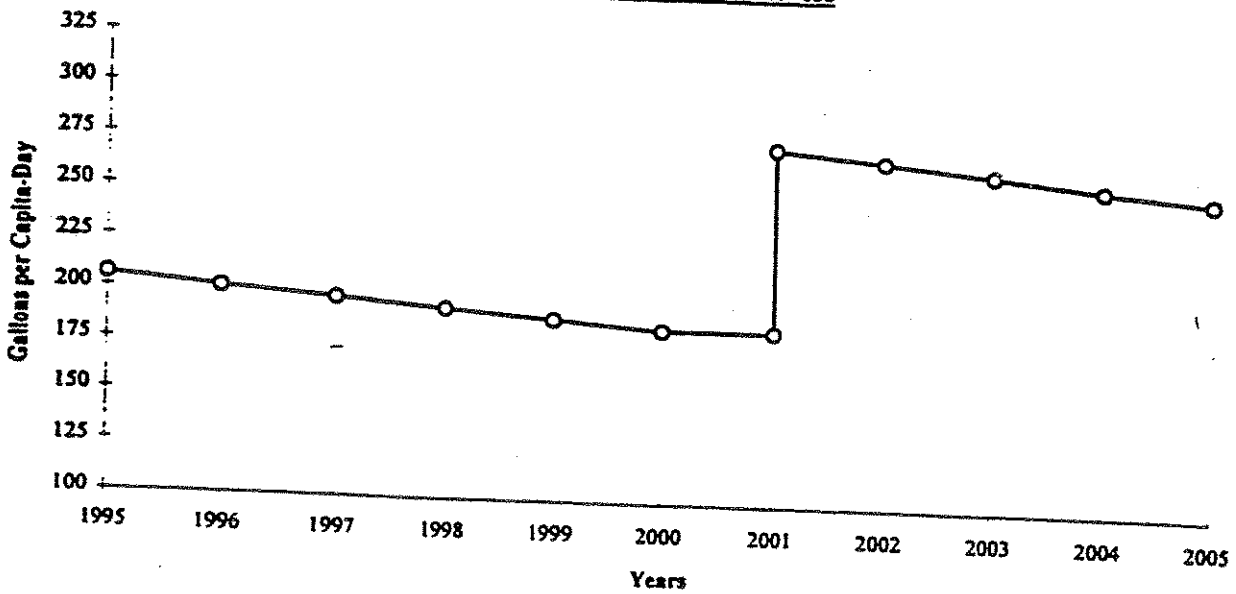
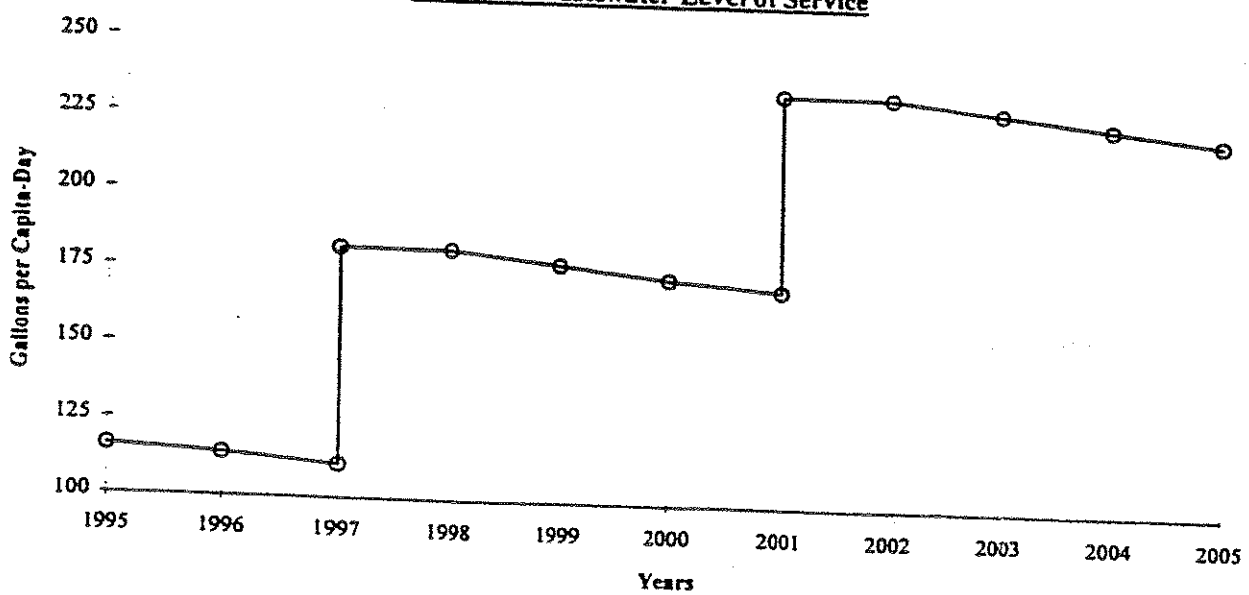


FIGURE III - 11
Projected Wastewater Level of Service



FERNCREST UTILITIES SERVICE AREA:

• Initial & Long Range Planning Periods 1995-2005

The Ferncrest Utilities Company has no plans for expansion, nor is there an need for expansion to accommodate demand throughout the short- and long-term planning timeframes. Therefore, no distinction is made between the initial and long range planning periods.

• Design Capacity of the Facilities

Water treatment facilities	1.00 mgd
Wastewater treatment facilities	.60 mgd

• Projected Demand on the Facility Capacity

Water treatment facilities	0.55 mgd
-Davie projected share	23%
Wastewater treatment facilities	0.37 mgd
-Davie projected share	31%

• Facility Capacity Analysis

For the initial and long range planning periods, 1995-2005, the water treatment facilities will be operating at 55% of capacity with a projected 45% surplus capacity. For the initial and long range planning periods, 1995-2005, the wastewater treatment facilities will be operating at 62% of capacity with a projected 38% capacity surplus.

• Projected Levels of Service

Since Ferncrest's LOS is not analyzed in gpcd, a judgment of future capacity adequacy is made based on available surplus capacity. Considering the projected average of 45% surplus capacity for water and 38% for wastewater for the Ferncrest System through the year 2000, the LOS appears to be adequate to serve the needs through the planning periods.

SOUTH BROWARD UTILITIES COMPANY SERVICE AREA:

Initial Planning Period 1995-2000

• Design Capacity of the Facilities

Water treatment facilities	2.00 mgd
Wastewater treatment facilities	1.00 mgd

• Projected Demand on the Facility Capacity

Water treatment facilities	0.657 mgd
-Davie projected share	98%
Wastewater treatment facilities	0.555 mgd
-Davie projected share	98%

• Facility Capacity Analysis

For the initial planning period, 1995-2000 the water treatment facilities will be operating at 34% of capacity with a projected 66% capacity surplus. For the initial planning period, 1995-2000, the wastewater treatment facilities will be operating at-56% of capacity with a projected 44% capacity surplus.

Long Range Planning Period 1995-2005

• Design Capacity of the Facilities

Water treatment facilities	2.00 mgd
Wastewater treatment facilities	1.00 mgd

• Projected Demand on the Facility Capacity

Water treatment facilities	.73 mgd
-Davie projected share	98%
Wastewater treatment facilities	.61 mgd
-Davie projected share	98%

• Facility Capacity Analysis

For the long range planning period, 1995-2005, the water treatment facilities will be operating at 37% of capacity with a projected 63% capacity surplus. For the long range planning period, 1995-2005, the wastewater treatment facilities will be operating at 39% of capacity with a projected 61% capacity surplus.

Projected Levels of Service

	Wastewater	Water
Year 2000	126 gpcd	252 gpcd
Year 2005	115 gpcd	230 gpcd

SUNRISE SERVICE AREA:

(Data from "City of Sunrise Water and Wastewater Master Plan" 1992)

Initial Planning Period 1995-2000

• Design Capacity of the Facilities

Water treatment facilities	33.40 mgd
Wastewater treatment facilities	25.00 mgd

• Projected Demand on the Facility Capacity

Water treatment facilities	22.15 mgd
Wastewater treatment facilities	19.30 mgd

• Facility Capacity Analysis
For the initial planning period, 1995-2000, the water treatment facilities will be operating at 66% of capacity with a projected 34% capacity surplus. For the initial planning period, 1995-2000, the wastewater treatment facilities will be operating at 77% of capacity with a projected 23% capacity surplus.

Long Range Planning Period 1995-2005

• Design Capacity of the Facilities

Water treatment facilities	36.30 mgd
Wastewater treatment facilities	25.00 mgd

• Projected Demand on the Facility Capacity

Water treatment facilities	24.27 mgd
Wastewater treatment facilities	21.20 mgd

• Facility Capacity Analysis
For the long range planning period, 1995-2005, the water treatment facilities will be operating at 67% of capacity with a projected 33% capacity surplus. For the long range planning period, 1995-2005, the wastewater treatment facilities will be operating at 85% of capacity with a projected 15% capacity surplus.

SOLID WASTE

Projected Need
Adequacy of solid waste disposal service is based upon the demonstration that an existing solid waste facility has sufficient capacity to provide for the needs of existing and new development. If service is not currently available but there is an economically and fiscally feasible plan to provide service, the development permit may be conditioned on that availability.

The following table provides solid waste generation projections for Broward County. Total waste includes all solid waste requiring disposal excluding ash. The garbage and trash figures were adjusted to reflect the one percent annual increase in the solid waste generation rate over and above that expected from the projected population increase. This adjustment was made to account for the difference between the approximate three percent increase in reported solid waste disposal since 1984 and the approximate two percent increase attributable directly to population.

The curbside collection of solid waste in the Town is handled by a franchised private

TABLE III - 4
Solid Waste Generation Projections (Thousand Tons)

Broward County
1995-2000

Year	Est. Pop.	Garbage	Trash	Total Waste	Lbs/Cap/Day
1995	1,470,300	1,366	580	1,946	7.2
1996	1,492,500	1,386	580	1,966	7.2
1997	1,514,600	1,406	580	1,986	7.2
1998	1,536,800	1,426	580	2,006	7.2
1999	1,558,900	1,446	580	2,026	7.1
2000	1,581,100	1,466	580	2,046	7.1

Source: Broward County Office of Integrated Waste Management

carting company and is planned to be handled in this manner in the future. The disposal of the collected trash is a County function as it would be impractical for each of the municipalities of Broward to site their own disposal facility and provide for individual collection. The Town has, through interlocal agreement, pledged its waste stream to Broward County.

The continued use of landfill disposal presents two primary problems: first, the problem of inadequate long-range capacity to continue the present level of service as County growth continues; and, second, the concern regarding possible groundwater contamination of the Biscayne Aquifer, the county's sole source of potable water. As an alternative to sanitary landfilling, the County opened two resource recovery plants in 1991, each of which has a capacity of 2,250 tons per day. These plants will produce electric power for sale to Florida Power and Light Co. and the ash residue will be greatly reduced in volume and practically inert. The combined capacity of these facilities will handle the projected solid waste until around 2000, at which time one of the plants will need to be expanded by 33% to 3,000 tons per day (as of June 1995, no expansions were planned).

When resource recovery plants are running at maximum output, increased capacity can be achieved by constructing additional modules at existing facilities or by developing new sites. When landfill capacity is depleted, additional capacity can be developed by broadening the base of existing cell areas, increasing the height of cells, or developing new cells. Broward County and private companies have proposed to construct additional facilities in order to provide an adequate level of service for solid waste disposal during the planning periods ending in 2000 and 2005. These facilities are as follows:

Facility

Year	Facility	Type
1997	CDSL(1)	Ash Cell 3- 1,257,000 CY
1998	CDSL	Sanitary Cell 2 - 3,180,000 CY(2)
2000	South Ash	Ash Cell 2 - 2,957,000 CY(2)
2000	MRF	Expansion or 2nd MRF

(1) Central Disposal Sanitary Landfill, owned and operated by a subsidiary of Waste Management, Inc. was expanded in 1988, 1991 and 1994 to handle Municipal Solid Waste as well as ash residue from the North Resource Recovery Facility. A separate ash residue landfill was developed at the South Resource Recovery Facility in 1988.
(2) The actual size of cells constructed will be determined at the time based on updated projections of need.

Broward County is contractually obligated to deliver 1,095,000 tons per year to the Wheelabrator Resource Recovery Facilities. Current demand is 1,000,000 tons per year and 30,000 tons per year at the Broward County Interim Contingency Landfill at US Highway 27 and Sheridan Street. The current tipping fee is $50.00/ton. The processable waste is disposed at the Wheelabrator South Broward, Inc. Southern Resource Recovery Facility at 4400 South State Road Seven. The current tipping fee is $7,587/ton. In September, 1993, a Materials Recovery Facility (MRF) was opened, which is owned and operated by Browning Ferris Industries, Inc., under contract to the County.

Another opportunity for the reduction of the solid waste stream is through source separation and collection of recyclable materials. These materials include newsprint, aluminum, glass, and certain types of plastic beverage containers. Recycling reduces the capital costs of expanding disposal facilities, as the volume of solid waste is reduced. Recycling also saves natural resources, reduces energy in production, and reduces air and water pollution associated with the mining and processing of raw materials. In response to growing concern for the environmental and economic affects of landfilling, the Florida Legislature, in 1988, approved Senate Bill 1152 which requires all counties to draft and establish a recycling program by July 1989. The legislation requires a phased reduction of solid waste resulting in a decrease in solid waste production by 30 percent as of 1993. The County's resource recovery program has addressed this new mandate.

Considering the current and projected solid waste generation rates for Davie and Broward County, and the existing and proposed capacities of the landfills and disposal facilities, the projected LOS for Davie and Broward County solid waste generation is adequate to support projected population and growth rates through the year 2000 and beyond.

Drainage

Projected Need

The South Florida Water Management is currently undertaking operations and study of the Western C-11 basin. This study, incomplete as of August 1, 1995, will evaluate and offer recommendations on the present and proposed operating procedures of the basin and pumping station.

Because of the mixing of positive and retained waters within the District's canals, it is difficult to assess the impact of a change in operation of the Western C-11 basin. If the study shows the pumping operation to be adequate, then the system as a whole will need only to maintain the status quo. If the study reveals a drastic change to minimize the pumping is necessary, then more retention lakes and more lateral canals will be required.

In general, the regulations of the drainage districts provide sufficient flood protection. Drainage District personnel serve on the site plan committee and the development review committee, this liaison provides a good basis for the needs and wants of the Drainage District and the Town.

The Town and the Drainage Districts must maintain the open water body concept in order to prevent flooding from a major storm event. Developers who border on the canal network should provide for relocation, not elimination, of the system.

Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element: Goals, Objectives and Policies

GOAL: Provide for the safe, efficient, and adequate supply of sanitary sewer treatment capacity, solid waste disposal, drainage facilities and potable water service for new and existing developments while maintaining and protecting the functions of natural ecosystems and allowing for development consistent with the Goals, Objectives and Policies of the Land Use Element of the Comprehensive Plan.

SANITARY SEWER SERVICE

OBJECTIVE 1: The Town shall provide adequate sanitary sewer service to the Davie service areas in a manner consistent with regulations promulgated by applicable regulatory agencies.

- **Policy 1-1:** The Level of Service (LOS) standard for sanitary sewer facilities is herein adopted to be 110 gallons per capita per day (gpcd), also described as 350 gallons per day (gpd) per equivalent residential connection (ERC) for potable water service. The ERC for non-residential, commercial, industrial or institutional connections shall be based on the Daily Flow Table on the following page:

ANTICIPATED AVERAGE DAILY FLOW TABLE
TYPES OF BUILDING USAGE

RESIDENTIAL	Average Daily Flow/Gallons per day
SINGLE FAMILY DETACHED	
Three (3) bedrooms	350 GPD
Two (2) bedrooms or 1ess	300 GPD
each additional bedroom	50 GPD
MULTI-FAMILY BLDGS, INCLD TOWNHOUSE BLOCKS	
Three (3) bedrooms	325 GPD
Two (2) bedrooms	275 GPD
One (1) bedroom	250 GPD
Efficiencies	200 GPD
DUPLEXES, TRIPLEXES OR QUADRAPLEXES	
Same as multi-family above	
MOBILE HOME PARKS	
Single Coach Units (One bathroom)	200 GPD
Double Coach Units (Two bathrooms)	300 GPD
TRAVEL TRAILER PARKS	
Per space	150 GPD

OTHER THAN RESIDENTIAL	Average Daily Flow/Gallons per Day
AIRPORTS	
Per Passenger	2 GPD
Per Employee	14 GPD
ASSEMBLY HALLS (per seat)	2 GPD
BAR & LOUNGES W/NO FOOD SERVICE	
(per seat)	20 GPD
BEAUTY PARLORS	
Per 100 sq. ft. of work area	30 GPD
BOWLING ALLEYS	
Per lane (including Bar & Food Service)	200 GPD
CAMPS	
Day, No Food Service (Per Person)	25 GPD
luxury resorts (Per Person)	100 GPD
labor (Per Person)	100 GPD

Youth & Recreation (Per Person)	15 GPD
CHURCHES (Per Sanctuary Seat)	5 GPD
DANCE HALLS (Per Person)	3 GPD
DENTIST OFFICE (Per chair)	250 GPD
FACTORIES	
With Showers (Per person/shift or 100 s.f./shift)	30 GPD
W/O Showers (Per person/shift or 100 s.f./shift)	15 GPD
FUNERAL HOMES (Per 100 s.f.)	10 GPD
HOSPITALS AND NURSING HOMES	
Per Bed Space	200 GPD
Each Resident Staff	100 GPD
HOTELS & MOTELS (per room or unit)	150 GPD
INSTITUTIONS (Public, other than those listed herein)	
Per person including resident staff	100 GPD
LAUNDRIES (coin operated)	
Per machine	275 GPD
OFFICE BUILDING (except medical & dental)	
Per 100 ft of gross building area	15 GPD
PARKS (public)	
with comfort station equipped w/flush toilets (per person)	10 GPD
RECREATION BUILDINGS (per person)	2 GPD
RESTAURANTS	
24 hours, per seat	50 GPD
less than 24 hours, per seat	30 GPD
Fast Food served on paper plate, (per seat)	25 GPD
Drive-ins, per space	15 GPD
Carry-out facilities (in addition to seat & drive-in), per 100 sq . ft . of kitchen floor space	50 GPD
plus, per employee	10 GPD

	Elem.	High/Coll
SCHOOLS		
Day - Per student or staff member	10	15
Add for shower/per student	5	5
add for cafeteria/per student or staff	5	5
Boarding School/per student	100	100
Dormitories/per student	100	100
SERVICE STATIONS		
Full service stations		
First two bays		750 GPD
each additional bay		300 GPD
per fuel pump		100 GPD
SELF-SERVICE STATIONS (no service bays)		
Per Fuel Pump		50 GPD
Convenience store (per 100 sq. ft . or fracti on thereof)		25 GPD
SHOPPING CENTER		
Per sq. ft. of floor space; unless otherwise listed in this table or otherwise determined by the Town Engineer		0.1 GPD
STADIUMS, FRONTONS, BALL PARKS		
Per seat		3 GPD
STORES, RETAIL		
(per sq. ft. of floor space)		0.1 GPD
SPECULATION BUILDINGS		
(per sq. ft. of floor space) to be readjusted upon occupancy		0.1 GPD
THEATERS		
Indoor per seat		10 GPD
Outdoor, per speaker		
WAREHOUSES		
With bathroom facilities in each bay (per s.f. of floor space)		0.1 GPD
With remote bathroom facilities (per s.f. of floor space)		0.04 GPD

The LOS standard shall also reflect other level of service standards utilized by the Broward County Environmental Quality Control Board pertaining to sanitary sewer facilities. The level of service standard shall be used to determine service adequacy during the earliest of the following processes: time of plat approval for properties requiring platting; or, site plan approval for development which does not require (re)platting, pursuant to the Platting Requirement of the Plan Implementation Section of the Future Land Use Plan, or for property platted prior to March 20, 1979; or, building permit review for development not requiring (re)platting or site plan approval.

- **Policy 1-2:** All effluents, sludges and other by-products of the wastewater treatment process shall be disposed of in a manner acceptable to applicable regulatory agencies, and in an environmentally sound manner.

- **Policy 1-3:** Sanitary sewer facilities shall be extended, to the extend that it is financially feasible, to those portions of the Davie service areas not currently served.

- **Policy 1-4:** The Davie Utilities Department shall coordinate with developers in the provision of adequate sanitary sewer service within the Davie service areas, with developers assuming the cost and construction requirements for extension of the system to accommodate development.

- **Policy 1-5:** All development applications that are to be served by septic tank must receive DNRP approval for the use of septic tanks prior to the issuance of development permits from the Town.

- **Policy 1-6:** The Town shall identify areas served by septic tanks and sanitary sewer systems, including corresponding densities and soil suitability for septic tanks. The study, to be completed by December 31, 1999, will identify opportunities for sewer extension, where such extension will not encourage development contrary to plan objectives and policies regarding low residential density and semi-rural community character.

OBJECTIVE 2: Areas within the Town not served by the Town of Davie utilities systems shall be assured an adequate level of wastewater disposal treatment service.

- **Policy 2-1:** Through the Town's Development Review Process, and pursuant to applicable land development regulations, the Town may assure adequacy of service consistent with the level of service standards established by the Broward County Environmental Quality Control Board.

OBJECTIVE 3: Discourage urban sprawl by continuing to require the use of sanitary sewer facilities where service is available in a financially

feasible manner.

- **Policy 3-1:** Wastewater services shall be provided to users within the Davie service areas prior to expansion into new areas.

SOLID WASTE DISPOSAL

OBJECTIVE 4: Insure the provision of adequate solid waste disposal service, recognizing that solid waste disposal is a regional function, and emphasizing resource recovery.

- **Policy 4-1:** The level of service standards adopted by Broward County shall be applicable for the Town of Davie; specifically, the following levels shall be adopted and utilized to assess adequacy of service as follows:

Land Use	Amount of Solid Waste
Residential	8.9 lbs. per unit per day
Industrial and Commercial	
Factory/Warehouse	2 lbs. per 100 sq. ft. per day
Office Building	1 lb. per 100 sq. ft. per day
Department Store	4 lbs. per 100 sq. ft. per day
Supermarket	9 lbs. per 100 sq. ft. per day
Restaurant	2 lbs. per meal per day
Drug Store	5 lbs. per 100 sq. ft. per day
School	
Grade School	10 lbs. per room & 1/4 lbs. per pupil per day
High School	8 lbs. per room & 1/4 lbs. per pupil per day
Institution	
Hospital	8 lbs. per bed per day
Nurse or Intern Home	3 lbs. per person per day
Home for Aged	3 lbs. per person per day
Rest Home	3 lbs. per person per day

(Source: Broward County Solid Waste Element)

The level of service standard shall be used to determine service adequacy during the earliest of the following processes: time of plat approval for properties requiring platting; or, site plan approval for development which does not require (re)platting, pursuant to the Platting Requirement of the Plan Implementation Section of the Future Land Use Plan, or for property platted prior to March 20, 1979; or, building permit review for development not requiring (re)platting or site plan

approval.

- **Policy 4-2:** Coordinate with appropriate regulatory agencies in the review and monitoring of procedures necessary to insure safe disposal of hazardous and biohazards wastes.

OBJECTIVE 5: The Town shall reduce by 30% the volume of landfilled materials, consistent with the County's overall 30% reduction.

- **Policy 5-1:** Coordinate with Broward County in its efforts to reduce the waste stream by encouraging source separation and recycling of solid waste.

DRAINAGE AND NATURAL GROUNDWATER AQUIFER RECHARGE

OBJECTIVE 6: The Town shall guide development in accord with practices that as sure reasonable flood protection and promote aquifer recharge.

- **Policy 6-1:** The level of service for water management shall consist of the following minimum design criteria:
  - Federal Emergency Management Administration (F.E.M.A.) criteria for minimum floor elevations of building sites, floodplain protection provisions.
  - Maximum allowable discharges of 3/4" per acre per day for properties west of 100th Avenue, and 1 1/2" per acre per day for properties east of 100th Avenue.

- **Policy 6-2:** Continue to work with the drainage districts exercising jurisdiction in the Town to insure provision of adequate improvements to the drainage system concurrent with development impacts. This shall be accomplished throughout the Development Review process, which shall assess the adequacy of essential service at the time of plat approval for properties requiring platting, and at site plan approval for properties not requiring platting.

- **Policy 6-3:** Restrict on-site discharges within wellfield protection areas as depicted on the Future Land Use Plan map series and in accord with the Broward County Potable Water Supply Wellfield Protection Ordinance.

- **Policy 6-4:** Promote aquifer recharge by encouraging the provision of adequate green open space in all development through the Zoning Ordinance.

- **Policy 6-5:** Encourage and facilitate the creation and maintenance of revegetated wetlands, including mitigation sites, in areas of the Town that maximize the natural ecological benefits of such

aquifer recharge sites.

- **Policy 6-6:** The Town adopts by reference the water quality standards contained in Article V, chapter 27 of the Broward County Code.

- **Policy 6-7:** The Town shall utilize the long-range water supply plans of the SFWMD as "best available information" under the requirements of the Growth Management Act, Chapter 163 F.S.

- **Policy 6-8:** The Town shall adopt the SFWMD standards for minimum stormwater flows and levels.

POTABLE WATER SERVICE

OBJECTIVE 7: The Town shall provide adequate potable water service to the Davie service areas in a manner consistent with regulations promulgated by applicable regulatory agencies.

- **Policy 7-1:** The Level of Service (LOS) standard for potable water facilities is herein adopted to be 150 gallons per capita per day (gpcd), also described as 350 gallons per day (gpd) per equivalent residential connection (ERC). The ERC for non-residential, commercial, industrial or institutional connections shall be based on the flow table included in Policy 1.1) The LOS standard shall also reflect other level of service standards utilized by the Florida Department of Health and Rehabilitative Services, through its Public Health Unit, for potable water service. The level of service standard shall be used to determine service adequacy during the earliest of the following processes: time of plat approval for properties requiring platting; or, site plan approval for development which does not require (re)platting, pursuant to the Platting Requirement of the Plan Implementation Section of the Future Land Use Plan, or for property platted prior to March 20, 1979; or, building permit review for development not requiring (re)platting or site plan approval.

- **Policy 7-2:** All by-products of the water treatment process shall be disposed of in a manner acceptable to applicable regulatory agencies, and in an environmentally sound manner.

- **Policy 7-3:** Potable water facilities shall be extended, to the extend that it is financially feasible, to those portions of the Davie service areas not currently served by the municipal system.

- **Policy 7-4:** The Davie Utilities Department shall coordinate with developers in the provision of adequate potable water services within the Davie service areas, with developers assuming the cost and construction requirements for extension of the system to accommodate development.

- **Policy 7-5:** The Town shall coordinate with appropriate entities, including the South Florida Water Management District, in encouraging, implementing and publicizing conservation techniques during water conservation periods.

- **Policy 7-6:** Land development regulations shall encourage the use of native vegetation and xeriscape in new development, to reduce dependency on potable water supply.

OBJECTIVE 8: Areas within the Town not served by the Town of Davie systems shall be assured an adequate level of potable water service.

- **Policy 8-1:** Through the Town's Development Review Process, and pursuant to applicable land development regulations, the Town may assure adequacy of service consistent with the level of service standards established by the Florida Department of Health and Rehabilitative Services, through its Public Health Unit.

OBJECTIVE 9: Discourage urban sprawl by continuing to require the use of municipal potable water service where service is available in a financially feasible manner.

- **Policy 9-1:** Potable water service shall be provided to users within the Davie service areas prior to expansion into new areas.

Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element Plan Implementation Section:

All departments in the Town participating in the implementation of this Element shall be required to operate within the framework established by the Goals, Objectives and Policies. All decision-making with regard to capital improvements and expenditures, shall reflect the Goals, Objectives and Policies. Annual budget review and capital improvement programming shall reflect consideration of needs that have been determined with respect to the Goals, Objectives and Policies.

Town land development regulations shall be amended, as necessary, to implement the requirements of this Element.

Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element: Monitoring and Evaluation Procedures

The following procedures address the requirement of Chapter 9J-5, F.A.C. to provide monitoring and evaluation procedures for each element:

- Continued compliance with regulations promulgated by appropriate regulatory agencies which address the quality and quantity of services (Objectives 1,6)

- Coordination with providers of services within the Town other than the Town of Davie, to insure adequate services at acceptable levels of service (Objectives 2, 7).

- Demonstrable growth in the number of customers served, in accordance with the Capital Improvements Program (Objectives 3, 8).

- Maintenance of favorable bond rating for municipal improvements.

The Town shall annually:

- evaluate adopted Levels of Service for potable water, sanitary sewer, solid waste and drainage facilities to determine if standards adopted in this Element have been met.

- assess compliance with the concurrence management system through determination of whether or not adequate Levels of Service for utilities facilities serving Davie have been met.

- update capacity and demand information on an annual basis for utilities facilities serving Davie.

- monitor the extent of urban sprawl through an analysis of service and facility extensions. The analysis shall consider compliance with Policies 3-1 and 8-1 which promote development within areas where facilities and services are available before extending service areas.

- assess coordination mechanisms with Broward County on the closed Broward Landfill clean-up by evaluating groundwater impacts and progress towards creating a park facility on the site.

Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element: Glossary

- **Building:** any structure having a roof and used or built for the shelter or enclosure of persons, animals, chattels, or property of any kind.

- **Building Permit:**
  (1) Any permit for the erection or construction of a new building required by Section 301.1 of the South Florida Building Code, 1984, Broward Edition, as amended.
  (2) Any permit for an addition to an existing building which would:
  (a) create one or more additional dwelling units, or
  (b) involve a change in the occupancy of a building as described in Section 104.7 of the South Florida Building Code, 1984, Broward Edition, as amended.
  (3) Any permit which would be required for the nonresidential operations included in Section 301.1(a) of the South Florida Building Code, 1984, Broward Edition, as amended.

- **Capital Budget:** the portion of the local government's budget reflecting capital improvements scheduled for a fiscal year.

- **Capital Improvement:** physical assets constructed or purchased to provide, improve or replace a public facility and which are large scale and high in cost. The cost of a capital improvement is generally nonrecurring and may require multi-year financing. For the purpose of this rule, physical assets which have been identified as existing or projected needs in the individual comprehensive plan elements shall be considered capital improvements.

- **Concurrence:** public facilities and services needed to support development shall be available at the same time or coincidental with the impacts of such development.

- **Cone of Influence (Zone of Influence):** an area around one or more major waterwells, the boundary of which is determined by the government agency having specific statutory authority to make such a determination based on groundwater travel or drawdown depth.

- **Conservation Uses:** activities within land areas designated for the purpose of conserving or protecting natural resources or environmental quality and includes areas designated for such purposes as flood control, protection of quality or quantity of groundwater or surface water, floodplain management, fisheries management, or protection of vegetative communities or wildlife habitats. Conservation Uses are further defined in the Conservation land use

category, as described in the Permitted Uses portion of the Plan Implementation Section.

- **Consistency:** For purposes of this definition, a local comprehensive plan is said to be consistent with the state comprehensive plan and the regional policy plan if it is "compatible with" or "furthers" such plans. The term "compatible with" means that the local plan is not in conflict with the state comprehensive plan or regional policy plan. The term "furthers" means to take action in the direction of realizing goals or policies of the state or regional plan.

- **Developer:** any person, including a governmental agency, undertaking any development.

- **Development:**
  (1) The carrying out of any building activity or mining operation, the making of any material change in the use of appearance of any structure or land, or the dividing of land into two or more parcels.
  (2) The following activities or uses shall be taken for the purposes of this chapter to involve "development", as defined in this section:

  (a) A reconstruction, alteration of the size, or material change in the external appearance of a structure on land.
  (b) A change in the intensity of use of land, such as an increase in the number of dwelling units in a structure or on land or a material increase in the number of businesses, manufacturing establishments, offices, or dwelling units in a structure or on land.
  (c) Alteration of a shore or bank of a seacoast, river, stream, lake, pond or canal, including any "coastal construction" as defined in Section 161.021, Florida Statutes.
  (d) Commencement of drilling, except to obtain soil samples, mining, or excavation on a parcel of land.
  (e) Demolition of a structure.
  (f) Clearing of land as an adjunct of construction.
  (g) Deposit of refuse, solid or liquid waste, or fill on a parcel of land.

  (3) The following operations or uses shall not be taken for the purpose of this chapter to involve "development" as defined herein:

  (a) Work by a highway or road agency or railroad company for the maintenance or improvement of a road or railroad tract, if the work is carried out on land within the boundaries of the right-of-way.
  (b) Work by any utility and other persons engaged in the distribution or transmission of gas or water, for the purpose of inspecting, repairing, renewing, or constructing on established rights-of-way any sewers, mains, pipes, cables, utility tunnels, powerlines, towers, poles, tracts, or the like.
  (c) Work for the maintenance, renewal, improvement, or alteration of any structure, if the work affects only the interior or the color of the structure or the decoration of the exterior of the structure.

(d) The use of any structure or land devoted to dwelling uses or any purpose customarily incidental to enjoyment of the dwelling.
(e) The use of any land for the purpose of growing plants, crops, trees and other agricultural or forestry products; raising livestock; or for other agricultural purposes.
(f) A change in use of land or structure from a use within a class specified in an ordinance or rule to another use in the same class.
(g) A change in the ownership or form of ownership of any parcel or structure.
(h) The creation or termination of rights of access, raparian rights, easements, covenants concerning development of land, or other rights in land.

(4) "Development," as designated in an ordinance, rule, or development rule includes all other development customarily associated with it unless otherwise specified. When appropriate to the context, "development" refers to the act of developing to the result of development. Reference to any specific operation is not intended to mean that the operation or activity, when part of other operations or activities, is not development. Reference to particular operations is not intended to limit the generality of subsection (1).

- **Development Order:** any order granting, denying, or granting with conditions an application for a development permit.

- **Development Permit:** any building permit, zoning permit, plat approval or rezoning, certification, variance, or other action having the effect of permitting development.

- **Drainage Facilities:** a system of man-made structures designed to collect, convey, hold divert or discharge stormwater, and includes stormwater sewers, canals, detention structures, and retention structures.

- **Dwelling Unit:** a house, apartment, or condominium unit, trailer, group of rooms, or a single room intended for occupancy as separate living quarter with direct access from the outside of the building or through a common hall and with complete kitchen facilities for the exclusive use of the occupants, including rental units contained in a multi-unit structure or complex which are licensed by the State Department of Business Regulation, Division of Hotels and Restaurants, as "apartments", "rental condominiums" and "Retirement Housing".

- **Environmentally Sensitive Land:** those areas containing Natural Resources, as depicted in the Future Land Use Plan Map Series.

- **Flood Plains:** areas inundated during an identified flood event or identified by the National Flood Insurance Program as an A Zone or V Zone on Flood Insurance Rate Maps or Flood Hazard Boundary Maps.

- **Hazardous waste:** solid waste, or a combination of solid wastes, which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or may pose a substantial present or potential hazard to human health or the environment when improperly transported, disposed of, stored, treated or otherwise managed.

- **Infrastructure:** those man-made structures which serve the common needs of the population, such as: sewage disposal systems; potable water systems; potable water wells serving a system; solid waste disposal sites or retention areas; stormwater systems; utilities; piers; docks; wharves; breakwaters; bulkheads; seawalls; bulwarks; revetments; causeways; marinas; navigation channels; bridges; and roadways.

- **Level of Service:** an indicator of the extent or degree of service provided by, or proposed to be provided by a facility based on and related to the operational characteristics of the facility. Level of service shall indicate the capacity per unit of demand for each public facility.

- **Nonpoint Source Pollution:** any source of water pollution that is not a point source.

- **Point Source Pollution:** any source of water pollution that constitutes a discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

- **Pollution:** the presence in the outdoor atmosphere, ground or water of any substances, contaminants, noise, or manmade or man-induced alteration of the chemical, physical, biological, or radiological integrity of air or water, in quantities or at levels which are or may be potentially harmful or injurious to human health or welfare, animal or plant life, or property, or unreasonably interfere with the enjoyment of life or property.

- **Potable Water Facilities:** a system of structures designed to collect, treat, or distribute potable water, and includes water wells, treatment plants, reservoirs, and distribution mains.

- **Sanitary Sewer Facilities:** structures or systems designed for the collection, transmission, treatment, or disposal of sewage and includes trunk mains, interceptors, treatment plants and disposal systems.

- **Services:** the programs and employees determined necessary by local government to provide adequate operation and maintenance of public facilities and infrastructure as well as those educational, health care, social and other programs necessary to support the programs, public facilities, and infrastructure set out in the local plan or required by local, state or federal law.

- **Solid Waste:** sludge from a waste treatment works, water supply treatment plant or air pollution control facility or garbage, rubbish, refuse, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from domestic, industrial, commercial, mining, agricultural, or governmental operations.

- **Solid Waste Facilities:** structures or systems designed for the collection, processing or disposal of solid wastes, including hazardous wastes, and includes transfer stations, processing plants, recycling plants, and disposal systems.

- **Water Wells:** wells excavated, drilled, dug, or driven for the supply of industrial, agricultural or potable water for general public consumption.

RECREATION, OPEN SPACE AND CONSERVATION ELEMENT

RECREATION, OPEN SPACE AND CONSERVATION ELEMENT: TABLE OF CONTENTS

TABLE OF CONTENTS ..... IV-i

LIST OF TABLES AND FIGURES ..... IV-ii

INTRODUCTION IV-1

RECREATION AND OPEN SPACE SUB-ELEMENT:
ANALYSIS OF EXISTING CONDITIONS IV-2

RECREATION AND OPEN SPACE SUB-ELEMENT:
NEEDS ANALYSIS IV-13

CONSERVATION SUB-ELEMENT:
ANALYSIS OF EXISTING CONDITIONS IV-14

GOALS, OBJECTIVES AND POLICIES IV-22

PLAN IMPLEMENTATION IV-27

MONITORING AND EVALUATION IV-28

GLOSSARY IV-29

LIST OF APPENDICES IV-34

RECREATION, OPEN SPACE AND CONSERVATION ELEMENT: LIST OF TABLES AND FIGURES

TABLES	DESCRIPTION	
IV-1	Existing Park & Recreation Sites Owned by Town of Davie	IV-3
IV-2	Existing Park & Recreation Sites Leased by Town of Davie	IV-4
IV-3	Existing Park & Recreation Sites Owned by State or County	IV-4
IV-4	Existing Park & Recreation Sites that are Privately Owned	IV-5
IV-5	Open Space Properties Owned by the Town of Davie	IV-5
IV-6	Projected Need for Recreation and Open Space Acreage	IV-12

FIGURES	DESCRIPTION	
IV-1	Town of Davie Recreational Trail Master Plan & Public Parks	IV-7
IV-2	Commercial Recreation Sites	IV-8
IV-3	Lakes & Canals	IV-16
IV-4	General Minerals Map	IV-19
IV-5	General Soils Map	IV-20
IV-6	Natural Reservations	IV-21

Recreation and Open Space Sub-Element: Analysis of Existing Conditions

The Town of Davie provides numerous recreational and open space opportunities to its residents and visitors. These opportunities are described according to the orientation of types of facilities provided, the facility's service area, and the ownership of the site and the potential for future expansion and improvement of such sites.

Recreational facilities are frequently classified as resource-based or activity based sites. Resource-based facilities are defined as those sites centered around particular natural resources, and may provide opportunities such as picnicking, hiking, water-oriented activities such as fishing and boating, and passive enjoyment of nature. Activity-based facilities are those sites that are developed for particular recreational activities, such as basketball, baseball, football, tennis and paddleball, recreational programs including aerobics and children's after-school activities, municipal pool facilities, and recreational pathways and vita courses. Most park, recreation and open space facilities developed and maintained by the Town contain a combination of activities; however, each facility may be classified according to its primary focus.

Parks and recreational sites are categorized according to the size and area or population served by the site. For purposes of this element, recreational opportunities are identified as neighborhood-,community- or regional-level facilities. Neighborhood-level facilities generally range in acreage up to 10 acres and provide amenities reflective of the localized need of the particular neighborhood served. Such amenities may include children's play areas, paddleball or basketball courts, picnic areas, and small community buildings. Community-level parks are generally larger, consisting of more than 10 acres, and serve more than one neighborhood. These larger facilities may include several ball fields in addition to the children's play areas, paddleball, basketball and tennis courts, and picnic areas found at the smaller parks. Regional-level facilities in the Town are owned and operated by Broward County and generally serve the regional needs of Broward County.

Finally, park and open space sites are described as to ownership of the facility -- if the site is owned or leased, the terms of the lease, and the Town's capital investment in the facility. The Town maintains leases with the Broward County School Board and Nova University for recreational amenities located on school campuses. These amenities constitute a joint use of land for the same purpose: recreational enjoyment by Town residents. However, lease arrangements introduce a concern not posed by facilities owned by the Town; that is, possible termination or non-renewal of the lease agreement.

Therefore, the Town must continue to reduce dependency on these facilities to meet the need for required recreational lands, and provide for alternative opportunities to insure compliance with the adopted level of service for park, recreational and open space lands. The Town has already decreased the percentage of leased sites versus owned sites from 46 percent in 1989 to 20 percent in 1995, as illustrated in Table IV-2.

Table IV-1 describes the park and recreational sites owned and maintained by the Town of Davie. Most of these sites consist of 10 acres or less, and are directed to particular neighborhoods (See Figure IV - 1 which shows existing public parks). The Rodeo Arena and the Oak Hill Equestrian Park are among the exceptions to this "rule", as they are community-oriented facilities. The Town acquired almost 55 acres of recreational land since 1989, an increase of approximtely 36 percent. This increase included new park sites as well as expansion of some existing facilities.

TABLE IV-1. Existing Park and Recreation Sites Owned by Town of Davie

Facility	Acreage (+)	Orientation	Service Level
Berman Park	3.00	Activity	Neighborhood
Bergeron	3.21	Activity	Neighborhood
Ivanhoe Park	3.30	Activity	Neighborhood
Lange Park	0.80	Resource	Neighborhood
Driftwood Estates	5.00	Activity	Neighborhood
Eastside Community Hall	0.30	Activity	Neighborhood
Oak Hill Equestrian Park	10.00	Activity	Community
Orange Park	0.50	Activity	Neighborhood
Pine Island Park/Ballfields	113.00	Activity	Community
Potter Park	3.70	Activity	Neighborhood
Rodeo Arena	10.00	Activity	Community
Reflections	4.46	Activity	Neighborhood
Shenandoah Park	17.00	Activity	Neighborhood
SW 36th Court Park	0.20	Activity	Neighborhood
Veterans' Park	15.00	Resource	Community
Waterford Park	5.00	Activity	Neighborhood
Waverly 100	10.10	Activity	Neighborhood
Total Acreage	204.57		

Source: Town of Davie Community Services Department

Table IV-2 lists the park and recreational sites not owned by the Town, but leased from the Broward County School Board and Nova University. Most leases have 40-year terms, with at least one-half of the lease yet to run. Also, it should be noted that while the Flamingo Elementary site is less than the minimum 10 acres

normally associated with community-level parks, the amenities it provides are more community-oriented and it generally serves more than one neighborhood.

TABLE IV-2. Existing Park and Recreation Sites Leased by Town of Davie

Facility	Acreage (+)	Orientation	Service Level
Flamingo Elementary School	5.9	Activity	Community
Davie Elementary School	5.9	Activity	Neighborhood
Western High School	20.0	Activity	Community
Total Acreage	31.8		

Source: Town of Davie Community Services Department

Table IV-3 lists parks and recreational sites owned by governmental entities other than the Town, but which serve the needs of Town residents. Tree Tops Park is owned and operated by Broward County, and serves as a regional resource-oriented facility. The C-11 Canal Bank is owned by the State, who granted the Town a license for limited recreational use. As Table IV-3 indicates, in 1995 there were almost 550 acres of parks or recreation sites in the Town that are owned by either the State or Broward County, representing an increase of 87 percent from the 293 acres existing in 1989.

TABLE IV-3. Existing Park and Recreation Sites Owned by State or County, in Davie

Facility	Acreage (+)	Orientation	Service Level
Tree Tops Park	257	Resource	Regional
Flamingo Road ESL	155	Resource	Regional
Pine Island Ridge	101	Resource	Regional
C-11 Canal	36	Resource	Community
Total Acreage	549		

Source: Town of Davie Community Services Department

Table IV-4 describes park and recreational sites that are privately owned yet serve the needs of Town residents and visitors (see Figure IV - 2, Commercial Recreation Sites). This list does not include small recreational facilities owned and maintained by homeowners' and condominium associations, that serve the localized needs of the individual residential developments they serve.

TABLE IV-4. Existing Park and Recreation Sites Privately Owned

Facility	Acreage (+)	Orientation	Service Level
Rolling Hills Country Club	175	Active	Regional
Arrowhead Golf Course	150	Active	Regional
Camp Seminole	120	Active	Regional
Bogeys	9	Active	Regional
Total Acreage	454		

Source: Town of Davie Community Services and Planning Departments.

Table IV-5 provides information concerning the open space properties in the Town. As the Table indicates, the Town now owns approximately 275 acres of open space for the use and enjoyment of its residents. The Open Space program is still in the implementation stage and, therefore, additional lands will be acquired.

TABLE IV-5. Open Space Properties Owned by the Town of Davie: 1995

Facility	Acreage (+)	Orientation	Service Level
Buckram (part of Westridge)	9.0	Open Space	Community
Faulk	5.0	Open Space	Community
Ivanhoe FPL Easement		Open Space	Community
Robbin	160.0	Open Space	Community
Westridge	37.0	Open Space	Community
Wolf Lake	50.0	Open Space	Community
Total Acreage	275.4		

Source: Town of Davie Community Services Department.

The facilities listed in the five tables above are described in greater detail in the following compendium:

Arrowhead Golf Course 8201 Southwest 24 Street

This site contains an 18-hole golf course, clubhouse and two tennis courts. The golf course consists of approximately 150 acres.

Berman Park 5801 Southwest 58 Avenue

This park is approximately three acres in size, and includes paddleball courts, playground equipment, picnic areas and a small community center. The rear section of the park is not developed.

Camp Seminole 3301 Southwest 142 Avenue
This approximate 120-acre recreational area is owned and operated by the Boy Scouts of America, deed restricted for passive recreational use. Facilities include campgrounds and hiking trails.

C-11 Canal Bank Orange Dr. (btwn Turnpike and Flam.)
The Town maintains gazebos, fishing piers, bicycle and bridle paths, a canoe landing facility, and landscaping along the C-11 canal; classified as a resource park. The canal bank is controlled by the South Florida Water Management District and consists of approximately 36 acres.

Driftwood Estates 3300 Northwest 77 Avenue
This site is approximately 5 acres in size and is developed with a children's play area, shelter with picnic tables and grills, paddleball courts, softball field, tennis courts and restrooms.

Eastside Community Hall 4300 SW 55 Avenue
This 0.3 acre facility, owned by the Town, consists of an activity building for community functions and special events, and includes restroom facilities.

Flamingo Elementary School 1130 Southwest 130 Avenue
This 5.9 acre facility is leased from the Broward County School Board on an annual basis. The facilities at this site include a basketball court, three playground areas, softball and baseball fields and an outdoor classroom.

Flamingo Gardens ESL 3770 Flamingo Road (SW 124 Avenue)
The Flamingo Road Environmentally Sensitive Land Site is a natural treasure recently purchased by Broward County in an effort to preserve its natural attributes. This 155 acre site is a haven for wildlife, a preserve of diverse plant communities, and a refuge for visitors. This ESL's significance derives from its possession of archaeological, historical and ecological resources; including an oak hammock, an 18-acre wetland, and open water lakes.

Ivanhoe FPL Easement 6801 SW 148 Avenue
This 14.47-acre site is currently undeveloped.

Ivanhoe Park 6101 Southwest 148 Ave.
This 3.3 acre parcel is the site of the Ivanhoe Community Center. The center includes meeting and activity rooms.

Ivanhoe Linear Park Ivanhoe development
This linear park consists of approximately 25 acres of Florida Power and Light transmission easement approximately 200 feet in width. This easement traverses the southern portion of the Ivanhoe development, on both the east and west sides of I-75. It is considered a resource park due to the passive use contemplated.

TOWN OF DAVIE
RECREATIONAL TRAIL MASTER PLAN
AND PUBLIC PARKS

NOTES:

Trail locations are not precise. This plan reflects Recreational Trail corridors, not precise alignments.

Under Florida Law an equine activity sponsor or equine professional is not liable for an injury to, or the death of, a participant in equine activities resulting from the inherent risks of equine activities.

LEGEND

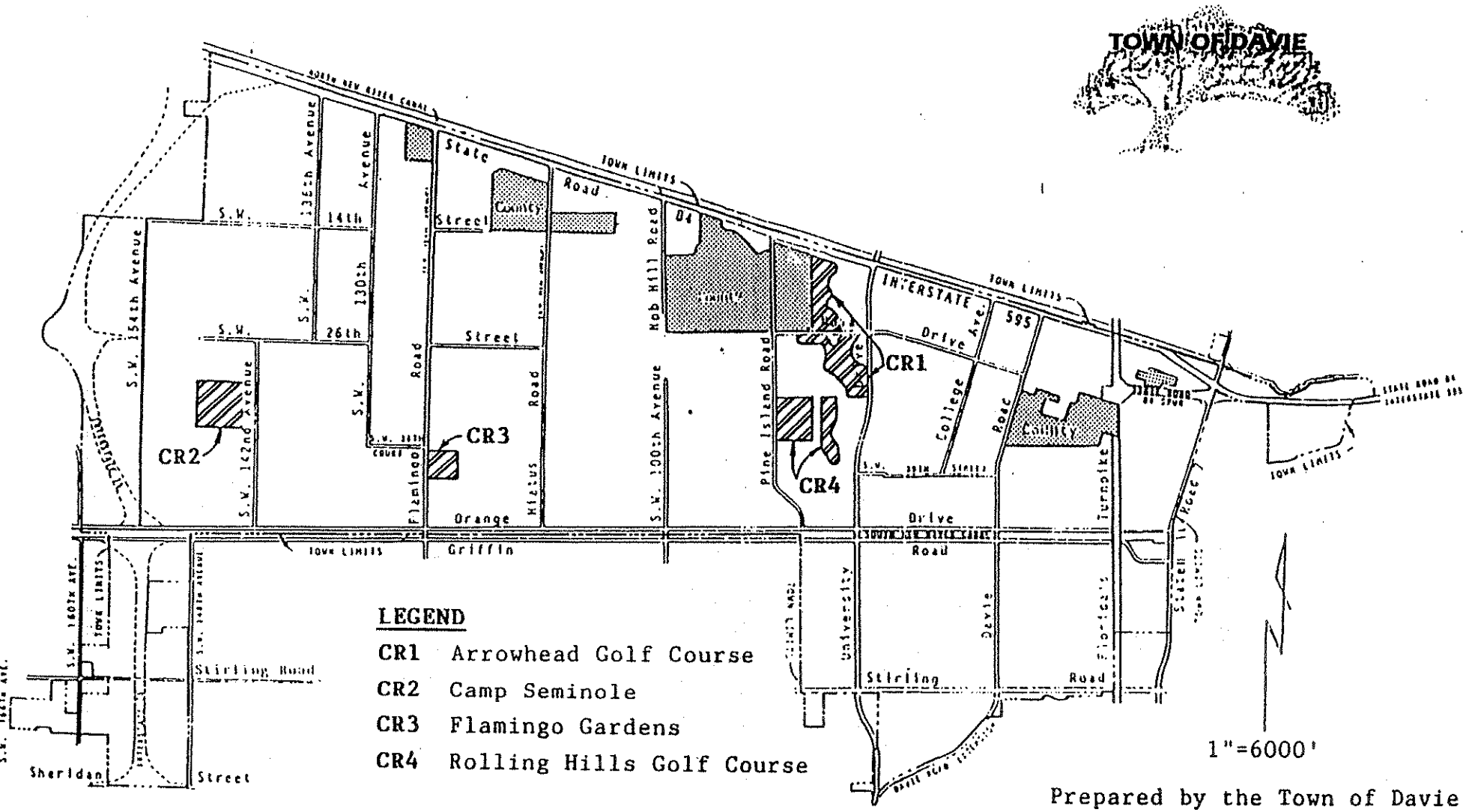
- EXISTING EQUESTRIAN TRAIL
- PROPOSED EQUESTRIAN TRAIL
- EXISTING PAVED RECREATIONAL TRAIL
- PROPOSED PAVED RECREATIONAL TRAIL

N

Not To Scale

FIGURE IV-1

COMMERCIAL RECREATION SITES



Prepared by the Town of Davie
April, 1989

Lange Park 6500 Southwest 47 Street
The .8 acre park facility is resource oriented. The developed portion of the site contains picnic tables, grills, and an open play area.

Oak Hill Equestrian Park 3100 Southwest 130 Avenue
This approximate 10-acre facility includes equestrian trails, practice area for horsemen, pavilion with picnic tables and grills, children's play area, multi-activity field area, and restrooms. This active park was developed with a grant from the State of Florida Department of Natural Resources, and opened in June 1983.

Orange Park 841 Southwest 133 Avenue
This facility is an approximate 1/2-acre neighborhood park located within the Orange Park Mobile Home Subdivision. The site contains a community center building.

Pine Island Park SW 92 Ave. & SW 36 St.
The 38-acre site is an active park, which houses a municipal pool facility, community center building, concessions, restrooms, 2 baseball/softball fields, and 2 football/soccer fields.

Pine Island Ridge ESL
This Environmentally Sensitive Land Site was recently purchased by Broward County in an effort to preserve its important natural characteristics. This 101 acre site is used as an area of passive recreation and education, and contains equestrian, nature and pedestrian/bike trails.

Potter Park 4250 Southwest 57 Terrace
This site consists of approximately 3.7 acres and includes a children's play area, picnic pavilion, paddleball court, basketball area, lighted softball field, and concession stand. This active park site was developed with Community Development Block Grant funds in 1976.

Reflections 4200 Alpine Woods Road
Reflections is a small park area. This 4.46-acre site contains play area equipment for recreational use.

Robbins Lodge 4005 Hiatus Road
Robbins Lodge is a sprawling 160 acre site, purchased through an Open Space Bond Issue. It contains an activity building, pavillions, picnic areas and restrooms.

Rodeo Arena 6550 Southwest 42 Street
The arena is part of the 10-acre recreational facility located behind the Town Hall complex. The facility contains a covered arena and bleachers seating 5,000, chutes, concession stands, office/dressing room building, restrooms, a press booth/announcer stand building, and a seven acre open space area which can be used for parking or temporary carnival/festival facility improvement.

Rolling Hills Country Club 3501 West Rolling Hills Circle
The site contains two golf courses, clubhouse and hotel. The western golf course, a regulation 18-hole course, is approximately 125 acres; the eastern executive course is approximately 50 acres in size.

Shenandoah Park 14601 Southwest 14 Street
Shenandoah park is a 17-acre dedicated park site programmed for additional development (see Capital Improvements Element). The active park will contain picnic areas, ball fields and basketball courts, tennis courts, community center, jogging trail and playground equipment.

Southwest 36 Court Park 6200 block of SW 36 Court
This pocket park consists of a single lot, and contains a children's play area and basketball facility.

39th Street Ballfields 7099 Southwest 39 Street
This six acre site is part of Davie Elementary School and contains two lighted baseball/softball fields, and concession/restroom building. Leased to the Town (40-year lease).

Tree Tops Park 3900 SW 100 Avenue
This site is a 257-acre resource-based regional park, owned and operated by Broward County. This facility includes picnic areas and shelters, volleyball courts, horse shoe rings, equestrian and nature trails, water oriented sports, children's play areas, administrative/meeting room building, nature observation tower and open space areas.

Veterans' Park 5950 SW 39 Street
This approximate 15-acre site offers picnic areas, sitting areas, and lakeside fishing. The park is considered a resource-oriented facility.

Waterford Park 5825 W. Waterford Drive
This is a 5-acre active park located within the Ivanhoe development. The facilities at the site include picnic areas, shelters, children's play area, baseball/softball field, basketball courts, paddleball court, and tennis courts.

Waverly 100 6625 Hawkes Bluff Avenue
Waverly is a recently acquired park. It's area is just over 10 acres, and is currently undeveloped.

Western High School 1200 Southwest 136 Avenue
The 20-acre school site addresses active recreational needs with a softball field, baseball field, handball court, football/soccer area, tennis courts, and outdoor basketball courts. The site is leased to the Town (40-year lease).

Westridge 2900 SW 100 Avenue

The Westridge site is an undeveloped open space area of 37 acres, plus 9 additional acres of open space known as the Buckram area.

Wolf Lake 5400 SW 76 Avenue

Wolf Lake is a 50 acre area which contains a picnic area, horseback trails and is also used for fishing.

The existing level of service provided by the Town is based on the total number of acres of parks and open space, divided by the population in 1000-person increments. For purposes of determining the level of service currently provided by the Town, facilities containing the following characteristics were included in the calculation:

- site provides neighborhood- or community-level facility
- site is readily accessible to the public
- site provides resource- or activity-oriented recreational use

A list of lands included in the determination for Level of Service is included in Appendix IV-5. The following represents the methodology used to derive the LOS for recreation and open space:

Total recreation and open space acreage ÷ (Town population ÷ 1000) = Level of Service

Using the above methodology (with Broward County population projections), the 1995 level of service is established: (834) ÷ (54,554 ÷ 1000) = 15 acres per 1000 persons.

Based on the Level of Service of 15 acres per 1000 population, the Town shall not be required to provide additional recreation and open space lands during the short or long range planning horizons in order to meet the 10 acres per 1,000 population Level of Service Standard during the planning period, as depicted in Table IV-6.

It has been and shall continue to be the Town's policy to require developers to participate in the provision of adequate recreation and open space facilities to satisfy the needs of the development's projected population at buildout. It should be noted that the population estimates used herein are projected resident population figures, and do not include seasonal residents. The Town's projected seasonal population (please refer to Table IV-6 on the following page) consists of just 6% of the total population, and does not impact the delivery of recreation and open space services to the community.

TABLE IV-6. Projected Need for Recreation and Open Space Acreage

Year	Projected Population*	Acreage Requirement**	Additional Acres Needed
1995	54,554	534.0	0
1996	55,755	557.6	0
1997	56,855	569.6	0
1998	57,956	571.6	0
1999	58,856	583.6	0
2000	59,346	593.5	0
2005	65,036	650.4	0
2010	69,451	694.5	0

*Extrapolation of population estimates provided by Broward County Office of Planning

**Reflects Level of Service standard of 10 ac/1000.
Source: Town of Davie

It has been and shall continue to be the Town's policy to require developers to participate in the provision of adequate recreation and open space facilities to satisfy the needs of the development's projected population at buildout. It should be noted that the population estimates used herein are projected resident population figures, and do not include seasonal residents. The Town's projected seasonal population consists of just 6% of the total population, and does not impact the delivery of recreation and opens pace services to the community.

Recreation and Open Space Sub-Element: Needs Analysis

The Community Services Department of the Town is responsible for maintaining Davie's facilities and programming at the facilities. It is the Department's experience that residents prefer to utilize larger or community-level park sites, as they contain more diverse amenities than the neighborhood parks. This is particularly true of residents in the western low-density portion of the Town, where backyards serve the needs normally associated with neighborhood sites. Town residents express the need for active facilities such as additional tennis courts, ball fields and basketball/paddleball courts but, most importantly, a way to access these facilities by bicycle, horseback and on foot. The linkages between parks, recreational facilities and open spaces are referred to as "recreational pathways", and shall consist of multi- and single-purpose paths that shall accommodate cyclists (non-motorized), equestrians, and pedestrians/joggers.

The Town shall continue to develop a "spine" network of recreational pathways, that link activity and attractor centers with community facilities. From the spine network, pathways linking smaller activity generators, such as residential communities, shall continue to be developed. The recreational pathway system will facilitate public access to open spaces and recreational facilities, schools, and commercial developments. The Town will continue its program to acquire, develop and enhance recreational facilities while the recreational pathway network is developed. Davie shall continue to seek public participation, through its advisory boards and committees such as the Open Space Advisory Committee and Bicycle Advisory Committee, in the planning process.

Conservation Sub-Element: Analysis of Existing Conditions

The purpose of the Conservation portion of this Element is to identify and preserve natural resources for the use and enjoyment of existing and future populations. Natural resources include rivers, lakes, wetlands and air; floodplains; commercially valuable minerals; soils subject to erosion problems; and native plant and animal communities.

Surface Waters, Rivers and Lakes

All surface waters in the Town are classified as Class III waters, by the Florida Department of Environmental Regulation. The priority use of Class III waters is recreation and fish and wildlife propagation. Primary canals are maintained by the South Florida Water Management District and, in Davie, include the North New River Canal and South New River Canal. Numerous smaller canals are maintained by the appropriate drainage district. Additionally, there are many man-made lakes or borrow pits, both active and inactive, throughout the Town; most are associated with particular developments which utilized the material for construction purposes (see Figure IV -3 , Lakes and Canals; and, Generalized Natural and Historical Resources Map of the Future Land Use Plan Map Series). There are no natural rivers or lakes in the Town.

Urban runoff remains a primary determinant regarding surface water quality. On-site retention and detention facilities create opportunities for filtering of pollutants prior to entry into the aquifer. This concern is critical in areas designated as wellfield protection areas, where the potential for contamination of wellfields from toxic materials could be disastrous. Therefore, land uses and activities within the wellfield protection areas are regulated, according to the zone of influence designated for the development site. Additional discussion is provided in the Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element. Wellfield zones of influence are depicted on the Generalized Natural and Historical Resources Map of the Future Land Use Plan Map Series.

Air Quality and Pollution

Air quality and emissions in Broward County, once monitored by the Broward County Environmental Quality Control Board (EQCB) are now monitored by the Florida Department of Environmental Protection (DEP), with which the (EQCB) merged. The primary non-point source of air pollution is the automobile. The DEP regularly monitors air quality throughout the County and publishes a daily rating for air quality (pollution standards index).

Air quality in Broward County has improved since 1989, rating "very good overall" in 1994. There were no violations of the National Ambient Air Quality Standards (NAAQS) for any of the six criteria pollutants monitored by DNRP's Air Quality

Division. The EPA upgraded southeast Florida's air quality designation from "moderate nonattainment" to "attainment" for ozone.

Wetlands

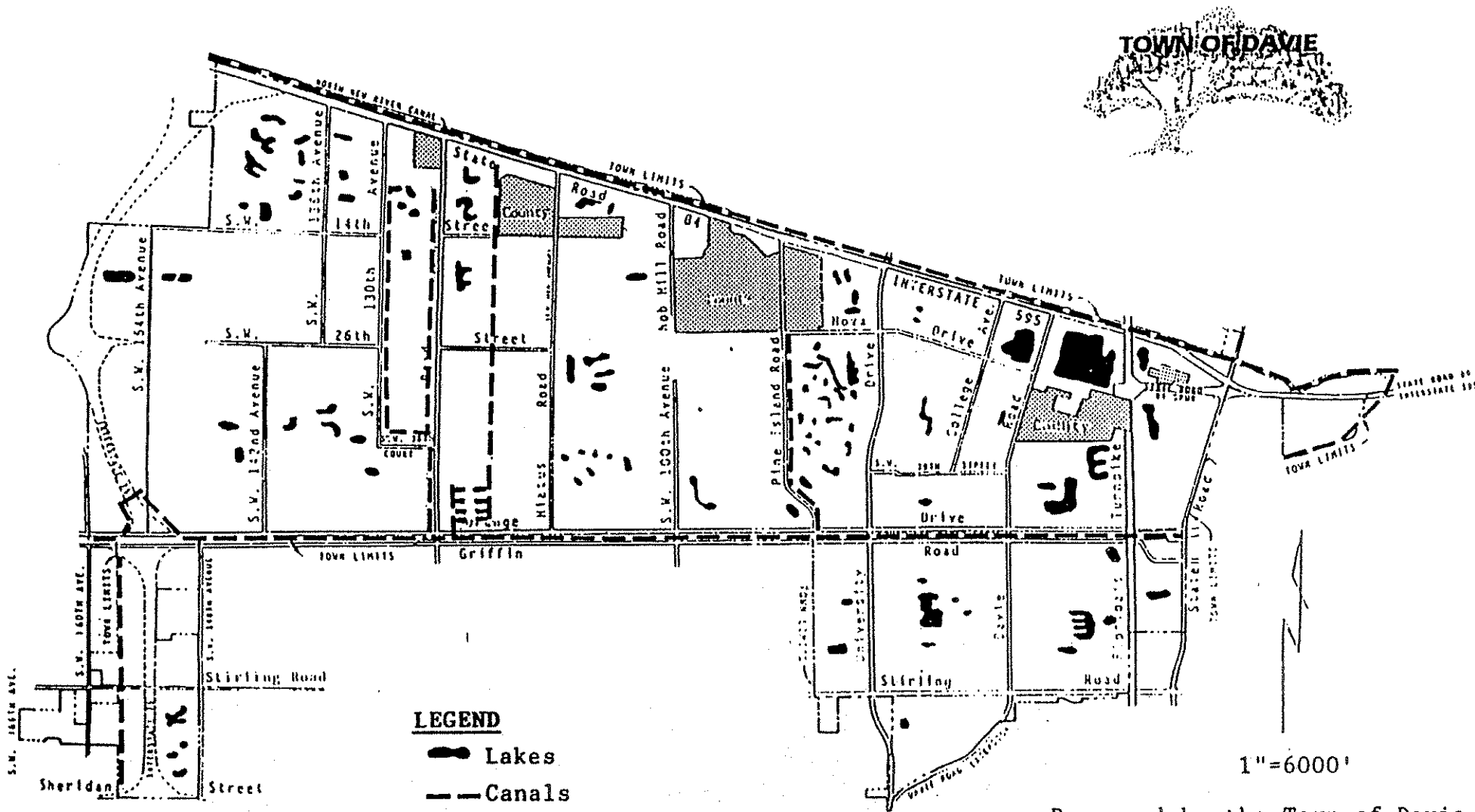
Wetlands exist in the eastern portions of the Town, along the State Road 84/I-595 corridor. These wetlands include the Pond Apple Slough site, on the south side of the roadway corridor, and the Hacienda Flores site on the north side. Both sites are designated by Broward County as Natural Resource Areas, and are used for mitigation of disturbed wetlands resulting from roadway development and construction of the County's resource recovery facility, located adjacent to the Slough. These sites are shown on the Generalized Natural and Historical Resources Map of the Future Land Use Plan Map Series.

Davie's wetlands are a combination of valuable fresh-water swamp and marsh lands, with plants that are mostly sub-tropical in origin. The wetlands are divided into two major plant communities: swamp and marsh-wet prairie. These terrains are very flat, with an elevation of approximately two feet. The swamp makes up the eastern half of the wetland area, covering all of the shoreline of the South New River Canal within Davie. This eastern swampy half is characterized by dense native vegetation, dominated by Pond Apple, Cypress, Strangler Fig and Willow. The vegetative growth is facilitated by fertile soil which is nourished by many intrusions of minor water passages into the swamp.

Davie's wetlands serve as a natural habitat to fresh water and migrating game fish. The swampy terrain also attracts tropical and subtropical aquatic birds, such as the Heron and Egret genera. The protected Osprey also makes its home in Davie's wetlands. Other species of particular interest which reside in Davie are: burrowing owls, Brazilian free-tailed bats, least terns, indigo snakes, and gopher tortoises.

The western wetlands are less swampy than the east. The terrain is open. Cypress and Melaleuca trees dominate this area. Sawgrass and other marsh/prairie grasses and broad leaved annuals constitute the ground cover. The vegetation in this area is much more sparse than the east because the drier soil there is less fertile, and because there is periodic burning. Animals such as red-winged and marsh hawks, raccoons, opossums, foxes, armadillos and a variety of aquatically oriented snakes and turtles make their home in Davie's marsh-wet prarie in our western wetlands.

LAKES AND CANALS



Prepared by the Town of Davie
April, 1989

FIGURE IV -

The Town is primarily located in flood zone A, as designated by the Federal Emergency Management Agency (FEMA) and shown on FEMA's flood zone maps. This designation indicates that the area is expected to flood during a 100-year storm event. The ridgelands, described below, are designated as flood zone C, not prone to flooding. See the Generalized Natural and Historical Resources Map of the Future Land Use Plan Map Series for non-flood prone areas; the remainder of the Town is considered to be flood prone. The South Florida Water Management District maintains and implements design criteria for roadway construction and building construction that address potential flooding.

Soil and Minerals

There are generally three types of minerals found in the Town: peat, sand shell and marl, and limestone (see Figure IV- 4 , General Minerals Map). Limestone and sand are commercially mined, and provide fill necessary for development and roadway construction. Inactive borrow or rock pits are evident throughout the Town, associated with existing developments and commercial mining in close proximity to interstates and the turnpike (see Future Land Use Plan Map Series, Generalized Natural and Historical Resources Map).

According to the Soil Survey of Broward County, Eastern Part (USDA, 1984), the predominant soil types in the Town are the Halandale-Margate, Lauderhill-Dania, and Immokalee-Urban land-Pompano associations (see Figure IV-5 , General Soils Map). This association is described as poorly drained, nearly level, sandy soils that are less than 60 inches deep to hard limestone. This soil association limits development to the extent that special design, significant increases in construction cost, and extra maintenance are required. Essentially, this type soil is generally removed and/or reconditioned, and replaced with clean fill. While this method of mitigating the adverse soil properties is costly, it enhances the water management system in two ways: firstly, it creates a well-drained development area, thus protecting life and property; and secondly, the rock or borrow pits utilized to create the clean fill necessary to condition the site present a drainage or retention opportunity. Compliance with applicable regulations regarding the dredging, filling, and other land development activities necessary for site preparation is monitored and verified through the issuance of site development permits. Inland soil erosion is minimal, except for siltation at construction sites, according to the Soil Conservation Service of the U.S. Department of Agriculture.

Natural Ridges

Broward County has review authority over an environmentally significant site if it has been designated as Local Area of Particular Concern (LAPC), Unique Natural Area, or if the site is included in the Urban Wilderness Inventory. The County must prepare an environmental impact report (EIR) on the site before it may be developed. The EIR provides the Broward County Board of County Commissioners information necessary for the Board to decide if all or a portion of the site should be acquired and preserved. Alternatively, a development permit may be granted with conditions that mitigate adverse impacts on the natural resources. The County has designated several sites within the Town as Local Areas of Particular Concern.

These include the Kapok Tree Oak Hammock, identified as LAPC 76; Long Key Ridge tropical hardwood hammock, LAPC 77; and Pine Island Ridge, LAPC 79. (See Figure IV - 6, Natural Reservations Map). On March 14, 1989, voters in Broward approved the passage of a 75 million dollar bond issue which, in part, went towards the purchase of two Environmentally Sensitive Land Sites in Davie: the Pine Island Ridge and Flamingo Road Sites.

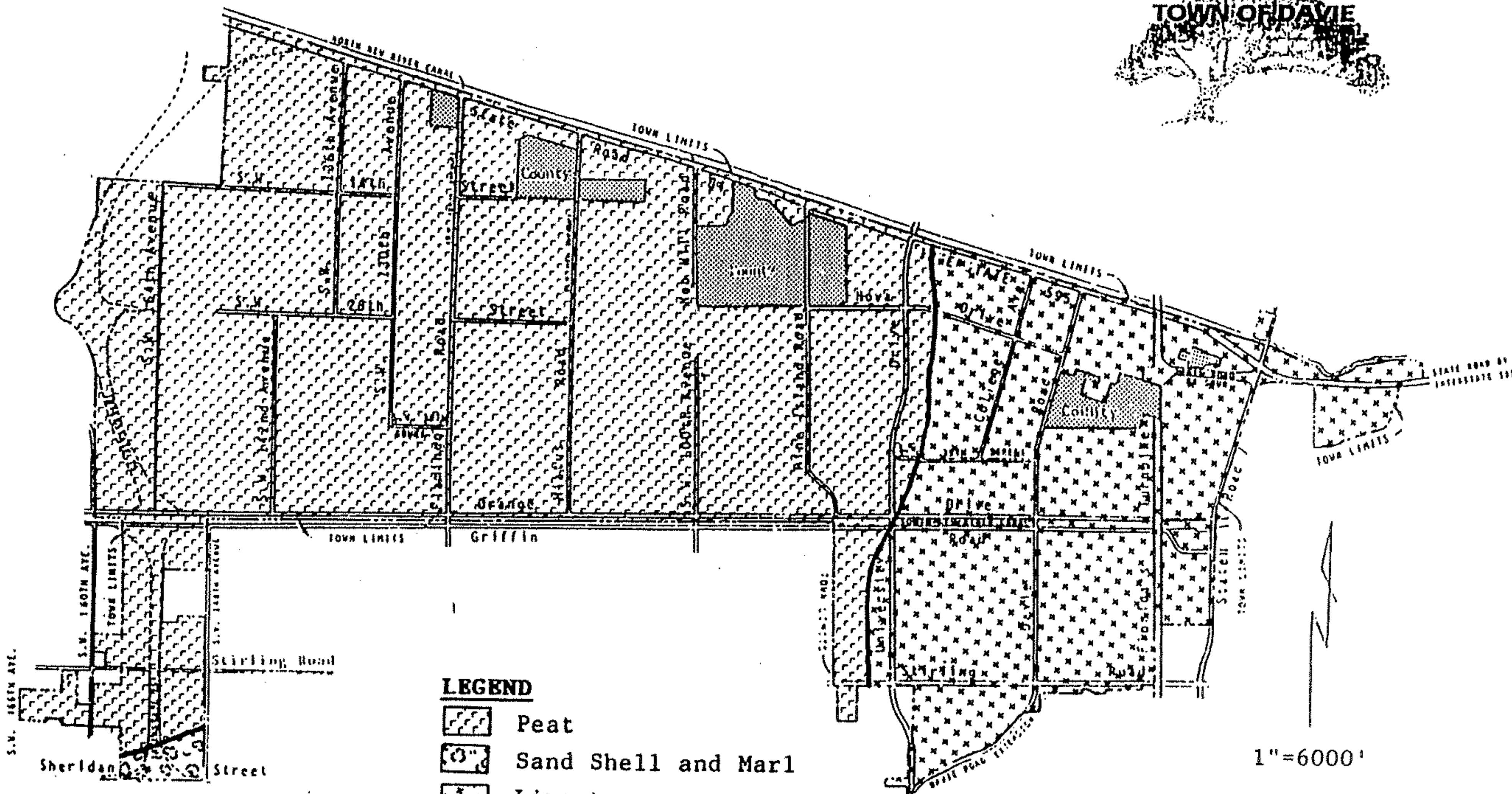
The portion of Pine Island Ridge within the Town is actually an approximate 120-acre complex of sandy ridges with a maximum elevation of 29 feet, M.S.L., one of the highest points in Broward County. Historically, the ridgelands were dry islands surrounded by wet prairie. Artifacts at the Ridge have been uncovered by archaeolgists which indicate that the site was used as far back as 2,000 years ago by nomadic peoples who raised crops in the area. The Seminole Indians hold the area to be sacred, as it had been used by their people for hundreds of years as a refuge for agriculture as well as a place for religious ceremonies. Pine Island Ridge represents an outstanding example of a hardwood hammock. Dominant tree species include live oak, slash pine, laurel oak, sabal palm, and gumbo limbo. A portion of the ridge is located within a County owned/operated park, Tree Tops Park. Broward County purchased 101 acres for preservation, linking the site with Tree Tops Park.

The Long Key Ridge, a portion of which is also referred to as the Kapok Tree Oak Hammock, stretches from east of Flamingo Road to SW 136 Avenue in Sections 23 through 26, Township 50S, Range 40E. Field studies indicate that portions of this hammock were scraped, perhaps for agricultural use, many years ago. However, the large live oaks and red bays that dominate the site were left intact. The understory has since been left to revert. This ridge area served as camps to the ancient Tequesta Indians, and more recently as a Seminole settlement. Broward County purchased 150 acres of the Long Key Ridge, now known as the Flamingo Road Environmentally Sensitive Lands Site.

Davie currently implements a Tree Preservation Ordinance which requires the relocation or replacement of trees removed as a result of development. The Town's Ordinance is consistent with the Broward County Tree Preservation Ordinance. The Town shall review the South Florida Water Management District's Model Landscape Code which addresses methods of encouraging and preserving habitats and native vegetation. The use of native vegetation that is not water consumptive (xeriscape) is a viable means to reducing potable water consumption while providing a native community that enhances our environment.

<u>GENERAL MINERALS MAP</u>

TOWN OF DAVIE



LEGEND

Peat

Sand Shell and Marl

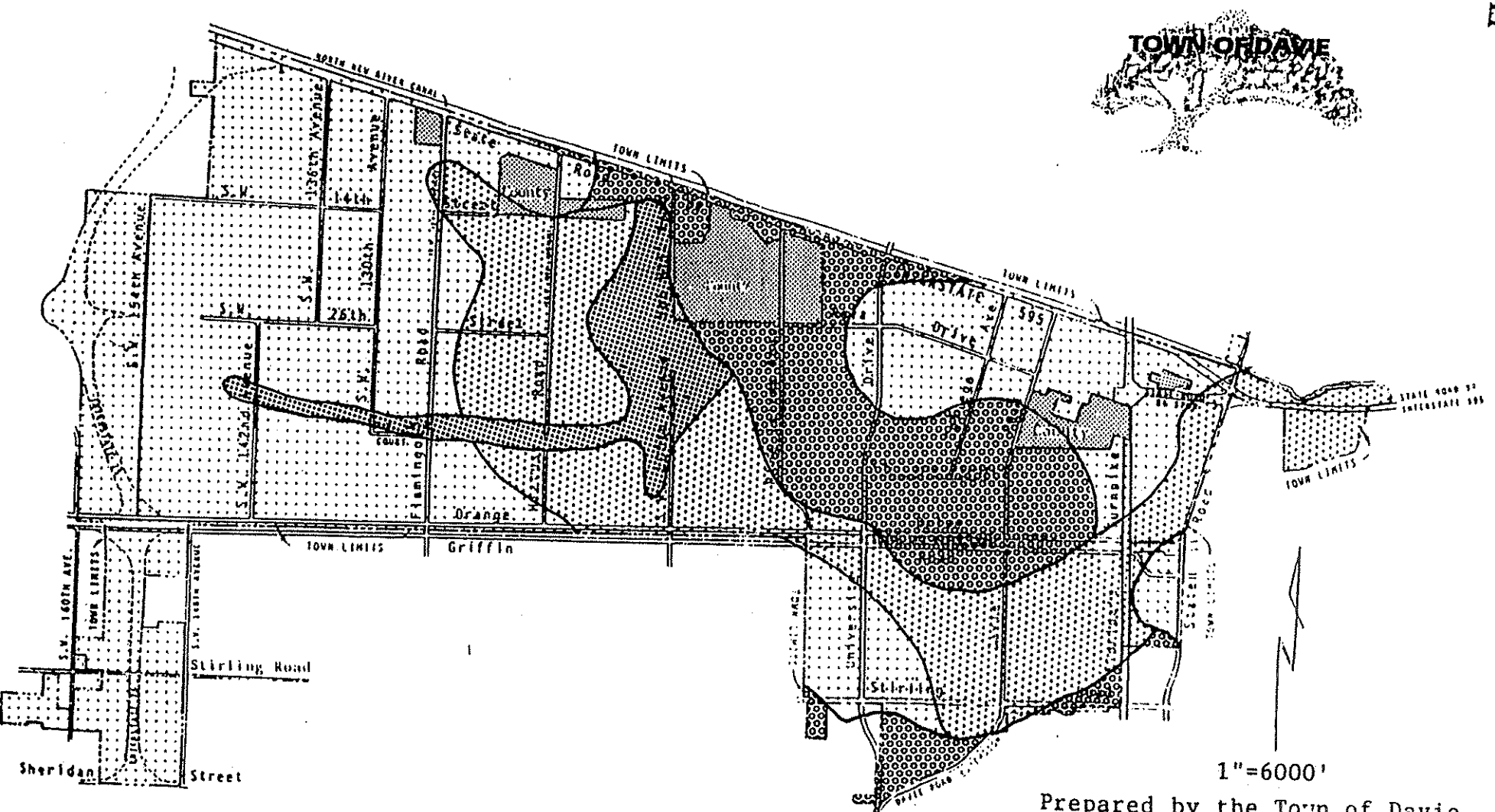
Limestone

1"=6000'

Prepared by the Town of Davie
April, 1989

FIGURE IV - 4

GENERAL SOILS MAP



LEGEND

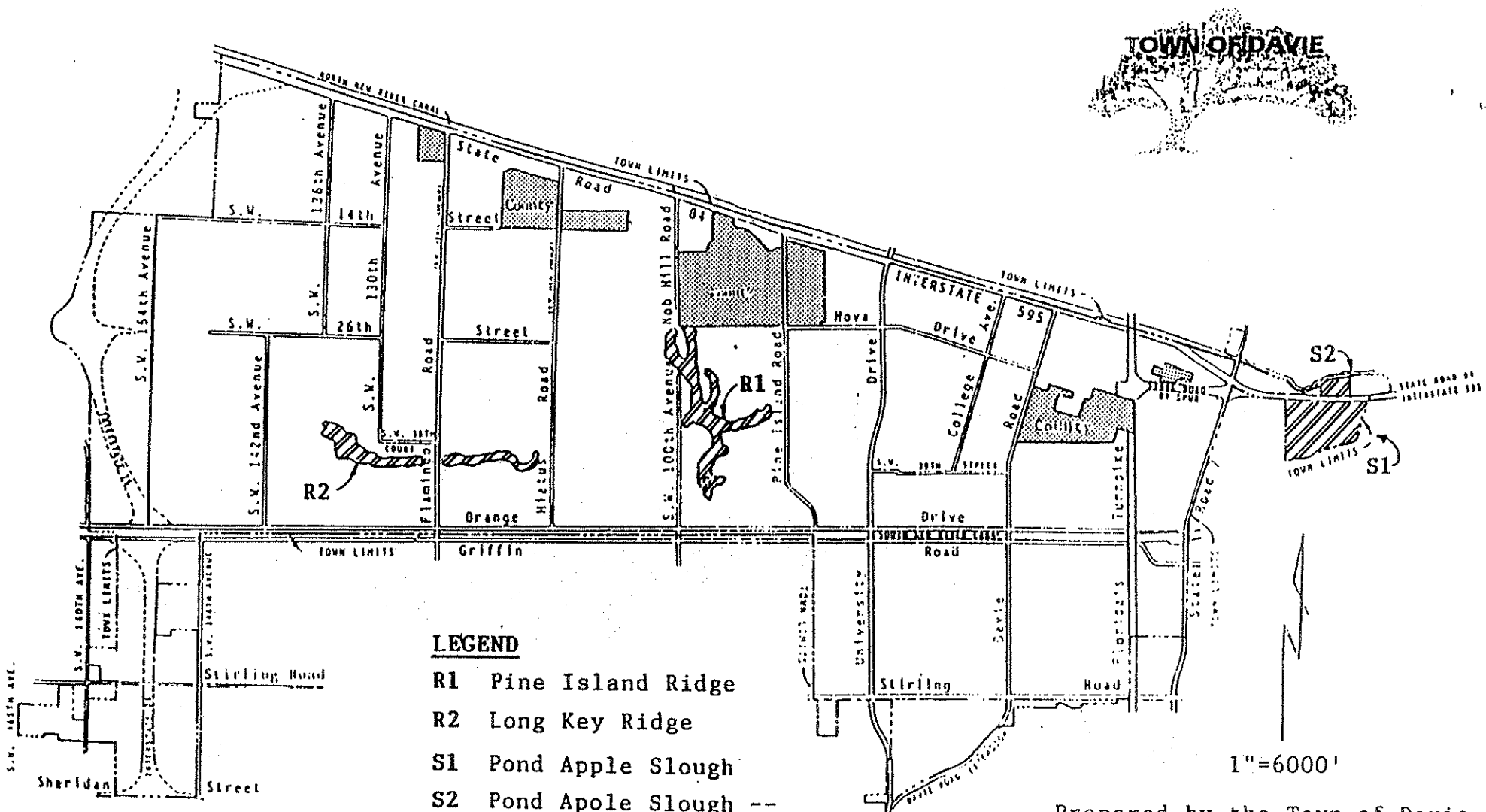
SOILS OF THE LOW FLATWOODS, SLOUGHS, AND MARSHES

- Hallandale-Margate association: Poorly drained, nearly level, sandy soils that are less than 60 inches deep to hard limestone
- Lauderhill-Dania association: Very poorly drained, nearly level, organic soils that are less than 40 inches deep to hard limestone

SOILS OF THE LOW RIDGES, KNOLLS, AND FLATWOODS

- Duette-Urban land-Pomello association: Moderately well drained, nearly level and gently sloping, sandy soils that have a dark subsoil generally more than 50 inches deep; most areas have been modified for urban use
- Immokalee-Urban land-Pompano association: Poorly drained, nearly level, sandy soils that are more than 80 inches deep; most have a dark, organic coated subsoil; areas have been modified for urban use

NATURAL RESERVATIONS



LEGEND

R1 Pine Island Ridge

R2 Long Key Ridge

S1 Pond Apple Slough

S2 Pond Apole Slough -- mitigation site

Prepared by the Town of Davie
April, 1989

FIGURE IV-6

Recreation, Open Space and Conservation Element: Goals, Objectives and Policies

GOAL 1: To provide sufficient parks, recreational lands and open spaces to satisfy the needs and diverse desires of the existing and future populations.

OBJECTIVE 1.1: The Town shall provide an adequate amount of recreational and open space lands, resource and activity oriented, to serve the needs of the existing and projected population.

- **Policy 1.1-1:** The Level of Service standard for recreation and open space lands as herein adopted is ten (10)) acres per 1000 population, with recreation lands comprising a minimum of three acres per 1000 population. The level of service standard shall be used to determine service adequacy at the earliest of the following processes: plat approval for properties requiring platting; or, during site plan approval for properties not requiring (re)platting pursuant to the Platting Requirements of the Implementation Section of the Future Land Use Plan, or properties platted prior to March 20, 1979; or, during building permit review.

- **Policy 1.1-2:** Land development regulations shall require the dedication of land by developers to satisfy the level of service standard for the projected population. Alternatively, the developer may pay the land value in lieu of dedication, at the discretion of the Town and where adequate land of a suitable nature is not available within the development.

- **Policy 1.1-3:** The Town shall pursue the acquisition and development of park sites to satisfy the level of service standard, in accordance with the Capital Improvements Element.

- **Policy 1.1-4:** The Town should pursue joint efforts with other jurisdictions in the acquisition, development and maintenance of pathways as a means for reducing costs and pooling resources.

- **Policy 1.1-5:** During the acquisition of recreation and open spaces, priority shall be given to lands containing natural resources suitable for preservation and appropriate for a resource-oriented facility.

- **Policy 1.1-6:** The Community Services Department shall continue to involve the public in determining the facility needs at neighborhood-level park sites.

- **Policy 1.1-7:** Community-level park and recreational facilities shall be located so that it is accessible to the general public, and is not internalized within a particular neighborhood.

OBJECTIVE 1.2: Parks and recreational facilities shall be developed so as to be accessible to the public.

- **Policy 1.2-1:** All parks and recreational facilities shall be developed so as to maximize accessibility, to the greatest extent possible, for all segments of the population.

- **Policy 1.2-2:** Automobile and bicycle parking facilities should be provided, to accommodate the needs of the particular facility. Where appropriate, the Town should provide hitching posts and watering troughs for horses.

OBJECTIVE 1.3: Parks, recreational facilities and open spaces shall be developed with amenities consistent with the orientation of the site, to maximize the enjoyment of the facilities.

- **Policy 1.3-1:** Activity-oriented sites shall contain a wide variety of recreational opportunities, with multipurpose fields and courts that can accommodate different sports activities.

- **Policy 1.3-2:** Park sites should be located adjacent to school sites, when possible, to maximize the potential for joint use of facilities.

- **Policy 1.3-3:** Resource-oriented sites shall be developed in a fashion that is compatible with the resource, maintains the integrity of the native vegetation and wildlife, and encourages enjoyment of a passive nature.

GOAL 2: To provide a network of recreational pathways that provide linkages between parks, recreational facilities, open spaces, and other community facilities throughout the Town.

OBJECTIVE 2.1: The Town shall continue to maintain and update the plan for the primary network of recreational pathways, which accommodates bicycle, equestrian, pedestrian and other recreational uses.

- **Policy 2.1-1:** The Town shall create a series of typical cross-sections for development of paths for bicycle, equestrian and pedestrian use. Standards established by recognized authorities and agencies shall be explored in the development of the cross-sections.

- **Policy 2.1-2:** Land development regulations shall provide for the accommodation of recreational pathways during plat and site plan review of proposed developments. Developers shall be required to incorporate pathways in their planning efforts, and develop the pathways in accordance with the standards established by the Town.

- **Policy 2.1-3:** For pathways developed along existing and planned roadways, the development of recreational pathways shall reflect adequate separations from vehicular travel lanes.

- **Policy 2.1-4:** The Town shall explore the possibility of obtaining grants, gifts, contributions, funding assistance, and other financial resources for the development of recreational pathways.

- **Policy 2.1-5:** The Town should pursue joint efforts with other jurisdictions in the acquisition, development and maintenance of pathways as a means for reducing costs and pooling resources.

- **Policy 2.1-6:** The Town shall support the Broward Urban River Trails (BURT) program as an endeavor that is a means of improving the quality of Broward County for boaters, tourist and residents.

OBJECTIVE 2.2: The recreational pathway system shall link park sites, recreational and community facilities, schools and regional parks and shall utilize open space areas of natural vegetation and unique features in the development of the pathway corridor.

- **Policy 2.2-1:** Development of the recreational pathway corridors shall maximize existing native vegetation and features.

- **Policy 2.2-2:** Planning for recreational pathways shall include amenities that need to be provided at destination points and at interim locations.

- **Policy 2.2-3:** The types of pathways provided within each of the linkages shall reflect the departure and destination locations, and the recreational orientation of the linkage.

GOAL 3: To preserve and protect the natural resources of the Town for the use and enjoyment of the existing and future residents.

OBJECTIVE 3.1: The Town shall promote the conservation of wildlife habitats, native vegetative communities, and marine habitat.

- **Policy 3.1-1:** The Town shall identify wildlife habitats and native vegetative

communities for acquisition and/or preservation under the auspices of the Open Space Program.

- **Policy 3.1-2:** Sites designated as Natural Resource Areas (NRA), Local Areas of Particular Concern (LAPC), Urban Wilderness Areas (UWA), or other appropriate designation by Broward County shall be managed in accordance with the applicable County regulations.

- **Policy 3.1-3:** The Town shall maintain its Tree Preservation Ordinance to insure the protection of native trees and vegetation.

OBJECTIVE 3.2: The Town shall protect the functions of existing soils, floodplains, wetlands and lakes.

- **Policy 3.2-1:** Development shall be in accord with applicable Federal Emergency Management Agency (FEMA) regulations regarding floodplain management.

- **Policy 3.2-2:** The development of man-made lakes shall be pursuant to a reclamation plan approved by the South Florida Water Management District (SFWMD) and which provides for revegetated slopes and littoral zones, to enhance water quality and promote fish and wildlife.

- **Policy 3.2-3:** Development of open spaces and recreational pathways in open spaces should include methods of educating the public as to the proper handling of native vegetation and wildlife.

- **Policy 3.2-4:** Development shall be consistent with the South Florida Regional Planning Council's policy of no-net loss in wetlands. Revegetated wetlands, required as a condition for development, shall be accommodated and sited at locations that provide the most productive environment and may include off-site locations.

- **Policy 3.2-5:** Coordinate with appropriate regulatory agencies in the disposal of hazardous wastes, to preserve and maintain the integrity of the natural environment.

- **Policy 3.2-6:** The Town adopts by reference the water quality standards for stormwater effluent contained in Article V, Chapter 27 of the Broward County Code.

- **Policy 3.2-7:** The Town's land development regulations shall require that all invasive exotic plant species be removed as a condition of development approval.

OBJECTIVE 3.3: The Town shall encourage a reduction in water consumption.

- **Policy 3.3-1:** The Town shall review and, as appropriate, amend the regulations addresses landscaping, to encourage and promote the use of non water-intensive native vegetation (xeriscape).

- **Policy 3.3-2:** The Town shall promote public education and awareness concerning water conservation methods and shall implement water conservation measures in accord with the requirements of the South Florida Water Management District or other appropriate regulatory agency.

OBJECTIVE 3.4: The Town shall promote the improvement of air quality.

- **Policy 3.4-1:** The Town shall promote effective roadway design that facilitates vehicular movement in an efficient and safe manner, so as to reduce the impacts of this non-point source of air pollution.

- **Policy 3.4-2:** The Town shall pursue roadscaping and tree plantings alongside roadways, to provide a visual amenity and filter air pollution created by automobile and truck traffic.

Recreation, Open Space and Conservation Element: Plan Implementation

All departments in the Town participating in the implementation of this Element shall be required to operate within the framework established by the Goals, Objectives and Policies. All decision-making with regard to capital improvements and expenditures, shall reflect the Goals, Objectives and Policies. Annual budget review and capital improvement programming shall reflect consideration of needs that have been determined with respect to the Goals, Objectives and Policies.

Town land development regulations shall be amended, as necessary, to implement the requirements of this Element.

Recreation, Open Space and Conservation Element: Monitoring and Evaluation

The quantifiable measures established in the Objectives shall be monitored on a regular basis, with the Community Services Department providing counts on park attendance and participation. The measurement of adequacy cited in Objective 1.1 is compliance with the acreage requirement. Accessibility to the public, per Objective 1.2, and development in accord with the natural features, per Objective 1.3, shall be a function of facility design and attendance.

The measurement for Objectives 2.1 and 2.2 shall be the creation of the pathway network, and its interrelationship with existing attractors.

The performance measure for Objectives 3.1 and 3.2 shall be a function of ongoing monitoring efforts that ascertain the location, and insure the maintenance and enhancement of existing facilities and habitats.

The performance measure for Objective 3.3 is water consumption as monitored by the Town's Utilities Department.

The performance measure for Objective 3.4 is air quality, as monitored and reported by Broward County's Environmental Quality Control Board.

Recreation, Open Space and Conservation Element: Glossary

- **Aquifer:** a stratum or formation of permeable material that will yield groundwater in useful quantities.

- **Aquifer recharge**: the addition of water to the groundwater system by natural or artificial processes.

- **Agricultural Uses:** activities within land areas which are predominantly used for the cultivation of crops and livestock including: cropland; pastureland; orchards; vineyards; nurseries; ornamental horticulture areas; groves; confined feeding operations; specialty farms; and silviculture areas. Agricultural uses are further defined in the Agricultural land use category, as described in the Permitted Uses portion of the Plan Implementation Section.

- **Concurrency:** public facilities and services needed to suppport development shall be available at the same time or conicidental with the impacts of such development.

- **Concurrency Management System:** the provisions in the local government comprehensive plan including implementation regulations, encompassing the restrictions, methods, resources, timing and solutions intended to be compatible with and further compliance with the statutory requirement to provide public facilities and services needed to support development concurrent with the impacts of such development.

- **Cone of Influence (Zone of Influence):** an area around one or more major waterwells, the boundary of which is determined by the government agency having specific statutory authority to make such a determination based on groundwater travel or drawdown depth.

- **Conservation Uses:** activities within land areas designated for the purpose of conserving or protecting natural resources or environmental quality and includes areas designated for such purposes as flood control, protection of quality or quantity of groundwater or surface water, floodplain management, fisheries management, or protection of vegetative communities or wildlife habitats. Conservation Uses are further defined in the Conservation land use category, as described in the Permitted Uses portion of the Plan Implementation Section.

- **Developer:** any person, including a governmental agency, undertaking any development.

- **Drainage Facilities:** a system of man-made structures designed to collect, convey, hold divert or discharge stormwater, and includes stormwater sewers, canals, detention structures, and retention structures.

- **Ecosystem:** the living and non-living components of the environment which interact or function together, including plant and animal organisms, the physical environment, and the energy systems in which they exist; all components of the ecosystem are interrelated.

- **Education Uses:** activities and facilities of public or private primary or secondary schools, vocational and technical schools, and colleges and universities licensed by the Florida Department of Education, including the areas of buildings, campus open space, dormitories, recreational facilities or parking.

- **Environmentally Sensitive Land:** those areas containing Natural Resources, as depicted in the Future Land Use Plan Map Series.

- **Facility Availability:** means whether or not a facility is available in a manner to satisfy the concurrency management system,

- **Flood Plains:** areas inundated during an identified flood event or identified by the National Flood Insurance Program as an A Zone or V Zone on Flood Insurance Rate Maps or Flood Hazard Boundary Maps.

- **Groundwater:** subsurface water in the zone of saturation.

- **Hazardous substance:** a substance that has one or more of the following characteristics: ignitable, corrosive, reactive, toxic.

- **Historic Resources:** all areas, districts or sites containing properties listed on the Florida Master Site File, the National Register of Historic Places, or designated by a local government as historically, architecturally, or archaeologically significant.

- **Infrastructure:** those man-made structures which serve the common needs of the population, such as: sewage disposal systems; potable water systems; potable water wells serving a system; solid waste disposal sites or retention areas; stormwater systems; utilities; piers; docks; wharves; breakwaters; bulkheads; seawalls; bulwarks; revetments; causeways; marinas; navigation channels; bridges; and roadways.

- **Land Development Regulations:** ordinances enacted by governing bodies for the regulation of any aspect of development and includes any local government zoning, rezoning, subdivision, building construction, or sign regulations or any other regulations controlling the development of land.

- **Local Area of Particular Concern:** an area designated on the Natural Resource Map Series of the Broward County Land Use Plan which has been declared to be environmentally sensitive. Those areas are subject to environmental impact report provisions of the Broward County Land Development Code. The criteria for Local Areas of Particular Concern are contained in the Plan Implementation Requirements section of the Broward County Land Use Plan.

- **Level of Service:** an indicator of the extent or degree of service provided by, or proposed to be provided by a facility based on and related to the operational characteristics of the facility. Level of service shall indicate the capacity per unit of demand for each public facility.

- **Natural Reservations:** areas designated for conservation purposes, and operated by contractual agreement with or managed by a federal, state, regional or local government or non-profit agency such as: national parks, state parks, lands purchased under the Save Our Coast, Conservation and Recreation Lands or Save Our Rivers programs, sanctuaries, preserves, monuments, archaeological sites, historic sites, wildlife management areas, national seashores, and Outstanding Florida Waters.

- **Nonpoint Source Pollution:** any source of water pollution that is not a point source.

- **Open Spaces:** undeveloped lands suitable for passive recreation or conservation uses.

- **Point Source Pollution:** any source of water pollution that constitutes a discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

- **Pollution:** the presence in the outdoor atmosphere, ground or water of any substances, contaminants, noise, or manmade or man-induced alteration of the chemical, physical, biological, or radiological integrity of air or water, in quantities or at levels which are or may be potentially harmful or injurious to human health or welfare, animal or plant life, or property, or unreasonably interfere with the enjoyment of life or property.

- **Potable Water Facilities:** a system of structures designed to collect, treat, or distribute potable water, and includes water wells, treatment plants, reservoirs, and distribution mains.

- **Private Recreational Sites:** sites owned by private, commercial or non-profit entities available to the public for purposes of recreational use.

- **Public Recreational Sites:** sites owned or leased on a long-term basis by a federal, state regional or local government agency for purposes of recreational use.

- **Public Access:** the ability of the public to physically reach, enter, or use recreation sites including beaches and shores.

- **Public Buildings and Grounds:** structures or lands that are owned, leased, or operated by a government entity, such as civic and community centers, hospitals, libraries, police stations, fire stations, and government administration buildings.

- **Public Facilities:** transportation systems or facilities, sewer systems or facilities, solid waste systems or facilities, drainage systems or facilities, potable water systems or facilities, education systems or facilities, parks and recreation systems or facilities and public health systems or facilities.

- **Recreation:** the pursuit of leisure time activities occurring in an indoor or outdoor setting.

- **Recreation Facility:** a component of a recreation site used by the public such as a trail, court, athletic field or swimming pool.

- **Recreation Uses:** activities within areas where recreation occurs.

- **Recreational Pathway:** any road, path or way which is open to equestrian travel, bicycle travel, traffic afoot and other recreational purposes and from which motor vehicles are excluded.

- **Resident Population:** inhabitants counted in the same manner utilized by the United States Bureau of the Census, in the category of total population. Resident population does not include seasonal population.

- **Seasonal Population:** part-time inhabitants who utilize, or may be expected to utilize, public facilities or services, but are not residents. Seasonal population shall include tourists, migrant farmworkers, and other short-term and long-term visitors.

- **Toxic Substance:** a chemical or mixture that presents an unreasonable risk of injury to health or the environment.

- **Water-Dependent Uses:** activities which can be carried out only on, in or adjacent to water areas because the use requires access to the water body for: waterborne transportation including ports or marinas; recreation; electrical generating facilities; or water supply.

- **Water-Related Uses:** activities which are not directly dependent upon access to a water body, but which provide goods and services that are directly associated with water-dependent or waterway uses.

- **Water Wells:** wells excavated, drilled, dug, or driven for the supply of industrial, agricultural or potable water for general public consumption.

- **Wetlands:** an area that is inundated by water with sufficient frequency to support, and normally does support, an assemblage of organisms that is adapted to saturated or seasonally saturated soil conditions for growth and reproduction including, but not necessarily limited to, swamps, marshes, bogs, sloughs, potholes, wet meadows, river flood plains, mud flats, and wet prairies. For purposes of this element, wetlands shall be those areas regulated by the Army Corps of Engineers, Florida Department of Natural Resources, or other regulatory authority having jurisdiction over the development of wetlands

- **Zones of Influence**: zones delineated by iso-travel contours around wellfields, within which toxic substances will be regulated to protect the quality of the groundwater.

RECREATION, OPEN SPACE AND CONSERVATION ELEMENT:

LIST OF APPENDICES

IV - 1 Open Space Implementation

IV - 2 Open Space Outline

IV - 3 Consultants' Reports
- A) Open Space Preservation Issue Paper
- B) Community Character Issue Paper
- C) Archaeological Report
- D) Botanical Analysis
- E) Agricultural Land Use Inventory

IV - 4 Resolutions
- A) Resolution R-87-183 and Attachments
- B) Resolution R-87-281 and Election Results
- C) Resolution R-88-225
- D) Resolution R-89-34 and Election Results

IV - 5 Recreation Sites Used for Level of Service Determination

MEMORANDUM

OFFICE OF TOWN ADMINISTRATOR

TO: **Mayor and Town Council**

FROM: Irving Rosenbaum, Town Administrator

DATE: March 23, 1988

SUBJECT: **OPEN SPACE IMPLEMENTATION**

Open Space is composed of two aspects:

The Greenbelt - approximately 2200 acres of oak ridge, re-created wetlands, and outdoor leisure areas that can be utilized for bike-paths, horse-trails and general recreation. These contiguous areas will ultimately form a valuable recreational amenity.

Preserved Agricultural Area - this program preserves citrus groves, ornamental horticulture, cattle and other agricultural uses through purchase of land/leaseback and other incentives.

Acquisition

Open Space will be acquired in various ways. Among the methods are the purchase of development rights, transfer of development rights and conventional land purchase. Non-ownership forms of control such as conservation easement and various forms of land reservation will be utilized. To advise the Town in areas of specific expertise, such as transfer of development rights and innovative methods to control land, we have hired the firm of Burke, Bosselman & Weaver as consultants.

It is recommended that the following types of lands be acquired:

1. Uplands/Oak Ridges
2. Unique lands of environmental or historical value
3. Lands to be utilized to buffer residential subdivisions
4. Wetlands/Cypress Stands
5. Lands under development pressure
6. Land to tie together other parcels to form the Greenbelt (includes horse-trails, existing parks, bike-paths)

An Open Space fund should be established to provide funding for optioning land for possible purchase, and acquiring some lands. Open Space is to be separate fund, not related to the Town's capital improvement fund in any way. Some preliminary financing to establish the Open Space fund can be arranged with First Union Bank of Florida.

To further expedite land purchase, a person should be engaged to act on behalf of the Town.

Preservation of Agriculture A good beginning point for this program would be 600-1000 acres of agricultural use. This would involve a separate borrowing program. The loan or bond would be secured by the lease to an agricultural user. A mix of citrus, ornamental horticulture and other uses is needed. Ornamental horticulture is the best revenue producer while citrus is the least. Carrying cost per acre is about $1200. Loss of tax revenue has little or no impact.

As preservation of agriculture is a regional issue, Broward County and other public agencies concerned should be involved in this effort.

COUNCIL ACTION REQUESTED:

1. To begin land acquisition based on criteria outlined herein. Informing Council by memo as lands are acquired.

2. Authorize staff to negotiate with First Union for advance loan funds to establish Open Space Fund.

3. Authorize staff to advertise for negotiator (preferably an appraiser) to act on behalf of Davie to purchase lands for the Open Space Program.

4. Authorize staff to work with Broward County and other agencies to begin the Preservation of Agriculture Program.

Open Space Plan Outline

Introduction

The Town of Davie is blessed with natural and other resources such as citrus groves, uplands, oak ridges, pre-historic and historic resources, dairy farms and horse farms, and canals that run the length of the Town. The challenge is to preserve as much of the existing lifestyle as possible through the open space program while still recognizing that Davie is located in the midst of a growth area. The ten miles of I-595, now under construction along the Town's northern border, will have a major impact on a community of only 35 square miles. Both growth management and open space planning and implementation are issues which are addressed in the Town's Comprehensive Plan and land development regulations. It is the intent of this Open Space Plan to implement amendments to the Town's Comprehensive Plan, Land Development Code, purchase programs, on-going education programs, and other programs. The open space program is closely related to recreation, but open space is a much broader issue. While most recreational facilities will serve a dual role as open space, there are many aspects of open space--environmental protection, visual amenity and farmland--where it will not serve any active recreational function.

The Background of Open Space Planning in Davie

The Town of Davie began an innovative program for open space protection in December 1987. The desire to protect and preserve open space came as a response to both perceived and actual urban sprawl in Broward County. The Visions 2000 Forum, funded by the Florida Department of State, was held in hopes of making a different statement concerning urban sprawl and open spaces in Davie. At that meeting, Davie decided that "rapid population growth...has the potential to undermine [our] quality of life" and identified assets and goals:

> ...significant tracts of green space with growth potential and the ability to plan that growth in ways to preserve portions of the green space.,.[our] Comprehensive Plan will be the vehicle to create and safeguard [our] "town in the country" image. Low density residential designations and green spaces must be identified and maintained through [our] Comprehensive Plan and its implementing ordinances... additional green spaces should be created through the use of landowner and developer incentives....[we would like to provide] bike paths, horse trails, and sidewalks.

There has been an on-going effort to educate Davie's residents and corporate citizens about the need to protect open space and to incorporate that open space preservation into a growth manage-

ment scheme. Symposiums were held on January 23, 1988 and on June 10, 1988 to further the open space goals. Such recognized experts in growth management as Dr. Lance de Haven-Smith from the FAU/FIU Joint Center for the Study of Environmental and Urban Problems, Nancy Stroud from Burke, Bosselman, and Weaver, Lane Kendig and Joel Kuperberg have participated in these open space symposiums. On March 8, 1988, the Town conducted a straw vote, as part of the regularly scheduled municipal elections, in order to identify community support for open space protection. The residents of Davie voted overwhelmingly, 94 percent, in favor of this question: "Should the Town of Davie establish a program for acquiring and preserving "Green Space" including natural areas such as oak ridges and wetlands, citrus groves, parks and recreation areas?"

The Town has also printed brochures, T-shirts and posters which promote open space protection. These have been available at symposiums, other events, and at the Town Hall. A portion of the funding was supplied by local businesses. There is also an organized campaign to attract media attention in order to further promote the open space preservation program.

In September 1988, Florida's Governor and Cabinet approved the purchase of the Pine Island Ridge, an oak ridge located in the Town of Davie. The Town will participate in preserving the Ridge by contributing the land, that the Town has previously exacted from the landowner, for park dedication.

Efforts to implement the recommendations from the Visions 2000 program were reviewed with residents and corporate citizens on October 1, 1988. The focus was on such growth management issues as annexation; re-use of the now-closed Broward County landfill for nurseries, open space and parks; downtown redevelopment; economic development and agricultural preservation; and implementing "people paths."

The Town has also established an Open Space Advisory Committee (OSAC) whose mission is to advise the Town Administrator and the Town Council concerning the preservation of open space. The OSAC has been meeting since October 3, 1988.

The Town also hired a team of consultants to accomplish these tasks:

1. Identify the next increment of open space lands which the Town should purchase. The product was the identification of land and a trail system which the Town should purchase through a general obligation bond referendum to be held in March 1989.

2. Identify the regulatory and other methods to preserve the open space which the Town does not desire, or is unable, to purchase.

Existing Conditions <Data here incomplete>

The park and open space system currently owned by the Town, the County, or other governments in the Town is identified in Map __. (This work product is not yet complete.) The County has one major park, Treetops Park at Orange and S.W. 100th Avenue which contains a southern branch of the Pine Island Ridge. The County also owns a landfill site in western Davie which, if all its environmental problems are eventually solved, should also be available for open space. The City has __ parks that are from __ to__ acres in size and scattered throughout the built up areas of the Town. In addition, the __ schools have approximately __ acres of land of which __% can be classed as open space and used for recreational purposes.

The Plan for Open Space

The purpose of the Open Space Plan is to identify the open spaces and trails which the Town intends to protect, preserve or acquire in some fashion. The Plan will be done in several stages. The first stage is to identify land that clearly is an essential part of any open space plan and which will serve as the corridor for a trail system in addition to any other open space functions.

Definition of Open Space

Open Space is land that remains open, can remain undisturbed, and is protected by the public in some manner. While open space may serve the dual functions of open space and recreation, that need not be the case. It is critical that open space include land that is to be left undisturbed for resource protection or other purposes. Open space land can be preserved for a variety of functions: to protect natural resources, to protect farmland, to preserve the rural qualities of Davie, to create entrances to Davie that give the community a stronger identity, or to provide for recreation. While the ability to remain undisturbed is important to some of these purposes, in other cases the site needs to be improved in order to create an entranceway or be used for recreation. The term "protected" in some manner is intentionally vague. While the purchase and ownership of land is important and essential for some types of open space, in other cases the public interest is served by simply keeping the land open. This can be done with easements, development rights or other techniques that may leave the land in private ownership.

Citizen Input

In developing this Plan, every attempt has been made to obtain citizen input. This began with the advisory question on the ballot in the spring of 1988. At the beginning of this study, the consultants conducted a "Reconnaissance" to solicit input from citizens, officials, and special interest groups. This effort involved the Open Space Advisory Committee at an even more detailed level using nominal group techniques.

There were a number of predictable responses from some of the special interest groups. The horseback riding interest groups were particularly interested in trails and safe street crossings. Developers were more concerned with the land use issues associated with open space. The developers felt that, for the most part, government should purchase open space and not rely on density or other regulatory efforts to preserve it on private land. There were a number of suggestions about specific properties, mostly near the groups making the request.

One of the most important concerns that came out of this effort was not anticipated. Safety was a major concern with some of the citizens. They were concerned with the safety of children to use either trails or parks without parental supervision. They indicated they would prefer fewer parks that were safe than lots of land that could not be used. In this same group, most of whom were active in school activities, there was a preference for recreational open space rather than natural areas.

Nominal Group Technique Results

The National Land Partnership conducted a consensus building technique known as the "Nominal Group Technique." Four questions were asked of the Open Space Advisory Committee to determine: A. their perceptions of the Town's character, B. their images of open space in the Town, C. the most important uses of open space, and D. where open space should be first acquired in the Town.

The questions the Open Space Advisory Committee were asked to rank and their responses are indicated in the following sections. The gross score is indicated after each response, with the lower score indicating a greater importance. This score gives the reader an indication of the degree to which the committee valued each response. For example, if the gross score between a response ranked first and that ranked second is only two or three integers, then a significant difference cannot be drawn between the two responses. However, if the two are separated by five or more integers, then the difference begins to be significant. Of course, as the magnitude of difference increases, so the significance of that ranking relationship gains in importance.

A. How do you describe the "character" of Davie when describing the community to someone who has never visited it?

The character of Davie should be the sum of all images about Davie. Traffic congestion, town meetings, residential streets, the friendliness of the people are but a few aspects of the character. Examples might be "western suburban" or "southern rural" or "South Florida exurbs."

Ranking/Response		Gross Score
1.	Low Density	29
2.	Horse Country (Struggling)	32
3.	Different from the Rest	38
4.	Future Shock Growth	42
5.	Western Suburban	44
6.	Country Western	49
6.	Not a Sea of Homes	49
8.	Trees and Pasture	50
9.	Agriculture/Bedroom Community	55
10.	Downhome Gentlefolk	57
11.	Non-Stressed	58
12.	Agricultural History	76
13.	1950's Fuel	79
14.	Open Government	81
15.	New York Cowboy	94

Analysis. The image of an area of "low density" settlement, characterized by the trappings of struggling "horse country," in fear that growth is threatening the quality of life (shortened to "future shock growth") that wishes to remain "different from the rest" (of Broward County) seems to represent the Town of Davie according to the members of the Committee. Whether their image of themselves is called "western suburban," "country western," or "agricultural/bedroom community," or as "non-stressed," "downhome gentlefolk" the participating residents of Davie want to be sure there are plenty of "trees and pasture" and "not a sea of homes." The remaining responses, 12 to 15, were ranked so much lower than the rest, that those responses could easily be eliminated from a statement of community character.

B. What are the mental images that come to your mind when you think or speak of open space in Davie?

Ranking Response		Gross Score
1.	Natural habitats/fields, flowers	39
2.	Agricultural land/orange groves	40
3.	Relaxed Vistas	46
4.	Non-congested	47
5.	Relatively low-density	51
6.	Tranquil oasis (passive parks)	52
6.	Green, people trails	52
8.	Equestrian activity	54
9.	Common green space developments	56
10.	Large tracts of green space	59
10.	Trail connectors to regional parks	59
12.	Parks and recreation areas	60
13.	Large, northern-type trees	61
14.	Green buffer areas (commercial)	75
15.	Cows (token), horses, pasture	80

Analysis. The visual image of open space in Davie is less sharply defined to the members of the committee than is their image of Davie itself. The evidence of this is the total range of gross score. Question A had a range of 65 points compared with only 41 points on this question. Only 20 points separate the first 13 responses about the image of open space in this question. But, in the first question, 50 points separated the first 13 responses. It should be noted, however, that the responses ranked 1 and 2 were somewhat distinguished from the rest. The importance of pastures is difference, in this question "natural habitats/-fields, flowers" and "agriculture/orange groves" seem to define the important image visually. Indeed, "cows (token), horses, pastures" was ranked last (15) as a response. This may have been the result of lack of clarity. Discussion during the clarifying round brought out the fact that dairy farms were rare in Davie and that cows were not a common sight. It may also be indicative that most residents do not frequent the areas of Davie where active pasturing is going on, or that the cattle may not be visually prominent, or it may be that a pasture is also a relaxed vista and a better descriptive image. In general, the small differences between the bulk of these images indicates that even for the individual there are a number of elements essential to the visual character of Davie.

C. What are the most important uses of open space?

The use of open space can be divided into environmental, visual, agriculture, trails (jogging, horses, bicycles), private open space, and other recreational. Active parks and recreation other than trails rate low on the committee's priorities. Agriculture is also rather low as a use.

Ranking/Response	Gross Score
1. Natural areas preservation	24
2. Trails; non-vehicle connectors	25
3. Passive public parks	27
4. Swales, setbacks, buffer zones	31
5. Preservation of waterways	32
6. Visual (canopy roads)	33
7. Orange groves	36
8. Parks and recreation (active)	44

Analysis. Natural areas registered as the strongest sentiment among the members as use of open space. If combined with preservation of waterways and passive parks, which presumably would have undeveloped areas, this a clear priority. Trails for non-vehicular access which would connect passive areas and regional parks was the only important active recreation use suggested as a priority for open space use. It is interesting to note that while the members' image of Davie's open space strongly suggests orange groves (Question B), the uses preferred ranked orange groves near the bottom. However, if we view Question B as focusing on visual imagery and Question C as use, this result is not surprising, since few residents actually get to use orange groves.

D. Where should open space first be bought or acquired in Davie?

This question was preceded with a discussion of the three open space concepts of greenbelts, greenways, and green spaces that could be applied to Davie. Greenbelts generally surround a community; greenways occur along roads, paths, canals, etc.; and green spaces are the pastures, groves, play fields and wooded lots that are not built upon. The ranking attempts to get at which of these should be the first priority in Davie's Open Space Program.

Ranking/Response	Gross Score
1. Unique Natural and Geological Habitats	9
2. Unique Botanical and Archaeological Habitats	23
3. Trails Connecting Existing Parks and Open Spaces	27
4. Buffers Around Preservation Areas	34
5. Regulated Acquisition Preservation within Development	36
6. In-town Green Spaces	38
6. In-town Waterways	38
8. Trails Away from Traffic	45

Analysis. Clearly, the number one priority for open space purchases are the areas of unique natural and geological habitats. Botanical and archaeological areas were ranked a distant second. There is a range of 36 points within the ranking and 14 points, 39% of the total range, separates the natural area from all the others. This is a clear mandate. A trail system connecting other areas is in the second priority category with rare sites. In the Ridges, all three of these are present together. The combination of natural areas and trails to serve them is the common theme in the responses to all the trigger questions. Activity areas, as open space, constantly were shown to have low priority among the members of the committee. While all techniques for open space acquisition should be utilized together, the clear priority for use of bond funds, from the perspective of the committee, is for natural areas and trails.

Inventory Summary

The joint venture between the National Planning Partnership and H. Kurt Kettlehut and Associates submitted detailed reports and a summary of their findings from inventories they conducted on the open space features in the Town of Davie. Their full reports are attached as Appendix A.

The inventory provides the status and qualities of open space in the Town of Davie today. It is, however, an understatement to say that the status should also include the note "rapidly changing". Davie's geographic location relative to I-75, I-595 and the Florida Turnpike leaves little time to develop a strategy and plan to preserve the qualities of open space which give Davie its character. Following are summaries of the findings of the consulting team.

Agricultural Qualities

All agricultural land use depicted on colored infrared high altitude photos (CIR-HAP) from March 1984 were compared with 1987 tax map aerial photos. In turn, these were compared with actual ground level observation of all existing agricultural land uses within Davie as of November 29, 1988. All land currently in agriculture has been mapped. Agricultural land use was placed into the following categories: Pasture (Pa), which includes dairy cows, beef cattle, and horses; citrus (AG)CIT); plant nurseries (AG)pn), which includes field nurseries, greenhouses and shade houses; winter vegetables (AG)Wv); horse training (AG)ht), which includes horse boarding; and agricultural research (AG)rch) which is the University of Florida IFAS Research Station.

Citrus. The acreage devoted to commercial citrus groves is declining rapidly. The most notable example of this is the com-

plete replacement of nearly a square mile of citrus by an upscale development, Forest Ridge. The overall physical condition of the majority of active groves can be described as old with declining yields, dying trees, and, in some cases, apparent abandonment. There are a few minor exceptions where some trees have been replaced and interplanted with palms and other tropical ornamentals. One is struck by the proliferation of "For Sale" signs on so many of the grove properties. In all probability, the total acreage mapped as citrus is exaggerated because in some case the grove has already been sold, maintenance and production activities have recently ceased, and the grove is awaiting conversion to residential development. Without the assistance of some type of preservation program, the groves are definitely destined to be replaced by non-agricultural land uses, especially residential developments. Even with some type of preservation program, there are a number of factors beyond the bounds of Davie which make continued citrus production highly problematic. Most likely, the balance has already been tipped whereby improvement of groves is not economically viable.

Pastures. Pasture, like citrus acreage, is rapidly being converted to residential and other urban land uses. The reasons for this are very similar to those for citrus. The scope of this effort has not permitted extensive interviewing of property owners to identify the precise motives for maintaining land in pasture. Even so, it should be recognized that there are multiple reasons for the existence of pastures in Davie. Among them are the following: (1) pasture for functioning dairy enterprises; (2) land held in speculation for urban development, being grazed by beef cattle to qualify for a significantly lower property tax assessment under Florida's Green Belt Law; (3) pasture for horses bred and used for recreational and show purposes; (4) some combination of these three.

The conversion is dramatically demonstrated by the very rapid development of former pasture north of S.W. 14th Street in the far northwest corner of Davie, of the west side of Interstate 75 between Griffin and Sheridan Street, and of that area south of SR 84, west of Nob Hill Rd. into residential uses and commercial uses.

Plant Nurseries. While plant nurseries of varying sizes and types can be found dispersed throughout Davie, many are concentrated south of Griffin Road, between University Drive and the Florida Turnpike. Like the citrus groves, one is struck by the number of "For Sale" signs on the wholesale plant nurseries, often accompanied by words such as "suitable for commercial development." The pressure to sell and the conflict of increasing urban uses surrounding what used to be rural wholesale nurseries contributes to the shifting of this agricultural activity to other locations outside of Davie.

One activity which will postpone (but probably not ultimately prevent) the conversion process is fueled, ironically, by the land use transition itself. As residential and commercial development occurs on former agricultural lands within and around Davie, there is a substantial demand created for landscape materials (palms, shrubs, hardwoods, etc.). It is possible to plant new citrus trees in those areas of the groves where older trees have been removed and, in the spaces between the citrus seedlings, plant landscape material. The landscape materials produce a revenue stream while the citrus is maturing. Then, as the citrus tree develops a larger crown and begins to yield fruit, the landscape material is sold off and either not replaced or replaced by low-growing materials in line with the trunks of the citrus trees. The degree to which this is occurring is small when compared to areas going out of citrus completely to make way for urban development.

Winter Vegetables. The very small area devoted to winter vegetables and strawberries is not likely to be replaced by urban activities. This land is located directly beneath the high voltage transmission lines which traverse the area on an east/west axis between Griffin Road and Stirling Road, east of University Drive. The production is limited in scale and appears to be marketed through a retail produce and garden center adjacent to the fields. In addition to the winter vegetables and strawberries, this space beneath the transmission lines is shared by plant nurseries which also are not threatened by residential and commercial development. By the same token, since this area comprises a very long, narrow strip perpendicular to the north-south streets which carry local traffic through the area, it does little in the way of contributing to the rustic appearance of Davie.

Summary. Agriculture in Davie is best described as a stressed industry under tremendous economic pressure. For most landowners, it is only a question of how long to continue, for they have already decided that agriculture is an interim use of the land. Thus, if Davie wants to preserve agriculture, it will have to have a very aggressive program.

Prehistoric and Historic Qualities

Florida State Archaeological Site Files were examined for known recorded sites in Davie corporate limits. Historical sources in the FAU library were also examined. This was followed by a meeting with Robert Carr, _<title>_____, in Miami. Both infrared and low altitude aerial photographs were used to identify sites and key areas for this study. Two days were spent in the field establishing "ground truth" of our analysis. Special attention was given to the present condition of each site as compared to photographs taken April, 1987. All recorded sites were then plotted on the low altitude section maps and subsequently transferred to the CAD base maps.

The City of Davie possesses a number of distinctive and unique prehistoric and historic period landmarks. Indeed, within the corporate boundaries of this municipality lie some of the most historically significant and relatively intact archaeological sites presently known in South Florida.

Given its geological history and physiographic features, archaeological sites located in Davie are found (to-date) solely in ecological zones characterized by elevations considerably higher than surrounding landforms. They are the prominent marine-formed remnant sand dunes or barrier reefs that run through portions of western Davie. Known as Pine Island to many, it includes a western extension known in recent times as Spooner's Ridge or Long Key. This ridge, with elevations up to 29 feet above sea level, forms a series of upland islands.

Archaeological sites have also been found in small hardwood tree hammocks scattered throughout Davie. These, too, were formerly islands in a general wetland ecosystem which preceded major land reclamation projects in the late 1800's.

While an intensive, systematic survey and controlled excavations were beyond the scope of this project, sites presently known and recorded with the State of Florida's Division of Archives attest to archaeological sites on Pine Island, its western extension and small hardwood tree hammocks within the corporate boundaries of Davie. It is most likely that more archaeological sites will be found in these ecologically distinct zones should intensive surveys be conducted. No excavation or clearing should be allowed along the ridge without a detailed site inspection by a qualified person.

Summary of Archaeological Site Information. A total of twelve archaeological sites have been recorded for Pine Island. On the basis of limited tests and surveys, six sites have both Seminole and prehistoric period components. Seven prehistoric midden sites cover a wide time range. Four additional sites are located on ridges to the west of Pine Island Ridge and on small hardwood tree hammocks. These are primarily prehistoric, one possessing an Archaic Period component (8Bd00052).

Sites vary in terms of the degree of disturbance but many are well preserved middens showing only partial damage.

Natural Botanical Qualities

The open spaces of the Town of Davie have been inventoried with respect to their vegetation. Each open space, three acres or greater, was examined and categorized (if applicable) as to plant community, major plant species, previous treatment, and use.

Most of the dry land within the corporate limits was created when the general area was drained in the first half of this century. Because of this, most of the present vegetation is not endemic, except on the centrally located elevated Ridge Area (Pine Island) and on the eastern-most located wetland along State Road 84. Thus, the only major areas significant to open space preservation from a perspective of natural vegetation are the ridges (Pine Island, Spooner's Ridge, and Long Key, as they are commonly known) and the wetlands located at the extreme eastern end of Davie. There are also some hardwood hammocks and other small features that represent open space or planning opportunities.

Ridges. The relatively high ridge presents a strikingly different ecology from the surrounding low plain. Huge ancient oaks cover major portions and are the dominant canopy species. They produce the biotic portion of the environment that governs the growth conditions of all the other flora.

There are two species of oak (Live Oak and Laurel Oak) that create over 90 percent of the vegetation canopy. Very large Slash Pine infiltrate the oak in some areas. The understory is mostly a composite of Red Bay, Mastic, Pigeon Plum, Red Mulberry, White Stopper Strangler Fig, and Cabbage Palm.

The shrub layer is composed mostly of Wild Coffee, Saw Palmetto, Beauty Barry, Satinleaf, Snowberry, Wild Lime, and Marlberry. Vines make up an important part of the total flora. Some of the more numerous species are Greenbriar, Muscadine Grape, Moon Vine, Poison Ivy, Rosary Pea, and Virginia Creeper.

The ground cover is made up of a diverse spectrum of plants, ranging from creeping woody shrubs to herbs. Representative species are Boston Fern, Swamp Fern (mid-sorus fern), Caesar's Weed, Comlina, Life Plant, Ground Plum, Pteridium (Fern), Sida, and Spanish Needles.

The dominant oaks, themselves, provide habitats for a number of epiphytic species (air plants) whose individuals literally cover many of the large branches. The major species of epiphytes found here are Resurrection Fern, Cabbage Palm Fern, Cardinal Air Plant, Spanish Moss, Tillandsia Recurvata, and a Wild Orchid (Encyclia Tempensis).

Portions of the Ridge vary in disturbance depending upon the intensity of man's incursions. Some areas seem untouched and contain a minimum of exotic (non-native) plant species, while other portions may be either denuded of understory vegetation, leaving only the great oaks, or contain a proliferation of exotic species that have successfully out-competed native species.

Wetlands. The Wetlands is a combination of valuable fresh-water swamp and march lands that are now rarely extant in areas pro-

tected by governmental and certain private agencies. Its plant species are largely sub-tropical to tropical in origin.

The Wetlands lies within the extreme northeastern corporate limits of the Town of Davie, Broward County, Florida. It is roughly isodiametric in shape. More specifically, it is located in Sections 19 and 20 Township 50, Range 42. State Road 84 runs southeast-northwest through the northern one-sixth of the area. The roadway thus forms the northern boundary of the major portion of the Wetlands. Davie's town limits form the western boundary, and the South New River Canal forms most of the eastern and the southern boundary.

The soils that underlie the Wetlands of Davie, as defined by the U.S.D.A. Soil Conservation Service 1980 Soil Survey of Broward County-Eastern Part, consist of two types:

> Lauderhill muck. The Lauderhill series consists of nearly level, very poorly drained soils in broad flats in the Everglades. These soils form in hydrophytic plant remains mixed with a small amount of mineral material. Under natural conditions, these soils are covered with water most of the year. Most of the acreage of this soil is in natural vegetation that consists of sawgrass.
>
> Plantation muck. The Plantation series consists of nearly level, very poorly drained soils in broad flats along the eastern edge of the Everglades. These soils formed in unconsolidated marine sediments--a muck surface layer (overlies) a sandy mineral material. Most areas of this soil are in natural vegetation.

The Wetlands is divided into two major plant communities: swamp and march-wet prairie. The terrain of both areas is extremely flat with an elevation of approximately two feet.

The swamp occupies generally the eastern one-half of the area and covers the entire shore line of the South New River Canal along the Davie town limits. The greater fertility of the soil of this eastern half and intrusions of minor water passages into the swamp (flowing water) have fostered the dense growth of native tree species. Pond Apple, Cypress, Strangler Fig, and Willow dominate the vegetational complex. Fresh water and migrating game fish reside here. Also, tropical and subtropical aquatic birds of the Heron and Egret genera feed and rest here, and the protected Osprey lives in this swamp.

The western marsh-wet prairie supports a radically different ecology. In this area, Cypress and Melaleuca trees, though dominant, are scattered enough to form an open type of growth. Sawgrass and other marsh/prairie grasses and broad-leaved annuals

make up the ground cover. The sparser growth of this western portion of the Wetlands is due to the less fertile and slightly drier soil conditions coupled with periodic burning. The periodic burning of the marsh-wet prairie kills off most of the swamp bush and tree species (exceptions: cypress and melaleuca) and allows the more rapidly growing sawgrass and marsh-wet prairie annuals to regenerate. Animals indigenous to the marsh-wet prairie are red-winged and marsh hawks, raccoons, opossums, fox, armadillos, and various aquatically-oriented snakes and turtles.

Hardwood Hammocks

<This section incomplete.>

Acquisition Alternatives

There were five alternatives identified by the Open Space Advisory Committee for the consultants to consider as possibilities:

1. The Ridges
2. Wolf Lake
3. Trails linking the various open space areas
4. The entrances to the Town
5. Improvements in conjunction with the Town Center Plan

The consultants have reviewed each of these areas and narrowed the number of alternatives to the first three. The clear primary conclusion of the research presented in this report is that the ridges should be the target for the purchase as soon as practicable for the Town. The ridges are identified by the consulting team as extremely rich in both archeological and botanical qualities. The ridges have been little disturbed by agriculture and except for some exotic vegetative species, remain natural. The linear nature of the ridges make them excellent candidates for trails as well. The Open Space Advisory Committee identified, as its first and second priorities, the preservation of natural areas, archeological areas and the creation of trails to connect them. As much of the ridges should be purchased by the public as possible and in addition right-of-ways for trails between the ridge segments should be acquired as well.

Wolf Lake has been retained in two of the four options. The area is an unique area because of its water quality, large vegetation (non-native) and general open space qualities. It is also clearly a target of opportunity, the Town has an option on the acquisition for one year. Thus, if the town wants this property, it should be on the acquisition list at this time.

The town entrances were deleted for several reasons. The most important is the degree of analysis needed to make decisions on the entrances. While the land at the entrances has been identified, there is no consensus as to what, if anything, should be done there. The entrances are an area of concern that is related to the type of open space community that Davie desires to be and will be studied in Phase 2. It makes sense to wait for these additional studies before making recommendations on acquisition. A similar problem is presented by the Town Center Plan. Once that plan is adopted by the Town Council, then its relationship to open space planning can better be assessed as part of Phase 2.

The planning consultant team is recommending four alternatives for your consideration. These alternatives cover a range of costs from $5,000,000 to $12,000,000. They all focus on the first three areas identified by the Open Space Advisory Committee, but they have been structured into four general alternatives with different combinations of these three elements. In most

cases, a range of acquisition costs has been identified. Often only a portion of a property is needed to accomplish a specific objective, but additional land would allow the system to meet a broad range of objectives. The four alternatives are outlined below.

1. The Ridges

The acquisition of the Ridges involves the portions of the Ridges that lie west of S.W. 100th Avenue which have not been acquired by others. There are a few pieces of the Pine Island Ridge in Davie that remain to be preserved. The major effort will be the acquisition of Long Key Ridge. There are remnants of the ridge near Hiatus Road that are not part of the major ridge formations, and are isolated from the Pine Island and Long Key Ridges which also can be included. The Ridges have shown up in both the environmental and archaeological work as the most important features in Davie. From the Community Character studies, the Ridges immediately stand out as important visual features. They are logical minimum acquisition targets. The Ridges have been recommended as the minimum purchase, and their acquisition is a part of all four alternatives. A bare minimum acquisition program with little land beyond the ridge formation itself would consist of the acquisition of 168 acres at a cost of $5,000,000. A more expansive view of the Ridges would result in the acquisition of 315 acres at a total cost of $8,000,000.

2. The Ridges and Wolf Lake

Wolf Lake is an old rock pit that has been abandoned for a period of ten years. The lake has a good water quality that makes it attractive as a recreational resource as well as open space. Its location in southeastern Davie makes it accessible to the more populous eastern end of Town. It adds 25 acres of lake and 24 acres of land to that proposed for the Ridges. The Wolf Lake land has been offered to the Town for $1,000,000 and awaits only the funds to make its acquisition possible. Therefore, this alternative would result in a total of between 217 and 364 acres for the two resources at a cost of from $6,000,000 to $9,000,000.

3. The Ridges and connecting Trail System

The Ridges are not connected. The system proposed here would be a trail system to connect the various portions of the Ridges to each other with a minimal connection to the Griffin-Orange Road trail system. In some cases, the trail system would involve acquiring whole portions of land that might be used for a variety of open space purposes as well as easements or narrow trail corridors. All trails are expected to provide land for horse, pedestrian and bicycle traffic. That could mean either a single area that would provide for all user groups, or a system of parallel trails that would serve one user group or another. Again, as

with the Ridges, there are several alternatives. The most extensive would involve 12 acres and cost $300,000. The more conservative approach of minimal acquisition would acquire eight acres for $200,000. These alternatives would result in several miles of trail connecting the various segments of the Ridges. As a whole, this would result in from 176 to 327 acres at a total cost of $5,200,000 to $8,300,000.

4. The Ridges, Wolf Lake and a connecting Trail System

This is the most expensive alternative with both the Ridges and Wolf Lake being acquired and a significantly longer trail system being established. The trail system would be more expansive and would include everything in Alternative 3, plus additional trails to Wolf Lake. There would be about 17.3 miles of trails, about 105 acres of additional land, and a cost of from $1,600,000 to $3,000,000. The total package would range from 322 to 469 acres at a cost of $7,600,000 to $12,000,000.

These alternatives represent a full range of benefits to the community. The Open Space Advisory Committee and Town Council will have to evaluate these alternatives in terms of total benefit versus the cost.

OPEN SPACE PRESERVATION

Issues Paper Number One

Introduction

This paper presents discussion and recommendations for implementation pertaining to conservation, protection, and enhancement of open space and natural resources in Davie. Open space has been found to be the prime shaper of community character in Davie. In the workshops with Davie citizens, open space and especially open space related to natural resources were found to be of primary importance to those participating. The suburban, estate, and rural character types that are important to Davie are all dependent on open space.

Few environmental protection or open space programs have failed because nobody wanted to protect open space. Most frequently, they have failed because the community did not understand the consequences--what the price of preservation would be and who would pay. In order to preserve open space the government must be willing to either adopt appropriate regulations, spend money, or both. Davie presently has a referendum on the ballot for the acquisition of open space. Thus, the Town has taken its first steps towards the preservation of such critical resources.

While this paper will concentrate on regulatory approaches to open space preservation it will also address the alternatives that do not involve regulations. The concentration is on the regulatory approaches because the only real issue with the non-regulatory approach is how much the community can afford. With regulations two opposing views of the land are involved, land as a resource and as a commodity. Each view results in a different group paying to preserve the open space. The focus is therefore on the equity questions about how to and who pays for an open space implementation program. Although most property owners recognize the need for such regulations, they are loath to have them applied to their land.

Legal and Equity Issues

One of the difficult problems in adopting open space regulations is the result of a very direct clash between two views of land. We can all agree to platitudes that call for the protection of open space to protect natural, scenic, and historic resources or to protect the character of the community. Yet, if it is our own land on which development is to be severely limited, then we evoke the rights of property owners with equal vehemence.

Generally, the landowner views land as a commodity to be bought and sold for profit. The community views the land as a resource

that functions as part of an overall system, with the private landowner being only a temporary trustee of the land. Conventional regulatory responses have heightened the conflict between these two views by focusing on density and lot size as the standards for environmental protection. In Davie, regulations have not protected the open space. The vast majority of open space in the community is open simply because development pressures have not focused on Davie.

Open space regulations proposed must be formulated in such a way that they are acceptable to the community as a whole and accomplish the purposes for which they have been passed. These regulations must take into account the degree to which each method of protection actually responds to the open space objective. The central question will be who pays for that protection?

This paper addresses the technical question of whether or not a protection measure is effective; it also focuses on who must pay the costs. This should assist the readers in evaluating different regulatory and nonregulatory techniques as they affect individual landowners and the community. Clearly, a regulation that ignores the interests of landowners is more difficult to adopt than one that at least tries to strike a balance between the landowner's investment point of view and the community's public resource protection point of view.

The second issue is more difficult, because it is a result of an idealistic attitude that often has no substantive basis. "I don't want anybody telling me what to do with my land," is a typical reaction to proposals for land use regulation. That position is clearly counter to the planning objectives of the State of Florida since local government is mandated to have regulations or other programs that implement the community plan. There are many landowners who view zoning as an infringement on their Constitutional rights. These people believe that they should be able to use their land in any way they can to maximize the return on their investment. In Florida, these beliefs are clearly not an accurate reflection of either Florida or Federal laws. The limits of regulation in Florida will be explored.

Since resource protection regulations may alter the value of property, the clash between the different views of land as a commodity and a resource becomes focused in terms of legal and equity issues. Regulations designed to preserve visual resources, sensitive natural areas, or historic sites may substantially alter a landowner's development expectations. The underlying issue--who pays for the benefits the entire community reaps--is the same whether approached from an equity standpoint or a legal one. The outcome of these two approaches, however, can be quite different.

The Taking Issue

This issue seems to arise whenever a proposed zoning policy results in a significant reduction in development potential. The proposed regulations generally give rise to the following, incorrect, allegation: "The Town is taking my property without paying--that's unconstitutional."

Indeed, both the Fifth and Fourteenth Amendments prohibit the deprivation of property without due process of law. The Fifth Amendment also provides that private property shall not be taken for public use without just compensation; the Fourteenth Amendment requires persons be given equal protection by the laws.

Exploring what the word "taking" means may prove useful, particularly since popular press reporting of the recent Supreme Court cases was inaccurate and sensational. "Taking" is usually interpreted differently by laymen than by professionals. A legal taking and what would seem to be a taking in the eyes of a landowner or the general public (from an equity point of view) are often not the same. Over the years, "takings" litigation has shown that even extreme reductions in land values caused by land use regulation may not constitute a taking in the eyes of the court. While the exact definition of a taking still eludes the legal profession and the courts, clearly, substantial reductions in property value can be sustained before a regulatory action may be considered a taking, as defined by the Fifth Amendment.

Justice Brennan, in his famous dissent in San Diego Gas & Electric v. City of San Diego, first noted that the U.S. Supreme Court has been unable to develop any "set formula to determine where regulation ends and taking begins." In a footnote, however, he adds "after all, if a policeman must know the Constitution, why not a planner?" Each case, therefore, must be decided on its own merits, leaving both municipal lawyers and the landowners' attorneys free to argue their positions.

While there is no hard and fast rule about what is definitively a taking, there are a number of legal cases that shed light on the issue. First, however, it is important to note that most cases involve two basic tests: 1) Does the regulation bear a reasonable relation to the public health, safety, and welfare; and 2) Does the regulation provide a reasonable beneficial use of the land. With respect to the former test, the courts have continued to expand the concept of a valid public purpose with regard to regulations--even regulations enacted to preserve aesthetic qualities have been upheld. Therefore, resource protection regulations based on an aesthetic purpose are valid.

The second test is more arcane: what is a reasonable beneficial use? Again, this test must be considered on a case-by-case basis, but, in general, determination of reasonable beneficial use consi-

ders both the value and use of the property. The first zoning case heard by the U.S. Supreme Court held that a mere diminution in value did not, by itself, constitute a taking. In this case, Village of Euclid v. Ambler Realty Co. (1926), the landowner's property value was reduced by 75 percent. In other cases, reductions in value up to 90 percent have been sustained. Thus, while the precise reduction in value that constitutes a taking in the eyes of the Court is unknown, very substantial diminutions in value have withstood judicial scrutiny. In many cases, the diminution is not in value but in expectations. If there is a beneficial use, the courts are not particularly sensitive to speculative expectations.

Nollan v. California Coastal Commission (1987), addresses the public use factor in determination of beneficial use. The Nollan's property value was not particularly diminished due to the action of the Coastal Commission; rather, the use of the property was affected. Justice Scala, writing for the majority, noted:

> ...where the actual conveyance of property is made a condition to the lifting of a land use restriction ...there is heightened risk that the purpose is avoidance of the compensation requirement, rather than the stated police power objective.

In this case, the California Coastal Commission had essentially required that the Nollans contribute a portion of their property to the public--they could not use that portion of the property for any other purpose but to provide public access to the beach.

Adding to the confusion is the difficulty in simply determining the value of a piece of property. The speculative or development expectations of a landowner may not serve as the basis for measuring value reduction or the notion of reasonable beneficial use. Wetland cases in Wisconsin (Just v. Marinette County), New Hampshire (Sibson v. State), and Florida (Estuary Properties, Inc.), have been a judicial recognition that natural land forms may not be destroyed to create value. A paraphrase from Estuary Properties, Inc. is that the owner of a swamp owns a swamp; the Constitution does not protect the development expectation created by filling the swamp.

In the Estuary case, the Constitutional interpretation also considered fishing to be a reasonable beneficial use of the swamp. In a case involving agricultural protection, the Illinois Courts upheld an agricultural zoning district with a 160 acre minimum lot size in McHenry County; a county that is about 45 miles from the center of the City of Chicago and part of the metropolitan area. The 160 acre zoning replaced five acre lots in this agricultural district, so the zoning change resulted in very different development expectations and real property values.

Finally, the courts seem to be increasingly willing to recognize the fact that a large portion of the value ascribed to a property is not a right of the landowner but, rather, the creation of a community's investments in public facilities (Penn Central Trans. Co. v. City of New York). This may lead to discounting the degree of the reduced value, making it more difficult for the property owner to demonstrate that a taking has occurred.

Takings decisions are further complicated by the willingness of the courts to consider other elements of the community's program as compensation. In Penn Central, the availability of transferable development rights was considered to be compensation. Legal commentators seem to agree that the courts have invited communities to use such tools to avoid the taking issue. In the recent Keystone Bituminous Coal Association v. DeBenedictis case, the U.S. Supreme Court found that Pennsylvania could regulate the amount of coal taken to prevent surface damages even though the coal companies had purchased the mineral rights.

Despite all the press on the First Evangelical Lutheran Church of Glendale v. County of Los Angeles, the issue of what constitutes a taking has not been altered. Prior to this case, if a regulation was unconstitutional, the courts did not force monetary compensation from the offending jurisdiction; a repeal of the restriction was considered a suitable remedy. First Evangelical held that property owners are entitled to monetary compensation if a regulation is found to have "taken" their land--even on a temporary basis. Simply put, this case says if a taking occurs, then compensation is a legitimate form of relief. In this case, a decision was never made as to whether or not the floodplain zoning actually constituted a taking.

There are two more elements of the taking issue that should be discussed. One element is the difficulty in convincing the Court to hear a "taking" case. Four times in the last six years, the U.S. Supreme Court has considered "taking" cases. In all four cases, the Court found that the case was not ripe for adjudication on the taking issue. In MacDonald, the Court appears to suggest that a developer may have to be turned down repeatedly for widely differing plans in order to have suffered damage. The majority in MacDonald noted that: "Rejection of exceedingly grandiose development plans does not logically imply that less ambitious plans will receive similarly unfavorable reviews."

For the landowner, the test will be exceedingly difficult. The most colorful reaction to this is in Bolemus v. Kirby from Rhode Island where the Federal Court stated: "So long as the State offers a suitable prospect for recourse in respect to the alleged "taking," a landowner must mine that quarry before panning for gold in the federal hills."

Thus, proving a taking has occurred is difficult under both Florida

and national law. Landowners must prove that they have been deprived of all beneficial use of their property. Furthermore, they must prove that all remedies have been exhausted and that the case is ripe for decision. If the community has made any attempts to mitigate the impact of the regulations, then landowners must prove that the compensation offered is not adequate. Ultimately, the legal definition of the taking issue may be unimportant given the following review of the economic impact of the various proposals for preservation.

Deprivation of Property

Deprivation of property is a substantive due process concern that questions whether the governmental response to a problem is, in fact, appropriate. The aforementioned Supreme Court case, Nollan v. California Coastal Commission, gives weight to this form of appeal. The Nollan decision indicates that the courts may be more inclined to review the degree to which regulations match their purpose. The legal test for deprivation of property requires several stages:

Stage 1: Is there a valid public purpose?

Stage 2: Are the interests of the public generally, as distinguished from those of a particular class, such that they require the regulation?

Stage 3: Is the mechanism used for achieving the public goal a reasonable approach?

Stage 4: Are the means used to achieve the goal in balance with the public benefits?

Stage 1 & 2

The validity of protecting natural resources and historic sites is well established. Open space objectives that address resource protection are well recognized. The courts, including the U.S. Supreme Court, have recognized that governmental regulations serving aesthetic purposes are legitimate. The general public will clearly benefit from the protection of open space in Davie on aesthetic grounds. As indicated in the community character paper, open space is an essential part of the community character of Davie. The protection of the character of a community, its land uses and lifestyle are well established in the law. No single group is singled out for regulation, since open space regulations are generally likely to be district wide.

Stage 3: Is the regulation reasonable?
Or is it arbitrary and capricious?

To determine whether a regulatory mechanism is reasonable, most

states give the benefit of the doubt to elected officials. That is, even if the means that elected officials have selected are fairly debatable, the courts have generally been unwilling to substitute their judgment for that of the local officials. In the past, only if the means selected did not really relate to the achievement of the desired objectives would the courts find the regulation arbitrary and capricious. The Nollan decision, however, raises the potential of a heightened judicial scrutiny for the connection between the actual protection achieved and the means to do so.

In dealing with open space issues, focusing on community needs for the open space and the exact form of regulation that is used is critical. In general, different zoning districts that represent different community character types provide a tight linkage between open space and community character. Where there are environmental resources that the open space regulation is protecting, an added level of need is established. The legal difficulty arises where other types of open space needs, such as regional recreation needs, are placed into the regulations. Parks, beaches or trails open to the general public are typically publicly owned. Open space regulations that attempt to force a land ownership transfer are clearly suspect. The goal, thus, has shifted from protection to use.

Stage 4: Does the end justify the means?

Any regulatory technique that does not balance the cost of regulation with the public benefits received has overstepped the police powers granted by the state. In more colorful terms, the courts have told local government that it cannot use an ax to do a job more suited to a scalpel.

The difficulty in this test for deprivation of property is that the majority of the burden is generally placed on the landowner. Thus, although a regulation may produce great public benefits, it may be too onerous on individual landowners. Where the balance rests is a grey area that must be decided on a case-by-case basis--there is no firm standard that can be applied to evaluate whether an individual regulation meets or fails this test. Yet, in evaluating a series of alternative environmental approaches, it is quite easy to place them on a relative scale. Very conveniently, the issue of open space protection is the conflict between the commodity and resource views of the land; therefore, each implementation strategy's performance can be evaluated according to each view.

Two aspects of the issue must be evaluated in order for the Stage 4 test to be complete. On one hand, the extent to which a regulation results in a loss of value must be measured. The greater the economic loss imposed by a regulation, the greater the likelihood that a deprivation has occurred. On the other hand, both

the success of a regulation in achieving its intended goal and the degree to which alternative regulations are successful in achieving the same results must be measured. Although the courts hesitate to substitute their judgment for that of local officials, if a regulation is clearly inefficient in either its implementation or with respect to other available measures, the courts may rule a deprivation of property.

The two sides of the Stage 4 issue must be taken together. A strongly protective regulation of an important open space with strong community benefits having a great deal of economic impact on the landowners is more likely to meet the test than a regulation giving little protection to a resource but having significant economic impact. The ideal regulation, therefore, is clearly one that provides the highest level of protection with little adverse economic impact.

Equity

Ultimately, all the legal concerns may be unimportant when measured against the political consideration of the equity issue. It has long been clear that land use professionals and lay people have different perspectives on the issue. The legal limits of equity are much more stringent, tilted substantially in favor of the public than a more populous view. Before any regulation can be challenged in the courts, it must be adopted. While this paper has tried to identify the legal limits of open space protection in terms likely to be leveled at the Town of Davie during a zoning hearing, these terms have a different meaning to legislators. In order to separate the rhetorical responses, the term "equity" is used rather than terms such as "taking and deprivation" that clearly have legal meaning. The legislative branch of government is supposed to balance the needs of different segments of society to ensure that the burdens of regulation are equitably distributed. Equity as to on whom the burden of open space protection regulations falls is, therefore, an important governmental concern.

One of the major reasons that many well-intentioned efforts to protect open space have failed is that the proponents of open space protection have read the law and then attempted to enact regulations that push the limits of what has been upheld by the courts. This results in a political battle between those with different perspectives of the land. In most cases, it is the open space that loses out.

The best approach is not to see how far to lean towards one view of the land or the other, because that would only encourage a "windfall" and "wipeout" approach to regulation and would fail to protect the interests of both parties. Instead, careful construction of the implementing regulations is necessary in order to ensure that the regulations are evenhanded. Balancing mechanisms within the regulatory process can be used, such as

clustering development in order to reduce impact. Escape mechanisms can also be provided that permit greater destruction of a resource in extenuating circumstances if there is suitable mitigation either on-site or off-site.

As the following alternative regulatory and nonregulatory techniques are reviewed, the various legal and equity issues should be carefully considered.

Alternative Open Space Protection Techniques

There are a variety of techniques that can be used to protect open space in Davie. Some are zoning techniques, however, other approaches, including subdivision regulations, can also be used. The following is a list of these available techniques:

Zoning Techniques

Large Lots
Very Large Lots
Overlay Zones
Clustering
Conditional Uses (including Planned Unit Development--PUD)
Performance Zoning

Other Techniques

Environmental Impact Statements
Land Acquisition
Conservation Easements
Transferable Development Rights

Each of these will be discussed in detail in the following sections. In some cases, there will be several variations of these techniques examined in order to fully explore all of the possibilities of the technique presented.

Before beginning, it is appropriate to sharply define open space so that we know what is sought. In general, open space is land that could be left in an entirely natural state or farmed. Generally, it means that it is outside the limits of buildable areas on lots and outside right-of-ways. While deed restrictions can be used to preserve open space on private land, and park land is clearly open space, the definition of open space should be land that could remain natural or in agricultural use.

Large Lot Zones

The large lot, whether it is a minimum of one acre or ten, is a commonly used open space response. The problem is that large lots

do not really create open space in the terms of its definition. These lots are generally too small to support agriculture and without deed restrictions or other open space preservation techniques cannot really provide open space as defined. Land that is mowed and manicured is part of the yard and when the entire area is developed, the borrowed open spaces that presently provide Davie with its character will be lost. Early housing in Davie were modest one story buildings for the most part located on one or more acres. Today, the homes are larger, often two stories, and the rural qualities are lost. In fact, Davie is finding, just as many other suburbs have, that lots once thought to provide an open feeling are being overwhelmed by the scale and size of larger homes being built today.

Large lot zoning can be counter-productive in resource protection because the homeowner will often want the dwelling placed in the most attractive location which is likely to be the most environmentally sensitive. It also increases the amount of land disturbed on a per dwelling unit basis.

In terms of community character, developments in open areas--that are characteristic of most of Davie--will result in a suburban character of up to 3 or 4 acres per dwelling. Three or more acres are needed to preserve an estate character. A rural character cannot be established using this technique. The present zoning in much of western Davie is 1 acre. In general a more estate-like character would require a down-zoning which is legal, but would clearly reduce the commodity value of the land.

While many communities have a large lot zone that is typically called "agricultural" and may even have a purpose for preserving agriculture, the fact is that large lots have never been successful in stopping development. Large lot zoning simply limits the number of dwellings that can be built.

Very Large Lots

Very large lots are generally in excess of 20 acres. The most common size is in the 30 to 40 acre range. There are some districts with minimum lots sizes of 160 to 320 acres per dwelling unit. These are generally effective in preserving farmland or any other natural resources and they provide large amounts of open space. In Davie, if the purpose of the open space was to protect agriculture, then the 20 to 30 acre lot size would be adequate. This is the best form of zoning to protect farmland.

Other than wetlands (which are regulated by others and can not be intensively developed), the other natural resources in the Town are not configured in such a way as to require this form of protection.

The very large lot zones recognize only the resource aspect of the land. The commodity value of the land falls to agricultural value which ranges from $20,000 to $30,000 per acre. If agriculture is the purpose of the regulation based on very large lots, it is sustainable by the courts.

Overlay Zones

Overlay zones are typically used for natural resource protection, and would impose a more stringent set of regulations within the underlying zoning district. Typically, floodplain districts are overlay zones. In Davie, the ridges would also be a logical candidate for protection with an overlay zone. In reality what the overlay zone does is place another zoning district in place over the selected areas. Overlay zones are not of much value for other types of open space protection.

Clustering

Cluster zoning provisions regulate by development density instead of lot size. The lots can be clustered (grouped tightly together) to avoid building on unsuitable areas of the site, thus making it possible to locate development where it will do the least damage to natural resource features. The theory behind clustering is excellent.

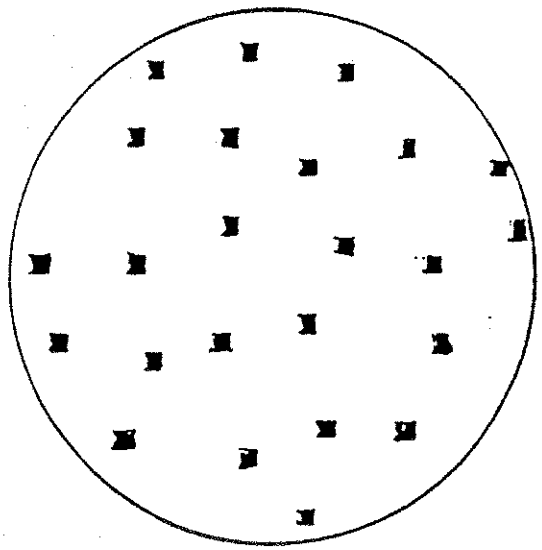
For general open space preservation purposes, clustering is the best solution. Clustering by definition creates open space. A concept known as the paradox of clustering is shown in Figure 1 and indicates that clustering is what creates open space, while maintaining a given density. Clustering is an effective regulatory method of providing open space without altering the basic density of use, thus it does not alter commodity values of the land. If lots are reduced from 1 acre to 1/2 acre, then 50% of the site will become open space. Large and very large lot zoning all rely on reduced densities.

An attractive natural resource feature on a lot generally results in the homeowners wanting to place their homes in the most sensitive areas even though the purpose is presumably to preserve the natural resource. Consequently, some additional regulations or review is needed to ensure that the highest level of protection is achieved. Clustering, however, does provide the needed flexibility to work with environmentally sensitive sites without severely reducing the development value of the property.

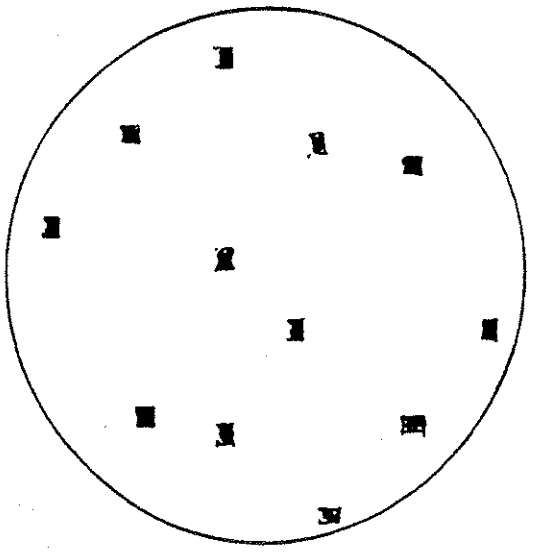
Cluster provisions, as typically used, provide for only a modicum of clustering, leaving perhaps 15 to 30 percent open space in a development. In Davie, typically 20% of the site is going to have to be open just to provide for storm water detention. At a maximum, clustering will need to have about twice the open space needed for detention. This allows for more flexible and efficient

Figure 1

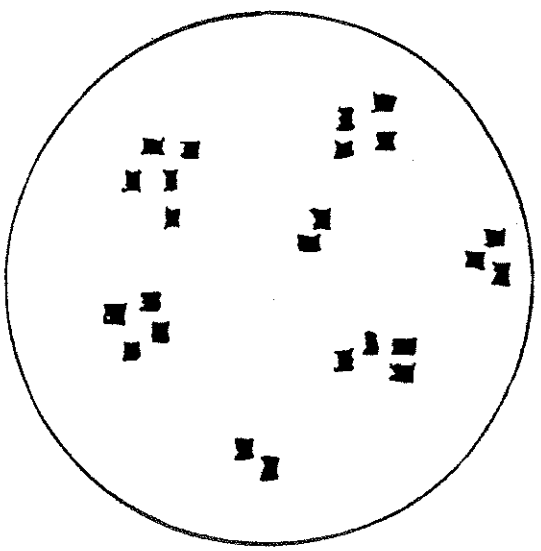
PARADOX OF CLUSTERING



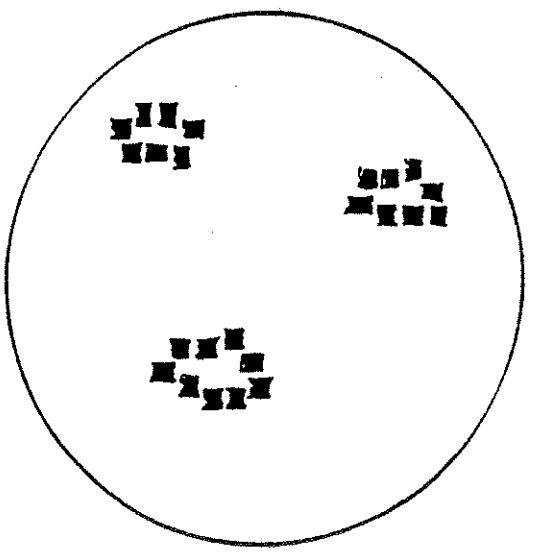
UNCLUSTERED 96% OPEN



UNCLUSTERED 98% OPEN



CLUSTERED 96% OPEN



CLUSTERED 96% OPEN

site development. More extreme forms of clustering can be used so that open spaces will dominate to create estate or even rural characters.

There is no question that at any given density clustering is less detrimental to the environment than conventional zoning at the same densities. In all cases, clustering provides needed flexibility to work with the land. The biggest advantage that clustering has over the conventional large lot technique is that it is usually possible to achieve a given level of protection at a slightly higher density. This increase in density should not be feared; it should be viewed as a means of providing an incentive to landowners for sensitive design.

Clustering is essentially a design concept. It is also used in conditional zoning, PUD's and performance zoning. Since clustering generally produces better plans, it is recommended that it be permitted as matter of right at the density of other permitted uses in the district.

Conditional Uses

There is a wide range of conditional use techniques. No matter what the underlying technical approach is, all conditional use approaches share one element in common. They permit the Town to evaluate a project according to a flexible standard. The elected officials have the power to grant, deny, or approve, subject to conditions. In theory, the conditional use process permits the Town to attach additional conditions to the project's site plan to ensure that environmental, visual, and historical resources are protected. In practice, the criteria or standards for approval are either too vague to ensure the desired results, too rigid to permit a design that protects the environment, or subject to political whim.

The problem is that conditional uses need to be used to provide developers with an incentive to use the process. The developer should have something to gain. Since that is nearly always density, the conditional use process usually produces conflict with neighbors. In general, it is a poor concept for open space preservation. The developer has a choice whether to seek a conditional use or not. Given the delay that is likely to be involved, the density bonus associated with this approach would need to be large.

The conditional use process is sharply dependent on the quality of the review board, the preciseness of the standards, and the ability to quantify any of the standards. Some systems have elaborate scoring processes that are intended to reduce the arbitrary elements of these approvals. But, while some very good developments have occurred under some form of conditional use permit, so have some of the greatest travesties. Inconsistency

is another reason to be cautious of this alternative.

Performance Zoning

This form of zoning was developed, for the most part, to provide an alternative to both traditional zoning and conditional use techniques for protecting environmentally sensitive lands. It integrates clustering as an important aspect of the performance standards. Performance standards, the basis of performance zoning, contain built-in safeguards to protect natural features and visual, archaeological, and historic resources. Performance standards often apply not to individual zoning districts but to the object being regulated or protected, wherever it exists.

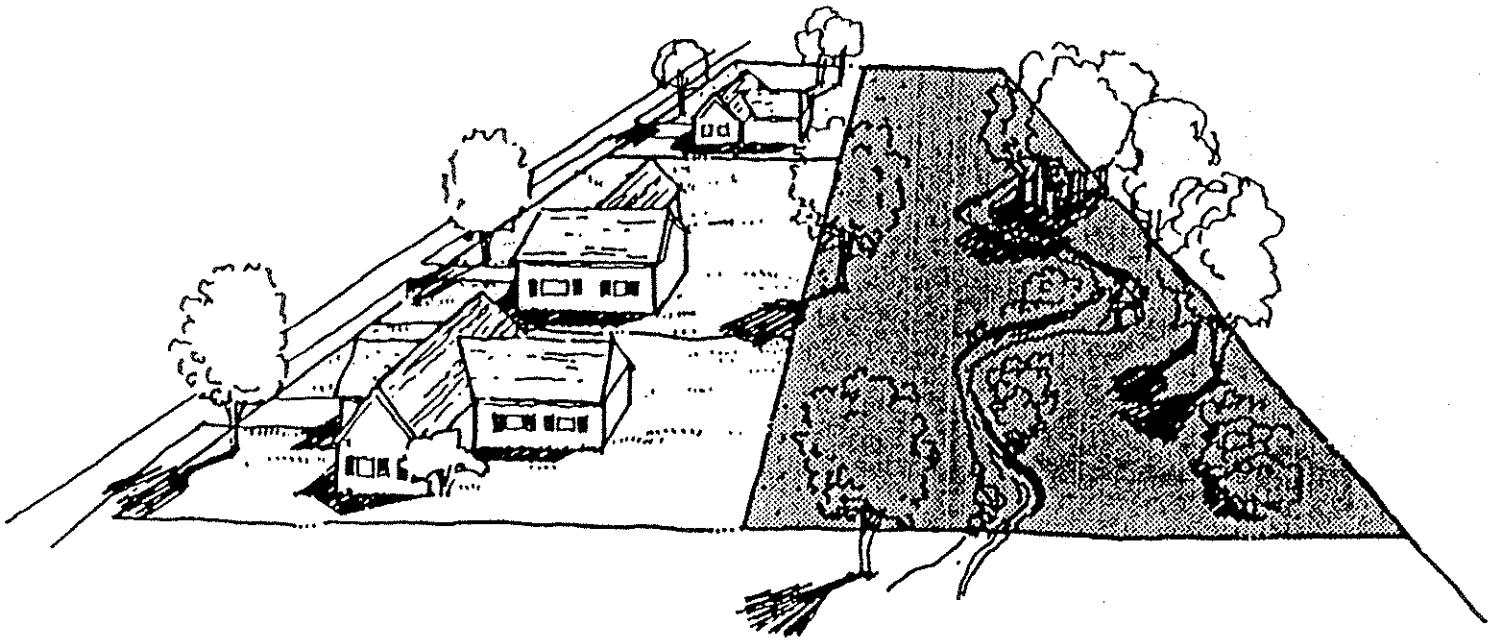
There are several types of performance standards that can be applied. The first type establishes an open space ratio for residential zoning districts and a landscape surface ratio for non-residential zoning districts or uses. These performance standards are illustrated in Figures 2 and 3. The table below provides an example of these district standards.

Use	Density	Space Ratio	Landscape Surface Ratio	Floor Area Ratio
Estate District				
Residential	.50	.30	-	-
Other permitted uses	-	-	.60	.15
Suburban District				
Residential	2.50	.25	-	-
Other permitted uses	-	-	.40	.30

The second type of performance standards sets a specific protection level for natural resources. This type of performance standard is essentially an automatic overlay zone that protects as shown below:

Natural Resources	Open Space Ratio
Floodplains	1.00
Lakes	1.00
Shore buffer	.85
Ridges	.90
Hardwood Hammock	.80
Forest, high quality	.65
Forest, low quality	.40

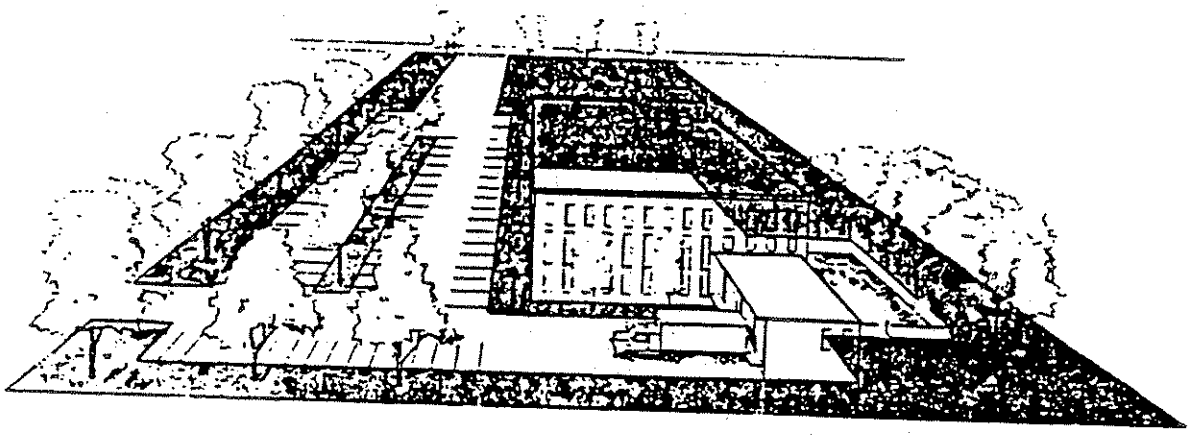
Essentially, this approach can be applied to any resource whose destruction or pollution is reasonably well understood.



OPEN SPACE RATIO (OSR)

Figure 2

Figure 3



LANDSCAPE SURFACE RATIO (LSR)

A third type of performance standard applies not to a resource, but to an aspect of a natural cycle or function that is disrupted by development. While the identification of protection levels helps reduce impacts, in many cases, addressing the specific cycle and the interaction with development that creates a problem is the desirable route. (An example is storm water; this is an environmental problem that can be addressed with specific standards to retard peak flows or to reduce the pollutant loads carried by the resource.) A complex analysis is required in order to determine whether a site design meets a particular standard. Unfortunately, a developer may have to test a number of alternatives in order to find one that works.

Performance standards have a tremendous advantage in that they directly apply a district-wide open space ratio that ensures adequate open space. Performance standards also protect natural resources without resorting to procedural systems. Performance standards generally rely on clustering and landscaping to achieve community character and open space goals. The densities are designed to take into account the degree of clustering desired. Landscaping is another important feature of performance standards systems. This ensures that the desired community character is achieved both by setting a minimum open space and by ensuring landscaping in those areas where it is required to enhance the quality of the community and its open views. Landscaping can be used to create specific effects that enhance the feeling of openness in the community. It permits and encourages more dramatic clustering. It can be effectively used for a wide range of clustering to protect and preserve agriculture, preserve natural resources, or simply to ensure the character of development in the community. It can achieve any open space goal. In general, it is even more sensitive to the commodity value of the land than clustering. Performance zoning provides a mechanism whereby Davie can, in fact, balance the impacts of the regulations so that both the resources and the rights of property owners are respected. Performance zoning is efficient at balancing the two views of land because, to a significant extent, density can vary independently of the open space ratio. This means that the density on the buildable portion of the land can, in many cases, be increased to ensure that reductions in property values associated with the resource protection standards are minimal. The potential problems with deprivation of property rights and arbitrary and capricious standards disappear with the performance zoning approach.

Environmental Impact Statements

The National Environmental Policy Act of 1969 was passed as a result of strong environmental and resource protection concerns in the United States. With the sudden advent of a strong resource protection objective, the government found itself without adequate planning or regulatory techniques to deal with environmental goals.

Communities are now adopting resource protection elements modeled after the national environmental impact statement requirements. This requires developers to prepare a statement that assesses any impacts on the community's resources and to select the best course of action from several alternatives. The system is less a regulation of the land than a process for arriving at a decision. The process is ad hoc and requires the developer to collect a variety of data, test alternatives, and present the findings on the impact. Public hearings are held, and citizens and other interested parties are also permitted to submit evidence. The elected officials must then sort through all the information and either accept, modify, or reject the statement.

The ultimate problem with this technique is that it is inconsistent in its long-term results. It not only has all the faults of conditional zoning but, because of the cost of preparing impact statements and the lack of standards, is also less consistent and more drawn out. The preparation costs for the developer can easily double or quadruple the cost of preparing a development review application. Citizen groups must hire attorneys and experts of their own to review the material. While it was originally envisioned that the elected officials would simply sit and listen, the complexity of the issues demands that the community hire its own staff with the technical expertise to sort through the complex and conflicting testimony that often arises.

Land Acquisition

Acquisition is one of the oldest methods of protecting a community's resources. Government has the right to acquire land either through negotiation or condemnation, provided there is a public purpose. Several methods of acquisition of land are available to government, including the purchase of fee simple interest, purchase and resale upon condition, purchase and lease back, acquisition subject to life estate, and acquisition of tax delinquent land. While all of these are valid techniques, they are used outside the regulatory process. There are also variations of acquisition in which the local government pays for easements or development rights which preserve the land in open space while leaving the land in private ownership which is appropriate for many open space applications and ususlaly requires less public funds than outright acquistion.

Open space may be actively used land where the public has full access, land on which development or uses are prohibited and land that provides amenity to the development in which it is located. Acquisition is appropriate for trails and parks. Open space used for the benefit of development residents or that provide the character of the development are not suitable for acquisition.

Conservation Easements

In ordinary situations, there is little difference in cost between the value of fee simple acquisition and the acquisition of an easement that takes all development value. A typical use is where an equestrian development is proposed and would for the easement approach have internal trails to hook into the Town's system. The Town may want access through that development to link elements of the Town's trail system. Easements would provide limited public access and still retain open space.

A variation on the easement is what is known as a conservation easement. Conservation easements are useful where purchase of the easement would result in a large tax reduction to the landowner--an incentive to maintain a specific natural resource such as a hardwood hammock. One advantage of the conservation easement approach is that it can be tailored to individual properties on a case-by-case basis. It is possible for the City staff to design a property to protect visual, natural, and historic resources. A plan could be worked out to give the landowner the maximum development value consistent with the preservation of the resources. Because it is a mutual effort, where both parties can benefit through good design, the costs may be reduced very substantially, and the easement is a means of negotiating this sort of thing.

The Nature Conservancy located in Wachapretue, Virginia uses this technique. Libertyville Township, Illinois has also used this technique and even offers the landowners free land planning services.

Transferable Development Rights

The concept of transferring development rights (TDRs) is based on the fact that ownership of property is a bundle of ownership rights that can be separately bought and sold. The fee simple ownership of property includes all these rights. The rights that can be separated from the bundle are mineral rights, development rights, hunting rights, logging rights, and scenic easements to name but a few.

TDRs essentially can take three forms. In one form, the rights of a property owner, who may own several parcels, can be transferred from one parcel to another. As a result, parcels most appropriate for development can receive an increase in density by limiting the development potential on other parcels where resources should be protected. The transfer does not permit an increase in overall density, it simply allows the location of all development potential on one or more parcels in return for leaving one or more parcels development-free.

In the second form, by sale or other agreements, several owners

may agree to a density transfer. Landowners may sell the right to develop their property to another landowner who can then build at an increased density elsewhere. The difference between this second form of TDR and the first is that a receptor district, where the development rights can be used to increase density, is required. There needs to be an area that is permitted to have increased densities and is capable of absorbing all the available development, if the landowner is to have a reasonable expectation of selling the development rights to builders.

One of the most important aspects of this method is ensuring that there is really a market for the commodity. This form of TDR is, as is the first, a voluntary system. Here, the landowner is given the option of development at restrictive densities or selling development rights.

The third form of TDR is mandatory; it requires landowners in a protection area to transfer their development rights in order to realize any development value from their property. In this case, the zoning mandates either no development or a very low level of development. As is the case with the second alternative TDR, there needs to be a receptor district which accommodates the development. Unlike the voluntary system, there also needs to be a carefully constructed balance between sender and receptor districts. There must be a market that absolutely ensures that all development rights can be used.

A mandatory TDR system will fail if there is insufficient land to accept all of the transferred rights. Since there is nothing forcing a landowner to purchase these rights, there needs to be a significant oversupply of receptor district land in comparison to the total number of development rights to be transferred. The mandatory nature of this third form of TDRs causes the TDR system to require much more careful design than the other two forms.

In Davie, the issue will be what is to be protected. Because there is so much open land today, there will have to be a balance between land to be protected and a market area large enough to purchase all the available development rights. This may mean preserving only 50-70% of the open space if a mandatory system is used. And, while the voluntary system is not market-dependent for its legal workings, its ultimate performance in achieving the desired goal is sensitive to the market.

The major advantage of the voluntary TDR system is that it can promote the preservation of some properties in an area that is too large to be preserved with a mandatory system. The voluntary approach encourages the preservation of large areas, and it provides some leverage for conservation groups who could protect more land if they could market development rights.

An exception to the market limitations of normal TDR systems is a

comprehensive TDR system. At this time, however, the comprehensive TDR system is relatively untested. The system was originally proposed in Maryland during the early 1970's as a reform to the entire zoning system. TDRs were, and still are, considered to be a device by which the "windfalls" and "wipeouts" that characterize zoning decisions can be mitigated. The comprehensive TDR system goes farther to recognize that a large portion of the value of land is created by governmental investment--a fact noted by the U.S. Supreme Court in Penn-Central.

In a comprehensive TDR system, every property owner in the Town would be issued development rights. Each landowner would receive a share of the development potential of the Town projected for the next 20 to 30 years. The distribution of rights would be based on land holdings, and while Davie might have several sub-areas that could be used in the allocation process in order to recognize major differences in land value, they would be very coarse.

In a comprehensive TDR system, the actual land use pattern is separate and distinct from the zoning system. The development rights are fully transferable. A zoning change would not bring instant increases in land value, because one also needs to have development rights to actually build at any given density.

The advantage of a comprehensive TDR system is that it spreads the benefit of development to all landowners more evenly, and de-emphasizes the role of a zoning change in establishing land values. It provides a mechanism for protecting sensitive land by selling development rights. In terms of pure growth management, the cost of building in one location or another would more accurately reflect the value of public investment and the cost of improving the site, rather than the value of the zoning district.

Although this system has some very attractive features, the fact that it is somewhat radical and relatively untested creates a liability. In addition, the allocation process would be expensive and complicated. Many property owners may end up with fractional development rights. Depending on the percentage of fractional rights in the system, free market assembly of development rights may be difficult. On the other hand, the system should be periodically updated, either every five to ten years or when 20 to 25 percent of the development rights have been used; therefore, it does not have to be tightly constrained economically as in other mandatory TDR systems.

An important reason for considering TDRs is that the U.S. Supreme Court continues to hear taking issue cases. The Court has given some broad invitations to communities to include such devices as a safeguard against a "taking." In MacDonald, Sommer, and Frates v. Yolo County, the Court required proof that "any proffered com-

pensation is not just" as a precondition to establishing a taking. Thus, building compensatory devices or alternative choices into an ordinance makes good sense.

ISSUES PAPER

COMMUNITY CHARACTER

Introduction

What type of community is Davie and in what direction is it headed? Answers to these questions are two of the most critical aspects of the Town's planning. The Town's past planning policies have been directed at preserving the rural and open space qualities of the Town; likewise, their preservation is viewed as an essential element of this plan. The development pressures in southwestern Broward County will place tremendous stress on Davie's goals. If Davie is not to be submerged and lost as a unique part of the metropolitan area, then it needs new policies that better protect, preserve, and enhance its character.

The term "community character" covers a broad spectrum of concerns. First and foremost, community character is a visual concept; it is, however, more than just an aesthetic concern. It represents a comprehensive system of looking at the environment where land use, economic, social, life-style, and visual disciplines are integrated.

The community character system is based on the assumption that there are three basic types of communities: rural, suburban, and urban. There are different design rules for each, and they are directly related to land use, economic, social and lifestyle conditions. Many of these elements carry with them specific consequences that are unavoidable. The essential elements are interrelated, and it is not possible to mix and match the different character types without bringing all the elements into play. For years planners have looked at many of these elements as separate and unrelated. Broward County and its many conflicting land uses and other urban problems is typical of the results of artificial compartmentalization. Land use classes that pit suburban residential areas against encroaching urban uses are the typical result. This issues paper is intended to provide a system for evaluating Davie's existing character, assessing where it will go according to current policies, and then focusing on the role of open space in structuring Davie's ultimate character.

Davie

The Town of Davie is a rather unique community in Southeastern Florida. In an era of unprecedented, unfettered development, Davie has managed to retain much rural charm. Orange groves, farmland, and several important ridges are all concentrated in western Davie. These lands and areas developed in scattered one acre lots have

given Davie its reputation. The development pressure now poised on Davie's borders can destroy that character in five to ten years. Once gone, it cannot be retrieved. It is not too late to take significant steps to achieve the desired results.

Recognizing that Davie is but a small portion of Broward County, serious consideration should be given to the Town's role, both in relation to surrounding communities and the entire County, in formulating the Open Space Plan. Other than the Town's lower density noted in the Broward Land Use Plan, there has been little recognition that Davie is unique. The cities in Broward County are growing together into a vast sprawling complex where residents or visitors can only distinguish one from another by road signs or maps. Davie can provide a very different character. Twenty to thirty years ago, regional planners were seeking ways to provide green corridors, fingers, or belts to structure the character of metropolitan areas. Davie can do what those planners failed to do: provide green space not only for the benefit of Davie's residents but also for the benefit of the entire County.

Historically, the Town was built on the farmlands and citrus orchards established on drained wetlands. Many residents in the area lived on one acre or larger lots and were involved in equestrian activities or agriculture. Despite rather traditional suburban development on the east end of town, this rural-equestrian-open space concept has taken hold of Davie.

Community Character

There are four related components involved in describing community character. The first is a view of the large scale components of a community (such as type of land use and intensity of use) to determine the type of community. A second crucial factor is the community's scale. Both of these components view the community on a relatively "macro-scale" perspective. The third component is the relationship of people to buildings; this is the "micro-scale" end of the community character spectrum. A fourth aspect is the design of development and the degree to which it contributes to a cohesive community.

The theoretical elements of each component are described in this section as a prelude to the description of the community character policy elements of the Comprehensive Plan discussed later in this chapter.

The first perspective, type of community, is assessed using a view of community character based on the aesthetic and functional aspects of different communities. An objective system of analysis is applied to the existing land use pattern to determine the character that exists. The type of land uses, their density, and their distribution are measured. This type of visual character relates directly to the life-style that is expected and experienced by

most residents and visitors to the community.

The second perspective, community scale, also relates back to the type of life-style expected in a community. Community scale is basically a size issue. The dynamics of human life in a community change with scale just as does the visual nature of the community.

Micro-scale issues define the relationship between a person and a building or space. While this is also a size issue, its orientation to the individual rather than its relationship to community functions results in very different concerns. The impact of an individual building is felt at this level.

The impact of the design of a building or group of buildings on the community is a subjective issue. Architectural qualities such as harmony, contrast, texture, and roof-lines are all vitally important, but represent a difficult task in terms of achieving a community consensus as to what is good.

Community Character Type

There are three basic types of community character: urban, suburban, and rural. These three types of character can be further divided. For Davie, the urban category is subdivided into urban and auto-urban; the suburban category is subdivided into suburban and suburban estate; and the rural category contains countryside and rural subtypes. The following list describes each of these subtypes.

1. **Urban**

   The urban community character type most closely resembles the classic urban environment where buildings define and enclose spaces. The spaces are architectural and often function beautifully with little or no vegetation. The ground is likely to be paved. The urban environment is designed to bring people into close contact and to maximize personal interaction. Congestion is desirable in commercial areas, in that it provides the needed interactions for successful commerce. Privacy is typically obtained in the interior spaces formed by small, walled courtyards or fenced yards. The skyline is architectural and is defined by the roof-lines of the surrounding buildings. There are not any good examples of nonresidential urban areas in Davie, but Las Olas Boulevard in Ft. Lauderdale is a good example as is the central area of Boca Raton. The highrise coastal condominiums are urban residential areas.

2. **Auto-urban**

   Auto-urban is a category that has developed where urban uses are designed to be accessed by automobile. They are, in fact,

urban places transferred to the suburban fringe of cities. The impact of roads and parking areas for automobiles are the driving forces that determine the character of this type of environment. While they are clearly urban in use, economic function and scale, the dominance of the automobile has left such areas with little or no attractive features. Missing are the well-defined enclosures and human scale of classical urban design. The degree of enclosure cannot focus and direct human activities as is the case in an urban environment. However, the degree of enclosure is high enough so that feelings of suburban spaciousness, lack of congestion, and privacy are impossible. The buildings are widely spaced, because the parking and circulation take up more land than the buildings, which tends to destroy any sense of place. These conditions are further aggravated by parking lots and roadways in the spaces between buildings.

The retail, office and industrial uses all function in this type of environment. The intensities, while they are often lower than in the urban category, are not limited to those intensities except by land economics. The need to have high levels of interaction and move the needed employees and shoppers in and out of such areas means that congestion is almost unavoidable. Strip commercial areas along Davie Road, Griffin and University Drive are all examples of auto-urban character. The much more intensive office development at University Drive south of Griffin is also auto-urban in character but exhibits a higher density.

3. Suburban

This type of character is vastly different from urban types of character. Suburban communities have sufficient open space between or within developments to provide needed contrast and balance to the buildings. The spaces are more accurately open spaces because they have lost their architectural quality; instead, the open spaces present a garden-type or natural appearance. Historically, the open spaces that provided suburbs with their character were simply vacant lands that had not yet been developed. For this reason, they are referred to as "borrowed space." Natural open spaces or views are borrowed from adjoining land. Unfortunately, as most suburbs develop, they move from a suburban character to an urban character, because these spaces are lost to development.

In suburban areas, human interaction is generally lowered from the intense commercial level to the social level, and individual privacy is greatly enhanced. While total privacy does not occur on the suburban lot, a substantial sense of privacy is maintained. Changes in lifestyle and interaction levels have profound implications for land use and economics. The level of interaction needed for commercial uses cannot be

sustained on a large scale. Either the commercial uses must be spread out, or the commercial uses must be surrounded by open space. The change in density of these uses is such that only more essential services to these areas will locate there, and economically the land is not as valuable as it is in urban areas for these uses.

There is a balance between the man-made and open space elements of the community; yet, in suburban areas, no matter how much care is taken in design, the visual resources of the community will not be preserved. Buildings are simply too close together.

The most recent one acre subdivisions in Davie are suburban, because large homes with three car garages have been built on open land. The size of the homes and type of landscaping used cause little space to be left between homes--there is privacy but not the near isolation and preservation of abundant natural features that are required in order for the development to fit into the rural category. Older areas such as Hiatus Isles also have a similar character. Dense developments, such as the Estates of Alpine Woods, are able to provide a feeling of suburban character, because they borrow open space from the surrounding vacant land.

4. Suburban Estate

Suburban Estate development represents the lowest intensity end of the suburban portion of the character scale. Here, individual properties are large enough and landscaped sufficiently to provide an extensive open feeling, and there can be less reliance on borrowed land to promote this open feeling. In general, open spaces have a slight dominance over man-made components. The lots are large enough so that privacy is secured without resorting to fences. The ability to borrow vast areas of space from neighboring agricultural areas makes residential lots that are nominally suburban in scale enjoy the benefits of estate or even rural living. This is true only because these lots take advantage of enormous and unrestricted open space nearby--should that land ever be developed, these residential areas would revert to their true suburban character.

Most of the old one acre developments in Davie presently have a potential to be suburban estate in character. An area such as Southwest 61st Avenue south of Griffin has this character because of the combination of modest homes, one acre lots and large trees. But, without the essential landscaping features, large homes in open areas can end up being suburban in character. All too often, homeowners have planted a few scattered trees in their lawn then concentrated on foundation plantings. Developments with this type of landscaping must rely on

surrounding open space in order to provide an estate character. Once this open space is developed, however, the character will revert to suburban. Unfortunately, most of the areas from which such developments borrow open space are also being developed. In order to prevent potential changes in character, developments should not be allowed to depend on heavy borrowing of open space.

5. Countryside

Space dominates rural character types; in the countryside character type, the environment is a landscape. Countryside is the only one of the rural characters that contains exurban development to any degree. The ability to accommodate any significant development without destroying the landscape qualities of this district is clearly a difficult balancing task. In open land, the buildings are highly visible and very low intensities are needed to preserve a countryside character.

Most of the land in a countryside area must either remain in agriculture or continue in a natural state. Since a countryside area must evoke the qualities of a landscape, it can, and should, be considered a composition. The clearing of land, and the creation of edges, spaces, or screens to provide interest and variety, are essential elements of this composition. Residential development must occur at the densities associated with countryside character; this development must enhance the character of the area through sensitive site design that results in the creation of a balanced composition.

For the most part, this type of character is transitory in nature. Most of western Davie presently has a countryside character, but it is only because most of it is undeveloped. If the land develops as presently zoned, this pattern will eventually result in a suburban character. Thus, preserving this type of character requires very significant action on the part of Davie.

6. Rural

This character type is just what its name implies--the character common to agricultural or natural areas. In a rural community, development is limited to the rural ecology: barns, homes, and other buildings needed to produce agricultural products. There are no places in Davie where this type of character has not been disturbed by some form of suburban intrusion over a large area. It is too late to attempt to retain this sort of character except as an isolated example of rural character.

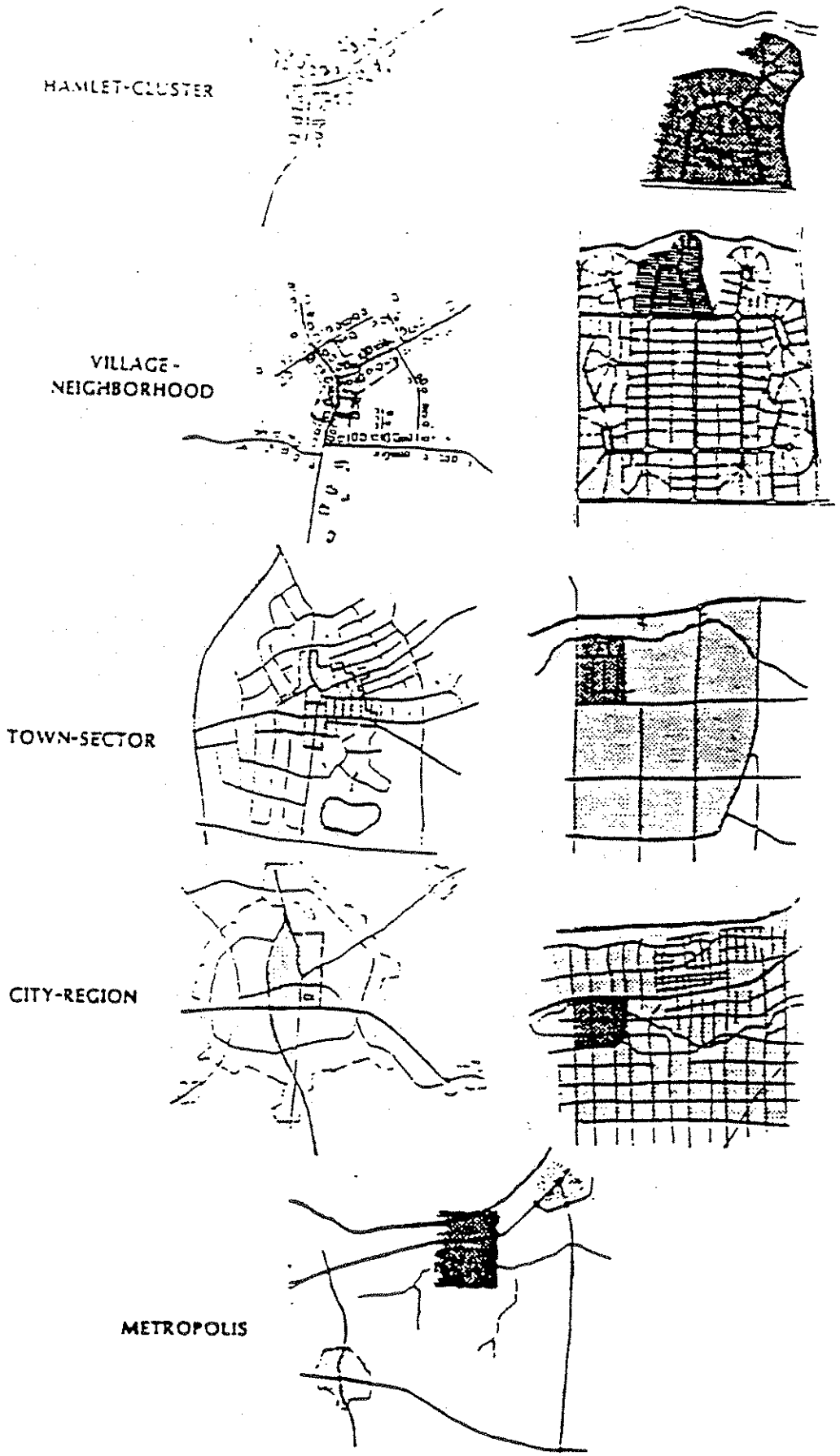
Community Scale

Human communities exist on different scales. There are places where the scale of settlement is very small and the human element is significant--allowing one to quickly traverse the area on foot in a minute or two. At the other end of the spectrum are ultra-large metropolitan places where the individual is minute in comparison to the whole, and where an hour or more of auto travel may be needed to traverse the community.

Classifying areas by scale is an important element in defining community character. Although the classes carry titles that relate to free-standing communities, the larger units are often made up of smaller units. The major points along the community character scale are illustrated in Figure 1 and discussed in the text that follows.

Figure 1

COMMUNITY SCALE



1. Cluster or Hamlet

A cluster or hamlet is a very small grouping of buildings ranging from three or four, up to perhaps as many as sixty individual structures. While the hamlet clearly refers to a totally free-standing community, the cluster is the building block for larger community units. The cluster may be any of the urban or suburban character types with the possibility of neighboring areas being of a different character. The hamlet is likely to be a small node of urban character set in a rural landscape. It represents an interesting element of design for the fringes of metropolitan areas, where intense clustering may achieve a more rural character than lower density conventional subdivisions. In each case, no more than two minutes of normal walking should be needed to traverse these small-scaled areas, and the scale of the buildings will have to reflect the character of the area. The cluster is almost inevitably residential. A hamlet is likely to be the commercial focus of a larger area to which it provides services.

2. Neighborhood or Village

A neighborhood or village is a real social unit capable of supporting non-residential uses. Each is large enough to sustain substantial social and economic interaction, and each has a number of small social units functioning within its boundaries. Walking through a neighborhood or village might take as long as five or ten minutes. Both of these types of areas are large enough to support nonresidential activities which serve only the immediate area. Like the hamlet and cluster, the village and neighborhood are distinguished by whether they occur as an isolated settlement or as a component of a larger settlement area. The village, like the hamlet, represents an interesting design element for use in suburban areas to provide greater areas of open space and a more rural character. Seaside, in Walton County, Florida represents the first of a number of efforts to use this concept.

3. Town or Suburb

A town or suburb is composed of groups of neighborhoods and is large enough to support a considerable diversity of non-residential activity. In a metropolitan setting, a town needs to do things to distinguish itself from its neighbors. Otherwise, it will become just another community within the larger suburban matrix. This represents a major problem in Davie, since the communities in Broward County often have a street as a common boundary.

4. City or Region

The city or region is a large community. Davie must find a role for itself in the metro Broward area.

5. Metropolis

The metropolis represents the far end of the community size scale. In south Florida, it extends from Miami to West Palm Beach and from the Atlantic Ocean to the Everglades.

There are two types of problems associated community scale. The first, the unwitting destruction of a community's scale, does not affect Davie, since its boundaries are set. The second problem is simply recognizing the structure of each element in a community, so that each of the units has an identity or character that gives its residents a feeling of being something other than a street in the South Florida megapolis. The preservation of the character of each of these units is a critical design element. While Davie has successfully identified itself as a community,it still needs to do so at the neighborhood or cluster level.

Furthermore, like people, distinct communities must have a separation between them. It is too late to preserve Davie as a free-standing community; it is and will continue to be a part of the suburban fabric of Broward County.

There is a major design opportunity at the small scale of hamlets and villages. They can be successfully used both to create a special sense of place and identity and to alter the character of the area at a give density. Decisions remain to be made regarding this design option that are crucial to the ultimate character of Davie. These decisions will not be easy, because the available techniques for preserving community scale may be controversial. The amount of controversy depends upon how determined a community is in preserving its scale.

There is a strong interaction between the type of community character and the scale aspects of a community. A factor known as the "paradox of clustering" is critically important. Clustering creates space; thus, the dense hamlet or village is, in part, dependent upon the space around it for its character. That space permits a community which contains significant urban areas to retain the image of a small rural community. In other words, the rural character of a hamlet is tied more closely to surrounding vacant land and its small size than it is to the intensity of use within its borders.

It is too late to isolate or surround Davie with open space. However, the largely countryside character of western Davie can either be suburbanized or preserved. The use of clustering and the paradox of clustering to greatly influence the total open space

preserved and, thus, the ultimate character of Davie, must be considered.

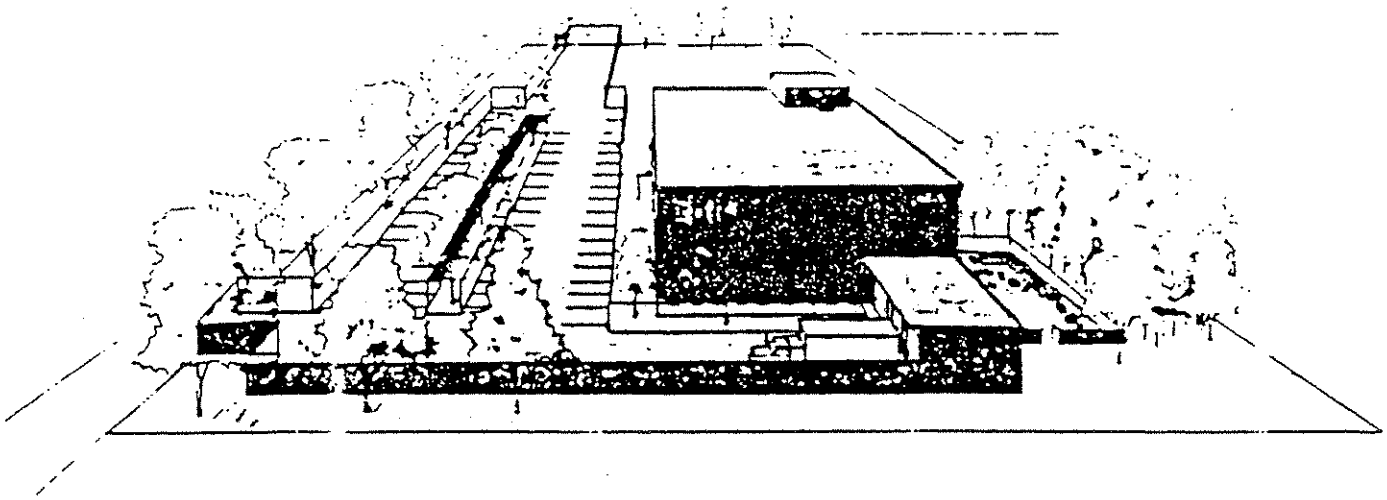
Micro-Scale

The micro-scale concept deals with how a building or space relates both to its inhabitants and to other buildings or spaces. Scale, by its very nature, is subject to quantification, at least on a relative basis. There are several methods for measuring scale. Some relate the building or space to human beings, others relate buildings or spaces to each other, and still others relate the building to its land.

Some of these concepts apply primarily to urban design. One of these is a scale measure that relates buildings to the human being and buildings to each other. A measure known as D/H (distance/height) is used to relate spaces to the surrounding buildings.

The critical issue in rural and suburban environments is the relationship between buildings and the land on which they sit. Basically, building volume ratio (BVR) is the volume of buildings divided by the area of the site. The building volume ratio measures the total built environment and accounts for the volumes of parking areas, loading areas, and accessory structures as well as the volume of the building. Its use is illustrated in Figure 2.

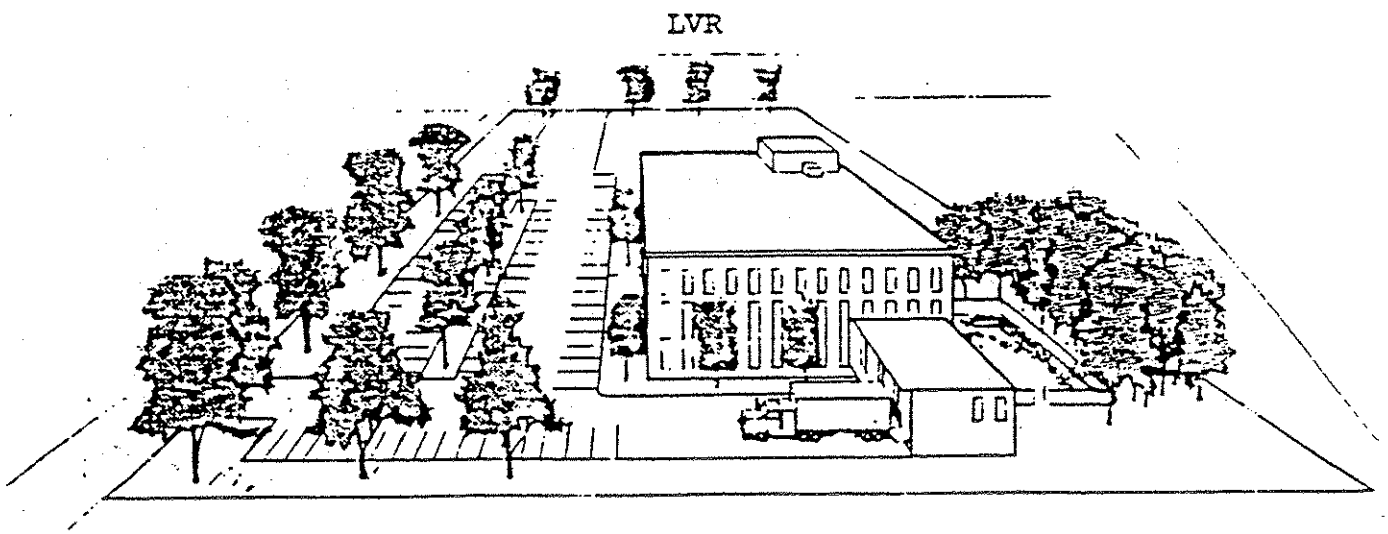
Figure 2



BUILDING VOLUME RATIO (BVR)

Building volume ratios should be used in conjunction with landscape volume ratios. Especially in Davie, this concept is extremely important to the micro-scale concept. Landscape volume ratio (LVR) is basically the landscape volume divided by the site area. It provides a method of measuring the effect of landscaping bulk, in much the same way building volume ratio measures the bulk of the built environment, by accounting for the area occupied by landscaping, its density, and the height of the plant material. The area and height of new plantings are based on the estimated size of plant material five years after installation. A five year grow-in period is used to better assess the overall impact of newly planted landscape materials. This is illustrated in Figure 3.

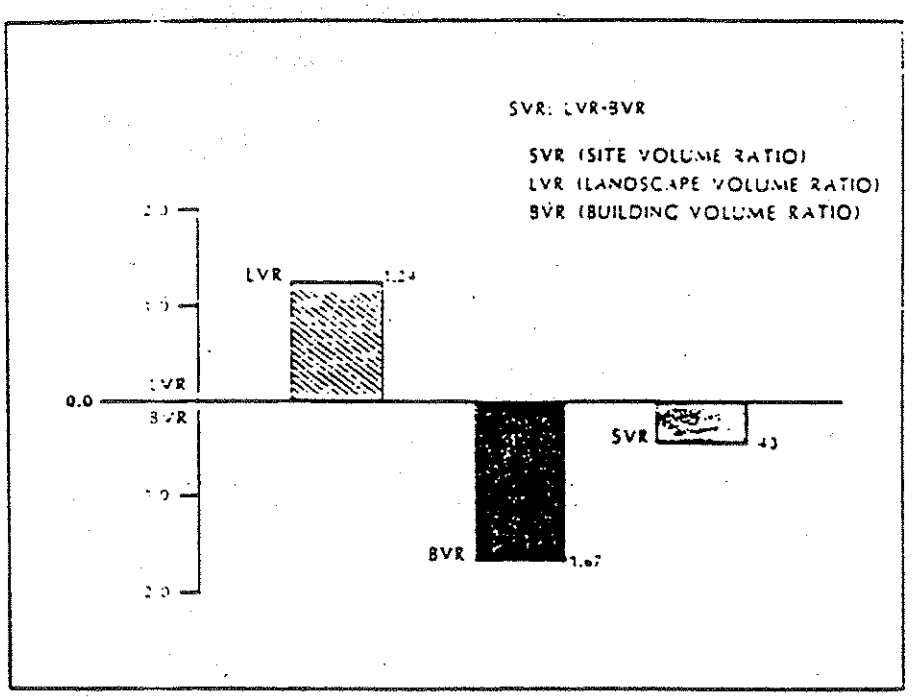
Figure 3



LANDSCAPE VOLUME RATIO (LVR)

The site volume ratio (SVR) is a site summation that describes the relationship between building volume ratio and landscape volume ratio. The site volume ratio is calculated by subtracting the building volume ratio from the landscape volume ratio. Site volume ratios can be either positive, meaning the volume of landscape is greater than the building volume, or negative, meaning the building volume is the larger of the two volumes. These values can be conveniently displayed on a chart as shown in Figure 4.

Figure 4



SITE VOLUME RATIO (SVR)

Another measure devised for micro-scale analysis is one that compares the volume occupied by a human to that of the buildings or spaces involved. The volume occupied by a human corresponds to Leonardo DaVinci's well-used illustration and results in a volume of 216 cubic feet (see Figure 5). This volume can be used as a measure of the mass or volume of structures in terms of their relation to human scale and in terms of a specific, quantifiable means of measuring a building's scale in relation to the others in the neighborhood. Thus, if a 1,000 square foot home has a volume of 12,000 cubic feet (20' by 50' by 12' high), it then has a value of 55.5 scale units (12,000 cubic feet divided by 216 cubic feet) when compared to our human-based volume.

Figure 5

Human-based Volume

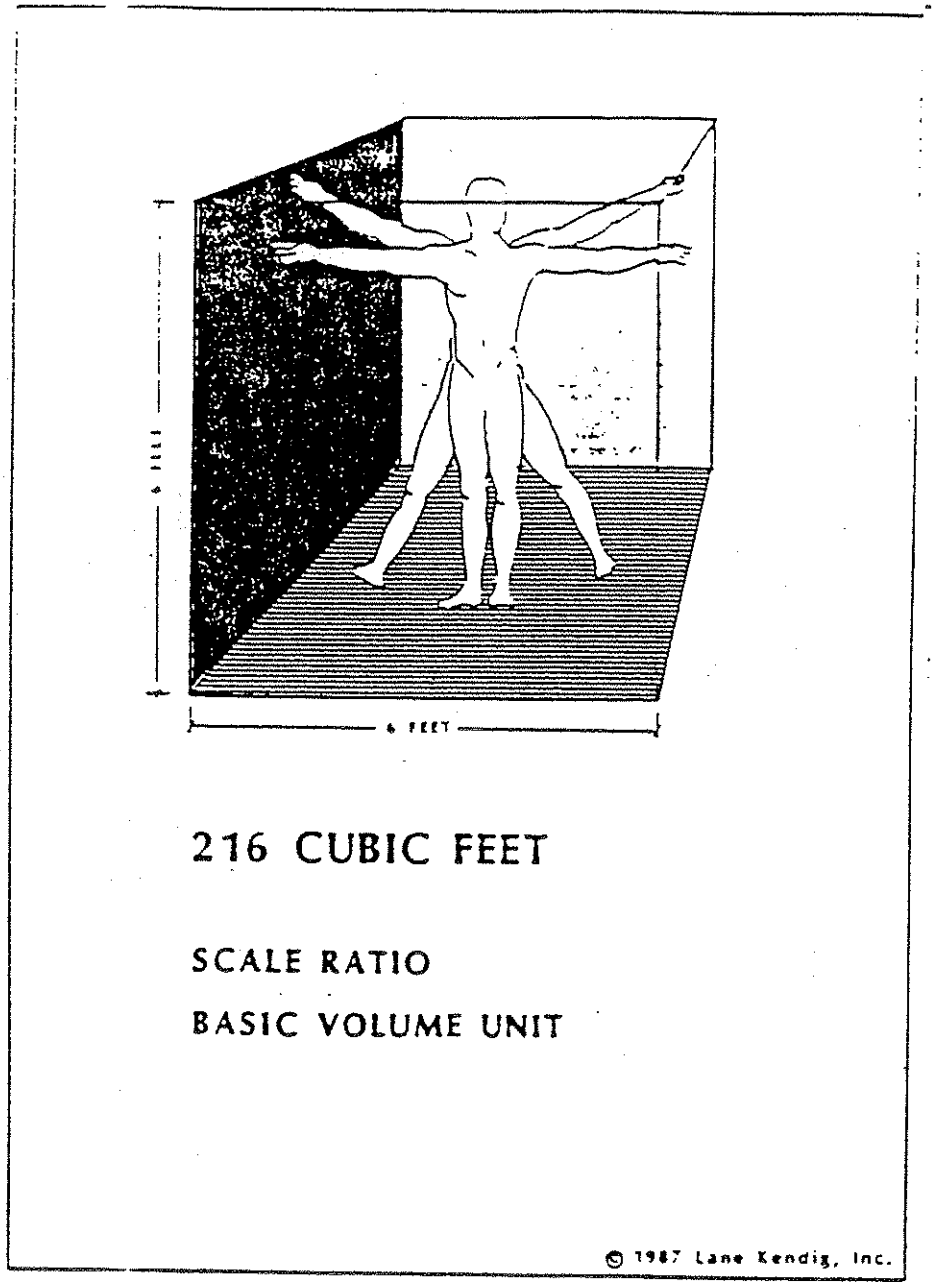
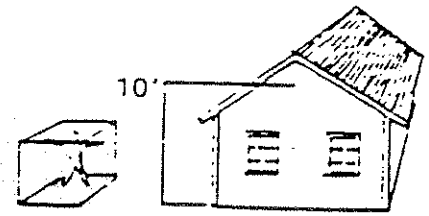


Figure 6, on the following page, depicts a number of structures as examples of what different human volume values might look like. The critical use of this tool is not necessarily to set a specific maximum or minimum building mass for the community, but rather to provide a technique for determining whether or not the proposed building fits into the existing character in terms of its micro-scale.

Figure 6

SCALE RATIO

20

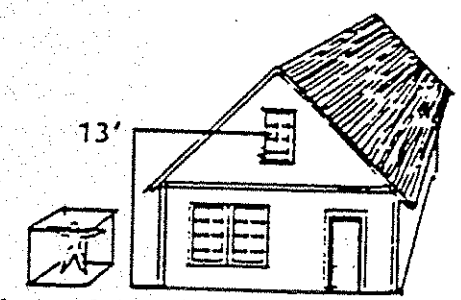


432 sq.ft.

4,320 cu.ft.

216 cu.ft.

52

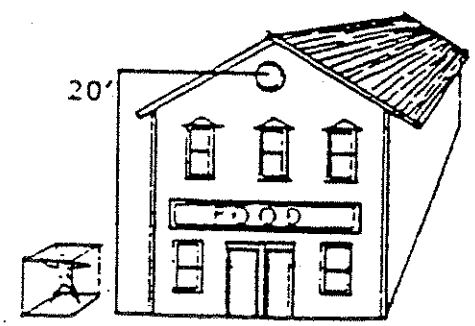


864 sq.ft.

11,232 cu.ft.

216 cu.ft.

111

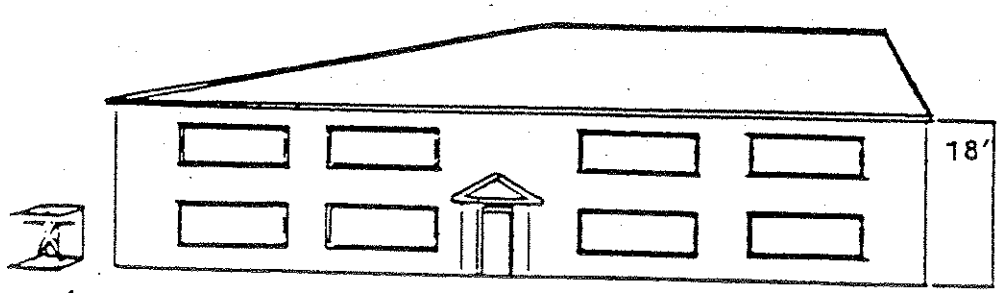


216 cu.ft.

1,200 sq.ft.

24,000 cu.ft.

250



216 cu.ft.

3,000 sq.ft.

54,000 cu.ft.

© 1987 Lane Kendig, I c.

Out-of-character building scale is becoming a problem in Davie. The scale of newer residential structures is much greater than the older buildings. The old one story ranches must now confront two story buildings. The site volume ratios of some of the newer buildings indicate that sites are being overwhelmed by buildings. Although barns and farm complexes have very large structures, they tend to be set on as much as 100 acres; therefore, they have low site volume ratios. The impact of large farm buildings is further softened, because farm structures are considered as integral parts of the rural environment rather than as foreign objects. A subdivision in a rural environment, in many cases, does seem quite foreign.

In suburban environments, buildings with large, out-of-scale masses alter the character of a neighborhood. The buildings may not increase the density of the area, and they may even have the same architectural style used in the area, but they will still be out-of-context and foreign. As buildings get larger, they begin to create a sense of enclosure; this is an urban attribute that is destructive to suburban and rural characters.

A building's architecture can also have an effect on scale. Two-story buildings with steeply pitched roofs beginning at the second floor eaves emphasize the size of the structure. Other architectural details can help mask the size of structures. Thus, mass itself is a concern, as is also architectural style.

In general, a community may have occasional buildings that are out-of-scale with the remainder of the community, but they should be buildings of importance to the general public so that their difference has a symbolic meaning.

Design

The design of individual structures can be divided into a whole range of perspectives. For example, the degree of contrast between buildings can range from no contrast (i.e., monotony) to total contrast (i.e., discord). Although harmony is a goal, individual buildings within a neighborhood should have enough contrast to ensure interest, but dramatic contrast should be limited to a building that has a significantly different function. A school or church in a residential area could contrast sharply, but residential units or multifamily structures should not. A Town Hall or a post office could contrast with downtown commercial uses, but the degree of contrast among commercial structures should be kept within limits.

Contrast can occur on a number of different levels such as color, scale, orientation, signs, landscape, texture, materials, and architectural style. Yet, there also needs to be a number of common threads in order to make a community design work. Davie's

western theme must be protected and enhanced. One building that contrasts too sharply can destroy the appearance of a whole street section. Regulations need to provide for the review of projects to ensure that the character of an area is maintained or improved.

Attention must be given to the design details that contribute to Davie's character. Architectural elements can create problems if they are ignored. Elements such as street furniture, lighting, and signs, are all critical to maintaining a community's character. While these elements may be viewed as being frills, they are essential ingredients in the creation of quality urban environments.

Vegetation is also important. While vegetation should not be ignored in urban town environments, it becomes increasingly important in small towns and villages. In commercial areas, trees can be used as decoration, or to focus attention on particular aspects of a space, or to provide shade. In residential areas, vegetation is a critical humanizing element.

Davie's Character

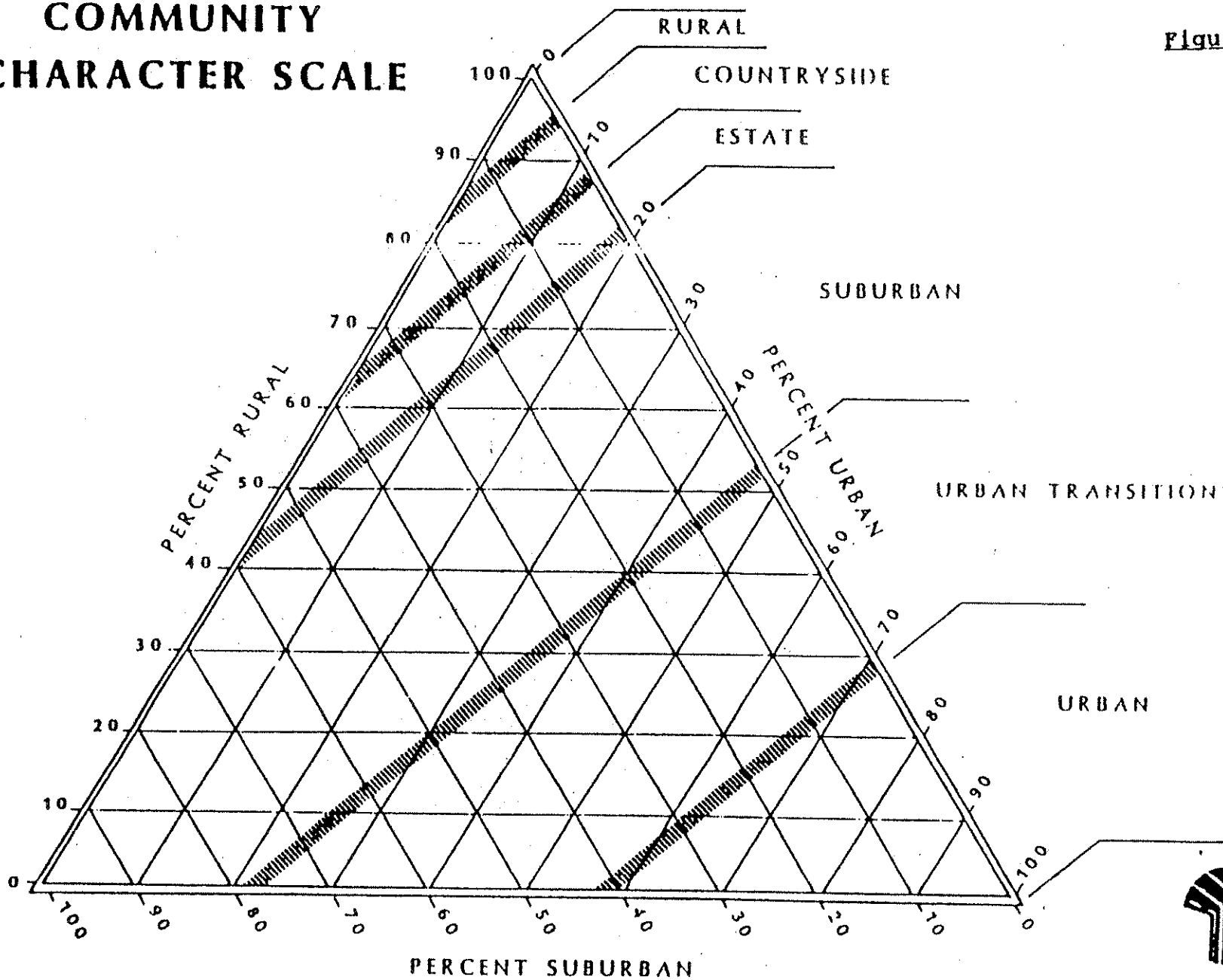
The Community Character Scale is an objective means of illustrating many of the points that have been made earlier about the character of Davie. The Community Character Scale is a graph upon which the percentages of three different components can be plotted, as shown in Figure 7. Each corner of the diagram represents the point at which the area is all a single character. The scales along each side of the triangle permit easy plotting of the percentage of any one of the three types of character. The six types of community character selected for Davie divide the triangle into six character areas.

In order to use the community character scale, the percentage of an area that is urban, suburban, and rural must be known. Figure 8 depicts a hypothetical area that is 65 percent rural, 25 percent suburban, and 10 percent urban.

The community character scale is useful both to plot existing character and to predict possible future character. Since in most instances, rural is assumed to be vacant, developable land, all possible futures lie below the existing character point as shown in Figure 9. If all future development is suburban, then the future proceeds along a line parallel to the left-hand side of the community character scale. Urban development proceeds parallel to the right-hand side of the triangle. Any land to remain rural would create a limit to possible changes in character.

COMMUNITY CHARACTER SCALE

Figure 7



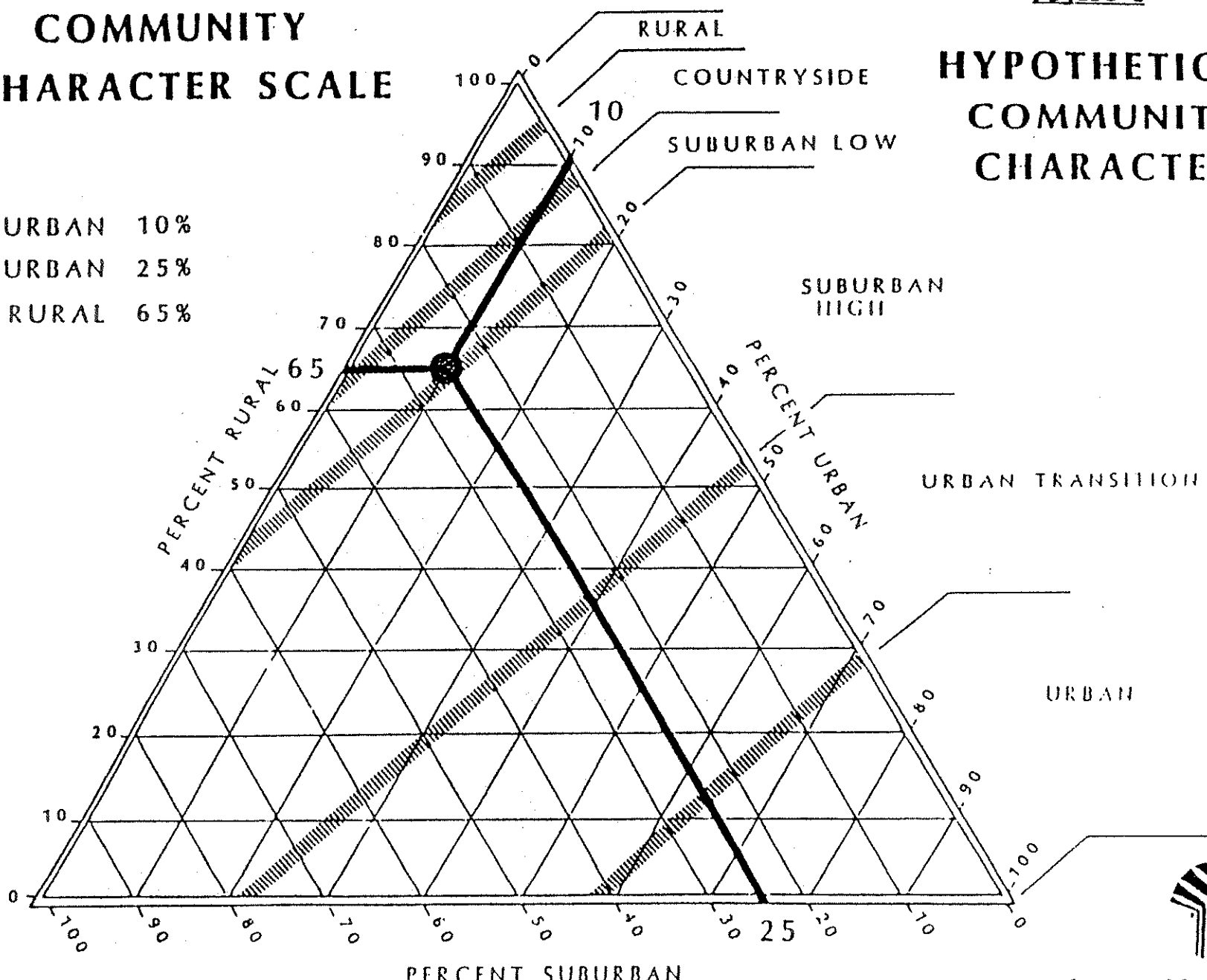
© 1987 Lane Kendig, inc
Performance Concepts in Planning

Figure 8

COMMUNITY CHARACTER SCALE

HYPOTHETICAL COMMUNITY CHARACTER

URBAN 10%
SUBURBAN 25%
RURAL 65%

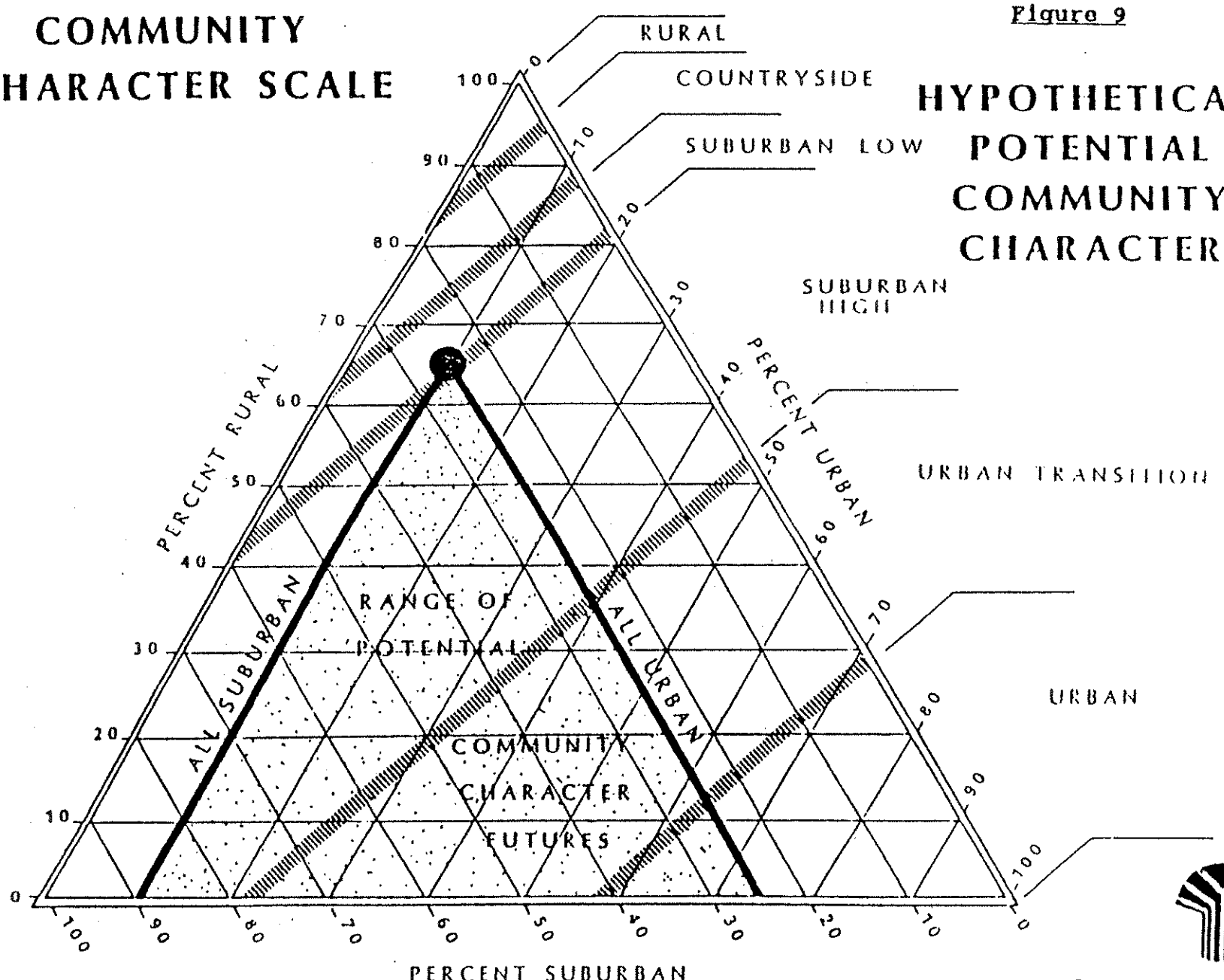


© 1987 Lane Kendig, inc

Figure 9

COMMUNITY CHARACTER SCALE

HYPOTHETICAL POTENTIAL COMMUNITY CHARACTER



© 1987 Lane Kendig, inc
Performance Concepts in Planning

CONSULTANTS REPORT TO NATIONAL PLANNING PARTNERSHIP FOR THE CITY OF DAVIE, BROWARD COUNTY, FLORIDA, OPEN SPACE COMMITTEE

ARCHAEOLOGICAL: CULTURAL HISTORICAL SECTION

INTRODUCTION

The City of Davie possesses a number of distinctive and unique prehistoric and historic period landmarks. Indeed, within the corporate boundaries of this municipality lies some of the most historically significant and relatively intact archaeological sites presently known in South Florida.

Given its' geological history and physiographic features, archaeological sites located in Davie are found (to date) solely in ecological zones characterized by elevations considerably higher than surrounding landforms. They are respectively the prominent, marine formed remnant sand dune or barrier reef that runs through portions of southwest Davie, known as Pine Island including a western extension (known in recent times as Spooners Ridge). This ridge with elevations up to 29 feet above sea level formed a series of upland islands. The second location where archaeological sites have been found are in small tree hammocks scattered throughout Davie. These too were formerly islands in a general wetland ecosystem which preceded major land reclamation projects in the late 1800"s.

APPENDIX IV - 3C

While an intensive, systematic survey and controlled excavations were beyond the scope of this project, sites presently known and recorded with the State of Florida's Division of Archives attest to archaeological sites on Pine Island, its western extensions and small hardwood tree hammocks within the corporate boundaries of Davie. It is most likely that more archaeological sites will be found in these ecologically distinct zones should intensive surveys be conducted.

By way of a brief background, M.R. Harrington first brought our attention to the historical significance of Pine Island with test excavations in 1909 on "Long Key". Three decades later, W. C. Orchard (1938) of Broward County conducted excavations. While the pioneer efforts of these men are recognized, no reliable information to pinpoint the location of these sites exits. That is, excavations may have been on Pine Island or on a more westerly island hammock. It is primarily since 1974, through the work of the archaeologist Robert Carr, that most of the archaeological sites on Pine Island are known (1986). The Broward County Archaeological Society has also contributed to this data base with several preliminary excavations of other sites in the city of Davie.

The historic period, primarily of Pine Island, has been researched by Patsy West (1983) a longtime friend and student of the Seminoles and Cooper Kirk, (1977) historian. Both are members of the Broward County Historical Commission and have documented

the history of this area. Indeed, this is truly a most important area historically. To those interested in the early history of southeastern Florida and Broward County specifically, Pine Island figured prominently in the Second Seminole Indian Wars (1835-1842) as well as providing refuge for the Seminole, preceding and following the military encounters in 1838 and 1841.

To those interested in the prehistory of southeast Florida, the cultural subarea was defined as the Tequesta by Goggin (1947) and more recently redefined and called the Everglades culture area (Carr and Beriault: 1984). At the time of Spanish contact, well adapted hunting, fishing and gathering groups called the Tequesta lived and camped on these island hammocks and elsewhere in the Everglades.

One reason that the archaeological sites in the area are so significant is that the cultural history spans several thousand years. This area is unique in that both the Seminole Indians recent past as well as occupations going into the prehistoric periods, perhaps as early as the Middle Archaic Period, (3000 B.C.) can be found in close proximity. The Peace Camp site (8Bd00052) in western Davie revealed an Archaic level dated 3050 B.P. +/-140 (Mowers and Williams: 1972). From its historical and archaeological importance few places in Florida compare. The temporal and cultural periods that are present suggesting its significance are as follows:

Occupations of the Recent Historic Period.

20th Century: Former Seminole Reservation; One quarter quarter-section of Section 20, T. 50 S., R 41 E. was reserved for Seminole land by Executive Order June 28, 1911. Long key had two quarter quarter-sections reserved. It was as recent as 1934, that the Federal Exchange Act mandated that lands included in the earlier Executive Order of 1911 be exchanged for what is now the northern perimeter of the Dania Reservation. Several first hand accounts verify Seminole Villages on Pine Island in 1898. Many of these household heads surnames can be linked to prominent families among the Seminole and Mikasoukee today. West comments that " Pine Island is the largest and most prominent Florida Seminole site in existence in southeast Florida" (Carr: 1986, 31).

Occupations of the Early Historic Period.

Seminole Period: Students of U.S military history have long been intrigued by the Seminole Wars. Pine Island was the final safe haven for retreating Seminole and Mikasuki under the leadership of legendary Apeika (Sam Jones), who traversed the Everglades from the northern shores of Lake Okeechobee. The U.S. Army engagment and ultimate route of Apeika in March , 1838 with 600 troops penetrating Pine Island from Fort Lauderdale is recounted by Kirk (1977). While the precise location of this skirmish has not been established, it is likely that it took place on the northern end of Pine Island (Carr, 1986).

Sites with Seminole Period components on Pine Island.

Site No.	Name	Condition of Preservation
8Bd00096	(Pine Island 3),	
8Bd01112	(Pine Island Landing),	
8Bd01114	(Pine Island Ridge),	Unknown
8Bd01115	(Charlie Willeys Island),	Well Preserved
8Bd01119	(Ranch Ridge) ,	Good to Excellent
8Bd00098	(Pine Island Seminole Village).	

Historic/Prehistoric Period: Tequesta, Glades and Archaic Cultures.

Known archaeological sites in the city of Davie cover an extremely long period of time ranging from the historic Tequesta dated from Glades IIIc Period (A.D. 1513 - A.D. 1700) through Glades I and II Periods, beginning as early as 500 B.C. As previously noted , the earlier Archaic Period is also present in this area. Furthermore, some of the known sites are relatively undisturbed and provide excellent examples of adaptation by the original inhabitants to a unique environmental niche of south Florida over considerable time. While most prehistoric sites are on Pine Island, habitation and camp sites are found elsewhere within the corporate boundaries.

Sites with the Historic Tequesta and Prehistoric Glades Cultures/

Site No.	Name	Condition of Preservation
8Bd00095	(Pine Island 2)	Minimally disturbed (10%)
8Bd00096	(Pine Island 3)	
8Bd01113	(East Midden)	Minimally disturbed
8Bd01118	(Low Tree Midden)	Fair to Good
8Bd01119	(Ranch Ridge)	Excellent
8Bd01114	(Pine Island Ridge)	Unknown
8Bd01117	(West Ridge)	"Probably among best preserved sites in Broward County" Carr.
8Bd01116	(Hamlet Midden)	Poor condition
8Bd00097	(Pine Island #4) (In Tree Top Park)	Disturbed

<u>Sites Outside of Pine Island Ridge/ Tree Island Hammocks:</u>

8Bd00108	(Spooner's Ridge)	Southern portion undisturbed
8Bd00100	(Large Oak Site)	Disturbed with intact components
8Bd00076	(Chaplin Nursery Site)	Badly disturbed
8Bd00052	(Peace Camp)	Disturbed, extent unknown

Summary of Archaeological Site Information:

A total of twelve (12) archaeological sites have been recorded for Pine Island. On the basis of limited tests and surveys six (6) sites have both Seminole and prehistoric period components. Seven (7) prehistoric midden sites cover a wide time range. Four (4) additional sites are located on ridges to the west of Pine Island ridge and on small hardwood tree hammocks. These are primarily prehistoric, one possessing an Archaic Period component (8Bd00052).

Sites vary in terms of the degree of disturbance but many are well preserved middens showing only partial damage.

Cultural Resource Management Recommendations:

1. The greatest priority should be given to acquiring Pine Island Ridge in order to preserve as green space a unique portion of south Florida's culture history. No other area in South Florida is blessed with both historic and prehistoric sites so undisturbed covering such a broad range of Florida's past. The Pine Island ridge could provide a unique setting, complete with nature trails and historical signs documenting the numerous sites and events while development is confined to areas adjacent to but off the ridge. From the standpoint of national, state, county and community history the historical significance of the entire ridge is considerable. Efforts should be made to incorporate ex-

Seminole Indian occupation as well as military encounters. Artifacts recovered from the Seminole sites and prehistoric period sites should be displayed to provide a thoughtful and educational experience for visitors. I am confident it would be a great source of pride for all residents of Davie and especially for the many Seminole residing in south Florida.

2. The western extension of the ridge, Spooner Ridge and west beyond Flamingo Rd. is also a high probability area for archaeological sites. A systematic archaeological survey should be conducted before further development takes place. Known sites, such as Spooners Ridge site and Chaplin Nursery sites should be assessed for additional disturbance since initially recorded. In the event that additional sites are encountered, mitigation plans should be implemented to preserve them.

3. Scattered Hardwood Tree Hammocks: There is a high probability that more sites will be found within hardwood tree hammocks scattered throughout the city. These sites would also form a unique place in the culture history of south Florida due to their environmental setting. It is recommended that they be subjected to archaeological survey and monitoring prior to any development. One site , 8Bd00052 (Peace Camp), is important and efforts should be made to preserve it. This is due in no small part to it being one of the few Archaic Period sites in Broward County. The Large

Oak site (8BdOO100) should also be studied further. Small park areas would be consistent with preservation goals in these situations.

The above conclusions are similar to those offered by Robert Carr for Pine Island (1986). Suggestions for a partial preservation plan is less desireable but in the event that total preservatio of Pine Island ridge would not prove feasible, the following is suggested. Areas were ranked as to their archaeological and historical significance. The extent of site damage was also considered.

1. The area in which sites 8BdO1113, 8BdO1115, 8BdO1117, 8BdO1119 are located were given the highest priority.
2. Sites 8BdO1114, 8BdO1118 and 8BdO1116 and the immediate vicinity should be subjected to scientific excavations prior to any development taking place. On site monitoring is also recommended.
3. A systematic survey of the Pine Island ridge outside of Section 20 (where Robert Carr restricted his survey). This should be followed by on site monitoring if development projects are initiated.

Comments Regarding Methodoloy On Which This Report Was Based:

Florida State Archaeological Site Files were examined for known and recorded sites in Davie corporate limits. Historical sources in the FAU library were also examined. This was followed by a meeting with Robert Carr in Miami. Both infrared and low altitude aerial photographs were used to identify sites and key areas for this study. Two days were spent in the field establishing "ground truth" of our analysis. Special attention was given to the present condition of each site as compared to photographs taken April, 1987. Following this all recorded sites were plotted on the low altitude section maps.

Report Prepared By: Wm. Jerald Kennedy, Ph. D.

Consultant, Society of Professional Archaeologists

Date: December 14, 1988

BOTANICAL ANALYSIS OF THE TOWN OF DAVIE
BROWARD COUNTY, FLORIDA

The open spaces of the Town of Davie have been inventoried with respect to their vegetation. Each open space, three acres or greater, was examined and categorized (if applicable) as to plant community, major plant species, previous treatment and use.

Most of the dry land within the corporate limits was created when the general area was drained in the first half of this century. Because of this, most of the present vegetation is not indemic except on the centrally located elevated Ridge area (Pine Island) and on the eastern most located wetland along State Road 84.

Below are the Identification Codes and their explanations that are used in the computerized Open Space Inventorization.

OPEN SPACE CODING
(See Separate Species List For Ridge)

ID Code	Name
Ap	Australian Pine
Bp	Brazilian Pepper
Bw	Borrow Pit
Cb Pm	Cabbage Palm
Cm	Cemetary
Co	Cocoplum
Cr	Citrus
Ct	Cattail
Cy	Cypress
Da Ho	Dahoon Holly
Df	Dog Fennel
Dr Pr	Dry Prairie
Ex	Exotics
Gr	Grasses
La O	Laurel Oak
Li O	Live Oak
Ln	Lawn
Ma	Red Maple

RECEIVED
DEC 27 1988
TOWN OF DAVIE

APPENDIX IV-3D

Ml	Melaleuca
Ms	Mastic
Od Pa	Old Pasture
Pa	Pasture (Active)
Pk	Park
Pl Fd	Playing Field
Po Ae	Pond Apple
R B	Red Bay
R Pm	Royal Palm
Sd	Scarified Field
Sr Fg	Strangler Fig
Sw Ba	Sweet Bay
Wi	Willow
Wt Pr	Wet Prairie
Wx Mt	Wax Myrtle

SP. LIST (Species List For Ridge)

Because of the great number of plant species residing only on the Ridge, a separate list of them is presented below.

Common Name	Scientific Name
African Tulip Tree	Spathodea campanulata
Australian Pine	Casuarina equisitifolia
(2 species)	Casuarina glauca
Avocado	
Beauty Berry	Callicarpa Americana
Bamboo	Lasiacis divaricata
Bottle Brush	Callistemon sp.
Brazilian Pepper	Shinus terebinthifolius
Broom Grass	Andropogon sp.
Cabbage Palm	Sabal palmetto
Sabal Palm	Sabal palmetto
Cabbage Palm Fern	Phlebodium aureum
Caesar's Weed	Urena lobata
Cardinal Air Plant	Tillandsia fasciculata
Castor Bean	Ricinus communis
Cattail	Typha latifolia
Comelina	Comelina sp.
Citrus	
Coco Plum	Chrysobalnus icaco
Elderberry	Sambucus simpsonii
Ficus	Ficus Benjamina
Fiddlewood	Citharexylum fruticosum
Greenbriar	Smilax laurifolia
Guava	Psidium guajava
Gumbo-limbo	Bursera simaruba
Jacaranda	Jacaranda filicifolia
Laurel Oak	Quercus laurifolia

Leather Fern	Acrostichum danaeaefolium
Life Plant	Bryophyllum pinnatrum
Live Oak	Quercus virginiana
Loquat	Eriobotrya japonica
Mahoe	Hibiscus tileaceus
Marlberry	Ardisia solanacea
Mastic	Mastichodendron foetidissimum
Ground Plum	Momordica charantia
Moon Vine	Ipomea alba
Muscadine Grape	Vitis rotundifolia
Myrsine	Myrsine guianensis
Orchid Tree	Bauhinia variegata
Pigeon Plum	Coccoloba diversifolia
Poison Ivy	Toxicodendron radicans
Pokeberry	
Pond Apple	Anona glabra
Fern	Pteridium aquilinum
Red Bay	Persea borbonia
Red Mulberry	Morus rubra
Resurection Fern	Polypodium polypodioides
Rosary Pea	Abrus precatorius
Royal Palm	Roystonea regia
Royal Ponciana	Ponciana regia
Satinleaf	Chrysophyllum olivaeforme
Saw Palmetto	Serenoa repens
Sida	Sida sp
Slash Pine	Pinus elliottii var. densa
Snowberry	Chiococca alba
Spanish Moss	Tillandsia usneoides
Spanish Needles	Bidens pilosa
Strangler Fig	Ficus aurea
Surinam Cherry	Eugenia uniflora
Swamp Fern	Blechnum serrulatum
Sweet Bay	Magnolia virginiana
Tabebuia	Tabebuia serratifolia
	Thelypteris kunthis
Trema	Trema micranthra
Turks Cap	Hibiscus sp.
Umbrella Tree	Schefflera actinophylla
Virginia Creeper	Parthenocissus quinquefolia
Wax Myrtle	Myrica cerifera
White Stopper	Eugenia axillaris
Wild Coffee	Psychotria nervosa
Wild Lime	Zanthoxylum fagara
Willow	Salix caroliniana
Woman's Tongue	Sanseviera Thysifolia
Zamia	Zamia pumila

PINE ISLAND RIDGE

Introduction

Pine Island Ridge is a unique elongated terrain formation that rises from eight to twenty feet above sea level. Its elevation, large numerous trees, and attendant native vegetation cause the Ridge to dominate the surrounding land area.

Location, Shape and Size

Pine Island Ridge lies mostly within the corporate limits of the Town of Davie, Broward County, Florida. Its length within the Town of Davie approximates 4.7 miles. More specifically, it is located in Sections 17, 18, 19, 20, 29 and 30 of Township 50 - Range 41 and in Sections 23, 24, 25 and 26 of Township 50 - Range 40.

The Ridge is narrow (300 - 600 ft. in width), and serpentine with portions being disjunct. One major arm runs generally east-west and a second major arm runs north-south. These two arms of the Ridge connect in S20-T50 - R 41. At the point of juncture of the two major arms a short southerly extension of the north-south arm terminates in a county park known as Tree Tops Park. Most of the western-half of the east-west running arm of the Ridge is separated from the greater formation by approximately one mile of low flat terrain.

Soil*

Pomello Series: Typically, the surface is dark gray, fine sand about 5 inches thick. The subsurface layer is 33 inches of fine sand. The upper 3 inches is light gray and the lower 30 inches is white.

Pomello fine sand: This is a nearly level to gently sloping, deep, moderately well drained, sandy soil that has a layer well coated with organic matter at a depth of 30 to 50 inches.

*Soil Survey of Broward County, Florida - Eastern Part. United States Department of Agriculture Soil Conservation Service 1980.

Ecological Description

The relatively high Ridge presents a strikingly different ecology from the surrounding low plain. Huge ancient oaks cover major portions and are the dominant canopy species. They produce the biotic portion of the environment that governs the growth conditions of all the other flora.

There are two species of oak (Live Oak and Laurel Oak) that create over ninety percent of the vegetational canopy. Very large Slash Pine infiltrate the oak in some areas. The understory is a composite of mostly: Red Bay, Mastic, Pigeon Plum, Red Mulberry, White Stopper Strangler Fig and Cabbage Palm.

The shrub layer is composed of mostly: Wild Coffee, Saw Palmetto, Beauty Berry, Satinleaf, Snowberry, Wild Lime and Marlberry. Vines make up an important part of the total flora.

Some of the more numerous species are: Greenbriar, Muscadine Grape, Moon Vine, Poison Ivy, Rosary Pea, and Virginia Creeper.

The ground cover is made up of a diverse spectrum of plants, ranging from creeping woody shrubs to herbs. Representative species are: Boston Fern, Swamp Fern (mid-sorus fern), Caesar's Weed, Comelina, Life Plant, Ground Plum, Pteridium (Fern), Sida, and Spanish Needles.

The dominant oaks, themselves, provide habitats for a number of epiphytic species (air plants) whose individuals literally cover many of the large branches. The major species of epiphytes are: Resurection Fern, Cabbage Palm Fern, Cardinal Air Plant, Spanish Moss, Tillandsia recurvata and a wild orchid (Encyclia tampensis).

Portions of the Ridge vary in disturbance depending upon the intensity of man's incursions. Some areas seem untouched and contain a minimum of exotic (non-native) plant species while other portions may be either denuded of understory vegetation, leaving only the great oaks, or contain a proliferation of exotic species that have successfully out-competed native species.

Evaluation

Pine Island Ridge is a unique geological/ecological formation which occurs nowhere else in southern Florida. Similar abrupt elevation changes (ridges) of this height are usually accompanied by a very dry ecology known as Scrub Vegetation. The soil of these other ridges in southern Florida are usually made up of a

very dry poor soil known as sugar sand. However, the soil comprising the Ridge is listed as Pomello fine sand which has a greater fertility and water holding capacity. Also, the Ridge's narrowness and isolation have effectively protected it from major fires that would have prevented the long time survival of the oaks.

The environmental factors that impinge upon the Ridge have fostered a plant community characterized as hammock vegetation which is a mixture of tropical (Amazonian) and temperate (North American) species.

There are isolated patches of hammock vegetation in southern Florida yet one of them duplicate the exact environmental (geological/ecological) factors of the Ridge, its vegetation and the age of its numerous oaks.

The dominating landscape features of the Ridge, as represented by its height and narrowness and the beauty of its vegetation, make it a natural resource of significant importance to the biology of southern Florida.

Uses

The Ridge, as a unique natural resource, offers significant potential for passive and active recreational pursuits for the citizens of Davie. Suggested uses are: Picnicking grounds in the more open and more accessible areas, horse trails and walking paths, jogging trails and aerobic exercise stations, self guided nature trails emphasizing identified flora and Ridge ecology, nature center and observation tower.

WETLANDS OF DAVIE

Introduction

The Wetlands is a combination of valuable fresh-water swamp and marsh lands that are now rarely extant except in areas protected by governmental and certain private agencies. Its plant species are largely sub-tropical to tropical in origin.

Location, Shape and Size

The Wetlands lies within the extreme northeastern corporate limits of the Town of Davie, Broward County, Florida. It is roughly isodiametric in shape. More specifically, it is located in Sections 19 and 20 of Township 50, Range 42. State Road 84 runs southeast-northwest through the northern one-sixth of the area. The roadway thus forms the northern boundary of the major portion of the wetlands. Davie's town limits form the western boundary, and the South New River Canal forms most of the eastern and the southern boundary.

Soil*

The soils that underlie the Wetlands of Davie consist of two types:

Lauderhill muck -- The Lauderhill series consists of nearly level, very poorly drained soils in broad flats in the Everglades. These soils formed in hydrophytic plant remains mixed with a small amount of mineral material. Under natural conditions these soils are covered with water most of the year. Most of the acreage of

this soil is in natural vegetation that consists of sawgrass.

Plantation muck -- The Plantation series consists of nearly level, very poorly drained soils in broad flats along the eastern edge of the Everglades. These soils formed in unconsolidated marine sediments -- a muck surface layer (overlies) a sandy mineral material. Most areas of this soil are in natural vegetation.

*Soil Survey of Broward County Florida - Eastern Part. United States Department of Agriculture Soil Conservation Service 1980.

Ecological Description

The Wetlands is divided into two major plant communities: swamp and marsh-wet prairie. The terrain of both areas is extremely flat with an elevation of approximately two feet.

The swamp occupies generally the eastern one-half of the area and covers the entire shore line of the South New River Canal along the Davie town limits. The greater fertility of the soil of this eastern half and intrusions of minor water passages into the swamp (flowing water) have fostered the dense growth of native tree species. Pond Apple, Cypress, Strangler Fig and Willow dominate the vegetational complex.

Fresh water and migrating game fish reside here. Additionally, tropical and subtropical aquatic birds of the Heron and Egret genera feed and rest here. The protected Osprey also lives in this swamp.

The western marsh-wet prairie supports a radically different ecology. In this area Cypress and Melaleuca trees, though dominant, are scattered enough to form an open type of growth.

Sawgrass and other marsh/prairie grasses and broad leaved annuals make up the ground cover. The sparser growth of this western portion of the Wetlands is due to the lesser fertility and slightly drier condition of the soil coupled with periodic burning. The periodic burning of the marsh-wet prairie kills off most of the swamp bush and tree species (exceptions: cypress and melaleuca) and allows the more rapidly growing sawgrass and marsh-wet prairie annuals to regenerate.

Animals indiginous to the marsh-wet prairie are red-winged and marsh hawks, raccoons, oppossums, fox, armadillos and various aquatically oriented snakes and turtles.

Evaluations

The Wetlands of Davie represent a fast disappearing natural resource in the eastern part of southern Florida. It is valuable not only for its innate beauty but for the part it plays in the overall environmental picture of the general area. Swamps and marshes provide habitats and food chain bases for numerous birds, reptiles, mammals and fish. Additionally, they temper the climate and act as pollution sinks for air and water born contaminants.

Preservation and Uses

The Wetlands of Davie is a valuable, environmentally sensitive natural resource and should be considered a preserve area. It should be managed as such by professional biologists (foresters) using the latest techniques for the eradication of non-native plant species in the total Wetlands and periodic localized burning in its western portion.

Though the total Wetlands should be considered a preserve, it is recommended that this valuable environment be enjoyed and also used for educational purposes by the citizens of Davie.

Construction of elevated wooden walk-ways at varying heights through the more interesting parts of the swamp and marsh-wet prairie would provide the valuable recreational and educational opportunities these ecologies contain.

TOWN OF DAVIE, FLORIDA

NARRATIVE FOR AGRICULTURAL LAND USE INVENTORY

Thomas F. Kelsey, Ph.D.
BCI Geonetics, Inc.

Agricultural Land Use Change in Davie

All agricultural land use depicted on Colored Infrafed High Altitude Photos (CIR-HAP) from March 1984 were compared with 1987 tax map aerial photos. In turn, these were compared with actual ground-level observation of all existing agricultural land uses within Davie as of November 29, 1988. All land currently in agriculture has been mapped (see Map __). Agricultural land use was placed into the following categories: Pasture (Pa), which includes dairy cows, beef cattle, and horses; Citrus (AG-CIT); Plant nurseries (AG-pn), which includes field nurseries, greenhouses and shade houses; winter vegetables (AG-wv); Horse training (AG-ht), which includes horse boarding); and Agricultural research (AG-rch) which is the University of Florida IFAS Research Station.

Citrus

The acreage devoted to commercial citrus groves is declining rapidly. The most notable example of this is the complete replacement of nearly a square mile of citrus by an upscale development, Forest Ridge. The overall physical condition of the majority of active groves can be described as old with declining yields, dying trees, and, in some cases, apparent abandonment. There are a few minor exceptions where some trees have been replaced and interplanted with palms and other tropical ornamentals. One is struck by the proliferation of "For Sale" signs on so many of the grove properties. In all probability, the total acreage mapped as citrus is exaggerated because in some cases the grove has already been sold, maintenance and production activities have recently ceased, and the grove is awaiting conversion to residential development.

Without the assistance of some type of preservation program, the groves are definitely destined to be replaced by non-agricultural land uses, especially residential developments. Even with some type of preservation program, there are a number of factors beyond the bounds of Davie which make continued citrus production highly problemattical. Most likely, the balance has already been tipped whereby improvement of groves is not economically viable.

There is a direct water resource conflict between citrus groves and residential development. Citrus groves which were developed long before the current residential development have

APPENDIX IV - 3E

traditionally been irrigated by manipulating the level of the groundwater table, holding water levels high in the canal system when it was necessary to irrigate. For residential development, canal levels are maintained at lower levels as a flood protection measure. When the balance of citrus groves versus residential development swings in favor of residential development and, therefore, canal levels are held lower than they were formerly, the trees in the remaining groves cannot adjust to the lowered levels and many, in fact, have died.

There are two general factors which discourage the continuation of citrus production in Davie: the prohibitive cost of reconditioning the groves (new plantings, undertree minimum volume irrigation systems) and lack of a reliable labor supply. Rather than investing in the grove improvements, it makes much more economic sense to sell the grove acreage for residential development, take the revenue from that sale and purchase land much further away from the urban/rural interface and develop new groves from raw land. This eliminates the conflict of new residents and old grove operations (often resulting in nuisance suits against the grove operations).

It is not just Davie that is experiencing a decline in citrus groves. On the contrary, frost-damaged orange grove property in Central Florida is sold for $12,000 to $20,000 per acre for residential development. In turn, the proceeds from that sale are used to purchase large tracts of land at $2,000 to $3,000 per acre further south, develop an efficient water management system (drainage and low volume irrigation) and plant new trees (another $2,000 per acre) and, in four years come into production far removed from the urban/rural interface. Like Central Florida, citrus acreage is also declining throughout Broward, Palm Beach and Martin counties. Hendry and Collier are the counties experiencing the greatest citrus grove acreage increase from this situation.

The labor supply required for harvesting the fruit is rapidly dwindling. The average age for the seasonal fruit picker is now approaching 45 years. Job alternatives, legal and illegal, have siphoned off the labor force. Those foreign fruit pickers who have recently obtained permanent worker status under the amnesty program of the U.S. Immigration and Naturalization Service, upon receiving their new status, immediately seek employment in other economic activities. Furthermore, the younger laborers who formerly would have replaced the older ones can now find jobs in the many service industries which have developed to serve the exploding residential population.

Pastures

Pasture, like citrus agreage, is rapidly being converted to residential and other urban land uses. The reasons for this are very similar to those for citrus. The scope of this effort has not permitted extensive interviewing of property owners to identify the precise motives for maintaining land in pasture. Even so, it should be recognized that there are multiple reasons for the existence of pastures in Davie. Among them are the following: (1) pasture for functioning dairy enterprises; (2) land held in speculation for urban development, being grazed by beef cattle to qualify for a significantly lower property tax assessment under Florida's Green Belt Law; (3) pasture for horses bred and used for recreational and show purposes; (4) some combination of these three.

The conversion is dramatically demonstrated by the very rapid development of former pasture north of S.W. 14th Street in the far northwest corner of Davie, of the west side of Interstate 75 between Griffin and Sheridan Street, and of that area south of SR 84, west of Nob Hill Rd. into residential uses and commercial uses.

Plant Nurseries

While plant nurseries of varying sizes and types can be found dispersed throughout Davie, many are concentrated south of Griffin Road, between University Drive and Florida's Turnpike. Like the citrus groves, one is struck by the number of "For Sale" signs on the wholesale plant nurseries, often accompanied by words such as "suitable for commercial development", "for residential development", etc., clearly indicating that the property will go out of its current use. Again, like citrus and pasture, urban development pressure and the conflict of increasing urban uses surrounding what used to be rural wholesale nurseries contributes to the shifting of this agricultural activity to other locations outside of Davie.

One activity which will postpone (but probably not ultimately prevent) the conversion process is fueled, ironically, by the land use transition itself. As residential and commercial development occurs on former agricultural lands within and around Davie, there is a substantial demand created for landscape materials (palms, shrubs, hardwoods, etc.). It is possible to plant new citrus trees in those areas of the groves where older trees have been removed and, in the spaces between the citrus seedlings, plant landscape material. The landscape materials produce a revenue stream while the citrus is maturing. Then, as the citrus tree develops a larger crown and begins to yield fruit, the landscape material is sold off and either not replaced

or replaced by low growing materials in line with the trunks of the citrus trees. The degree to which this is occurring is small when compared to areas going out of citrus completely to make way for urban development.

Winter Vegetables

The very small area devoted to winter vegetables and strawberries is not likely to be replaced by urban activities. This land is located directly beneath the high voltage transmission lines which traverse the area on an east-west axis between Griffin Road and Stirling Road, east of University Drive. The production is limited in scale and appears to be marketed through a retail produce and garden center adjacent to the fields. In addition to the winter vegetables and strawberries, this space beneath the transmission lines is shared by plant nursuries which also are not threatened by residential and commercial development. By the same token, since this area comprises a very long, narrow strip perpendicular to the north-south streets which carry local traffic through the area, it does little in the way of contributing to the rustic appearance of Davie.

Observations on the "Country" or "Rustic" Appearance of Davie

By looking at the High Altitude Color Infrafed Photos of Davie and surrounding area taken in 1984 and then driving on nearly every street of Davie in late November 1988, one can easily see and feel the "country" nature of Davie. However, with the exception of limited unincorpated areas of Broward County along Griffin Road, one can also see that while Davie stands out as an island of agricultural activities in a sea of urban development, that island is shrinking and changing rapidly. The new, planned community of Weston on Davie's western limits represents a classic "leap frogging" of urban sprawl past an area where the desire of many is to maintain an appearance and atmosphere of rural life. This, coupled with the replacement of pastures, citrus groves, and plant nurseries with housing and commercial development within Davie, represents a real threat to the current atmosphere and "quality of life" of Davie.

Davie is faced with a typical population growth dilemma which will result in the conversion of agricultural lands into urban land uses. A substantial portion of Davie still has the appearance of openness because of the extensive pastures, citrus groves and plant nurseries. Several of the older residential areas are large-lot, single-family homes, many with lots large enough to have horses and other animals. In some cases, it is evident that homes were built in the midst of functioning citrus groves without completely removing the groves. Driving past the

open fields and citrus groves, through large-lot subdivisions on narrow streets where Australian pines have formed tunnels, past the "Old West" style of architecture of Davie municipal facilities and commercial properties, and past a rodeo arena, one indeed receives the feeling of being in a place very different from the urban sprawl of neighboring communities.

To many, the present ambiance has become a very attractive setting for a place to live and work. To accommodate the demand for housing and services for those who would like to move to Davie, land now used for the very uses which create the feeling of openness and "country" must be converted to housing and other non-agricultural uses. New developments with names such as Country Estates, Country Pines, Country Villas are built. Initially, a selling point to purchase a dwelling unit in such a development is that, quite often, one can literally see "country" out of the window and drive through "country" to and from one's residence. Obviously, what will happen in due time is that the more people who must be accommodated, the very land which has created the atmosphere will be occupied by residential and commercial developments, thus destoying the very essence of that which has created a desireable living environment in the first place.

Agricultural Lands for Open Space Preservation

If at all possible in terms of cost, find a way to maintain "agricultural open-space corridors" on long stretches of local roads which currently front on contiguous agricultural activities to maintain the appearance and thereby maintain a feeling of "country". Two areas that come to mind: (1) north side of Orange Drive (land currently in pasture might be converted to citrus/land scape material mix); (2) both sides of Flamingo Road (land currently in groves, mixed grove/landscape, some pasture - Flamingo Gardens, a portion of the ridge with its laurel oaks). Neither of these roads are major carriers of through traffic. This, combined with existing "country", large-lot subdivisions (encourage more of these, with narrow streets planted with large crown hardwoods, if possible, instead of Australian pine) The large-lot residences would include citrus trees and horses).

The preservation program would be, in reality, a program to subsidize whatever agricultural activity (or activities) deemed appropriate for the purpose of providing the appearance of a "country" feeling. Furthermore, this would have to be coordinated and integrated with traffic element. At the present time a coflict would exist if the Town desired to create an agricultural corridor along Flamingo Road because there are already plans to widen Flamingo Road such that it will carry more through traffic.

RESOLUTION NO. R-87-[illegible]

A RESOLUTION OF THE TOWN OF DAVIE, FLORIDA, DELINEATING AN AREA FOR CONSIDERATION IN THE OPEN SPACE PROGRAM; STATING THE TOWN COUNCIL'S INTENT TO PRESERVE THE RURAL CHARACTERISTICS OF THIS AREA

WHEREAS, the Town Council of the Town of Davie has identified the need for a permanent Open Space Program to preserve the unique lifestyle of the Town and to facilitate the acquisition of passive and recreational open space; and

WHEREAS, the objectives of the Open Space Program include the protection of unique natural areas, enhancement of the quality of life in Davie, and preservation of the non-urbanized area of the Town from development pressures; and

WHEREAS, it has been determined that the Open Space Program is essential to the Town's efforts to preserve the unique rural characteristics of the Town and direct growth to areas of the Town capable of accommodating such development; and

WHEREAS, it is essential for the success of the Open Space Program to provide for the acquisition of certain property within the Town and the transfer of development potential to appropriate areas.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF DAVIE, FLORIDA:

SECTION 1. That the Town Council of the Town of Davie declares that the estate area generally located east of Interstate 75, west of Pine Island Road, south of Southwest 14 Street and north of Orange Drive is preserved for consideration in the Open Space Program.

SECTION 2. That it is the policy of the Town Council to preserve and protect the rural characteristics of the area described in Section 1 above.

SECTION 3. This resolution shall take effect immediately upon its passage and approval by the Mayor.

PASSED THIS 16th DAY OF September, 1987

Mayor/Councilman

Attest:

Town Clerk

Approved this 17th day of September 1987

APPENDIX IV - 4.

OPEN SPACE PROGRAM

TOWN OF DAVIE

JUNE 3, 1987

OPEN SPACE

PURPOSE: To establish a permanent Open Space Program to preserve the uniqueness of the Town of Davie and to facilitate the acquisition of passive and recreational open space in the Town.

OBJECTIVE: To preserve the quality of life in the non-urbanized portion of Davie and resist the encroachment of development in low density areas. The Open Space Program will provide better planning by providing a network linking areas of open land and avoiding the piecemeal development that the Town has historically experienced. The Open Space Program will provide positive action in response to development activity.

TIMETABLE: Open Space will be an ongoing multi-year program.

I. What is Open Space? Open space is a large undeveloped area that currently may have various passive uses such as citrus grove, agriculture, forestry, or similar use. The Open Space Program will blend these land uses with uses such a bike paths, horse trails, hiking trails, etc. weaving them into a free-flowing linear network of open space. It is a valuable amenity that enhances the quality of life in Davie. The need for park and recreational facilities for active uses is unquestioned and ever increasing. The Open Space Program is an effort to provide passive and dispersed recreational activities for our community while preserving the country, open air atmosphere which makes Davie so unique.

2. What are the Benefits of Open Space? The open space program can, through market impact, increase the value of low density residential parcels. Proximity to large open areas may make these types of property particularly desirable places to live. Open space programs can help preserve agriculture in this community which is now declining at an alarming rate. Planned areas of open space can decrease the traffic impact caused by rapid development and be planned to allow the provision of municipal services more efficiently and effectively.

3. Why should Davie consider an Open Space Program now? Davie still has ample open land and time to plan. Timing is critical. Davie must act now to soften the impact of Interstate 595 and increasing development pressures in the Town. The Town must act to properly utilize its land resources, plan for the future and preserve the atmosphere for which Davie is known.

4. Is Davie able to afford an Open Space Program? The physical layout of the Town allows Davie to undertake such a program over a period of time. The eastern portion of the Town of Davie has ample industrial and commercial development and a strong tax base to sustain the cost of services for the Town without utilizing the low density areas to the west for development.

5. How is open space acquired? How much is it going to cost the taxpayers of the Town? There are a number of ways of acquiring open space. The proposals for acqusition do not involve any significant impact on the tax structure of the Town:

a) Purchase of Development Rights. PDR is used primarily to preserve agriculture. In this program, a government entity purchases the development rights to the land, not the actual property. Continued use for agriculture is allowed, but the property is not available for development. This method can be most useful in preserving Davie's

farms and orange groves.

b) Transfer of Development Rights. TDR programs can be developed to provide open space by transferring the dwelling units from proposed open space land to other parcels. TRD requires careful planning and controls.

c) Small Increment Bond Program. This is a limited bond issue to acquire open space areas that have been optioned by the Town. Growth increments in the Town's tax base and impact fees can be used to finance this project.

d) Open Space Impact Fees. This is a method to assess large projects to finance open space and mitigate the impact of development in the Town.

6. Who owns the Open Space? The Town of Davie will own the open space in perpetual trust.

7. How will open space impact Davie's overall density? Davie's overall density will decrease as a result of open space programs.

Summary: Open space will provide an amenity and a development control in addition to being a significant planning tool.

FOR FURTHER INFORMATION:

Irving Rosenbaum
Town Administrator
Town of Davie
(305) 584-1809

OPEN SPACE PROGRAM
POTENTIAL FUNDING SOURCES

FLORIDA DEPARTMENT OF NATURAL RESOURCES

LAND AND WATER CONSERVATION FUND PROGRAM (LWCF)

The Land and Water Conservation Fund Program is a Federal Grant Program administered by the Florida Department of Natural Resources and is an excellent source of acquisition money for resource-based outdoor recreation programs and facilities. The matching formula is 50% federal funds and 50% applicant funds. The acceptable forms of matching may include the following:

Cash - general appropriations
Bonds
Donated land value
In-kind services.

The application period is from November 1 to December 31 each year. Review is completed by FDNR, recommendations for funding are approved by the Florida Governor and Cabinet, with final approval by the National Park Service. The time frame for completion of project acquisition is up to two years and the project must be developed within five years. The project must remain a public recreation facility for a minimum of twenty-five years.

Current year's funding level --$1,170,025.
Cap of Grant Award -- $150,000

FLORIDA RECREATION DEVELOPMENT ASSISTANCE PROGRAM (FRDAP)

The Florida Recreation Development Assistance Program is a State Grant Program administered by the Florida DNR. It is an excellent source of development money for outdoor recreation programs and facilities and may also be a source of site acquisition money. The matching formula is as follows:

Resource-based: Two state dollars to one applicant dollar and may be used for facilities dependent upon natural resources such as:

nature trails and study areas
picnic areas
boat ramps
wood playgrounds
fishing piers
horseback riding trails
hiking trails
recreational biking trails within outdoor recreation sites.

User-oriented: One state dollar to two applicant dollars and may be use for facilities which can be placed at the convenience of the user such as:

swimming pools
tennis courts
playgrounds (non-wood)

shuffleboard courts
basketball courts
golf courses
handball and racquetball courts
football and soccer fields
physical fitness courses.

Combination of above uses: One state dollar to two applicant dollars and may combine resource-based and user-oriented facilities.

Uses may also include support facilities such as lighting, restrooms, and parking in conjunction with submitted project -- but not community centers or museums.

The forms of match may include:

Cash
Bonds
Undeveloped land
In-kind services
Florida Boating Improvement Funds

The application period is from September 1 to October 31 each year. Review is by the DNR with final approval by the Governor and Cabinet. The time frame for completion of a project is up to two years. Projects where land is leased must remain in public use for a minimum of twenty-five years and projects where land is owned must remain in the public trust for outdoor recreation uses in perpetuity.

Bonus Points can be awarded in evaluation for those projects which have statewide significance such as:

Historic Preservation.
Conservation and Recreation Lands Program (CARL).
Florida Recreation Trails Program.
State Park System.
Natural Areas Inventory.

The previous year's funding level -- $2.1 million
Cap of Grant Award -- $150,000.

FLORIDA RECREATION TRAILS PROGRAM

Chapter 260 of the Florida Statutes created the Florida Recreation Trails Program in 1979. The purpose was to establish a network of recreational trails for non-motorized entities such as bicyles, hikers, horseback riders, canoeists, etc. The Florida Department of Natural Resources serves as the administrator of this program. No specific grant money is available through this program because FRDAP funds can be used for this purpose. The department is able to provide technical assistance to local governments and volunteer groups such as the Florida Trails Association and is now writing the development and maintenance standards for the various types of trails, establishing an idea resource library with trail plans from across the state, and will review local plans for suggestions. The department depends heavily upon volunteer groups and local governments for the construction and maintenance of "dispersed recreation" facilities. Mary Ann Twyford is the contact person at DNR for further information. (904-487-4784)

BROWARD COUNTY AND THE FLORIDA DEPARTMENT OF NATURAL RESOURCES

FLORIDA BOATING IMPROVEMENT PROGRAM (FBIP)

Funds collected by the State of Florida Department of Natural Resources from pleasure craft vessel registration fees are deposited into the Florida Motorboat Revolving Trust Fund. A portion of these dollars is used to fund the Aquatic Weed Program and Manatee Protection and Recovery Program. The remainder of these funds is returned to the counties for boating improvement programs based upon the number of pleasure crafts registered within each county for the preceding fiscal year. It is up to the individual counties whether or not to apply for these funds and whether or not to share these funds with their local municipalities.

Broward County does share these funds. Application must be made through the county to the DNR for all allocations. A resolution by the County Commission supported with specific project information must accompany the application and request for funds. The matching formula may be structured as desired by the individual county and may vary from project to project.

Current Statewide allocation:	$2,300,000.
Broward County allocation:	$ 224,593.
Funds may accumulate -- Current funds available in Broward:	$ 857,896.

Uses for BIP Funds include:

- New boat ramps and dock facilities.
- Support services such as restrooms, lighting, paving, utilities and access roads for new and existing ramps.
- Renovation of existing boat ramp and dock facilities or additions to existing boat ramp and dock facilities.
- Shoreline stabilization, riprap, seawalls, signs and navigation lights.

May not be used for picnic facilities.

Grants may be applied for at any time. No opening and closing dates exist.

CONSERVATION AND RECREATION LAND PROGRAM (CARL)

This is a state grant program to assist in the acquisition of lands which contain unique and irreplaceable ecological, historical and archeological resources and which provide significant wildlife managme benefits as well as the opportunity for public recreational opportunities.

The Town of Davie and Broward County have submitted a Joint Application for CARL Grant money for the Pine Island Ridge Site. Chapter 259 of the Florida Statutes establishes the CARL Selection

Committee and Chapter 253.023 defines the CARL program and funding sources. The primary source of funding is the phosphate severance tax and up to $40,000,000. may be designated annually for this grant program. There is no cap on individual project funding.

Statewide allocation: $38-39,000,000.

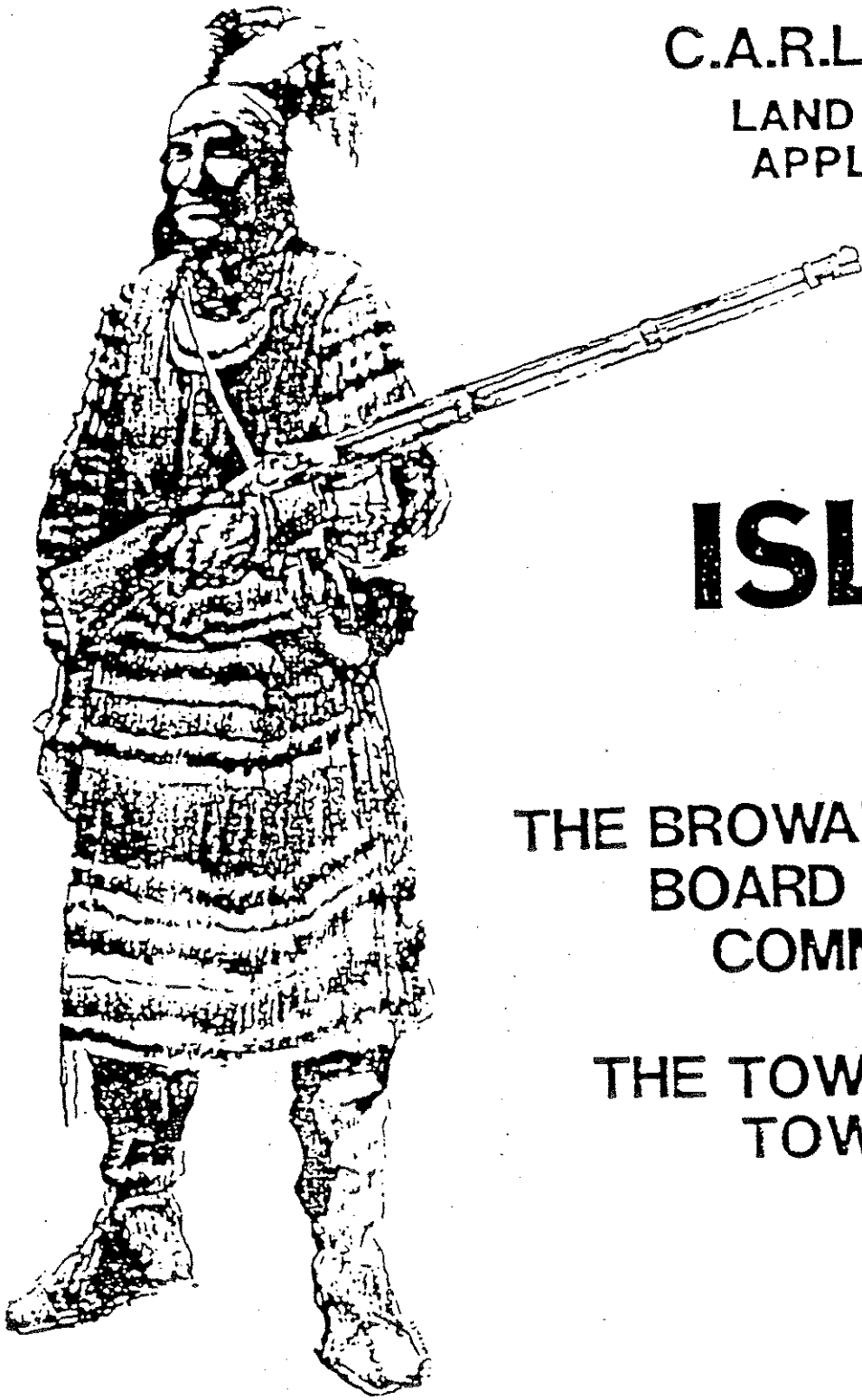
Application time frame: Submission by August 1 each year for consideration during the next fiscal year.

Each project must come before the CARL Selecion Committee a minimum of three times before it may be ranked for funding. A project must obtain three votes of the Selection Committee for staff to assess the project. The project must then be readdressed at a later time by the Selection Committee and receive four votes for design work on the project to be assessed and completed. Once again at a later time, the project must receive four votes by the Selection Committee for the project for become ranked for funding approval. It must then compete on its merits with all other ranked projects. Greg Brock is the contact person at DNR for further information. (904-487-1750)

PARKSCAPES

PRESERVATION OF OPEN SPACE

DAVIE, FLORIDA



C.A.R.L. PROGRAM

LAND ACQUISITION APPLICATION FOR

PINE ISLAND

SUBMITTED BY

THE BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS AND THE TOWN OF DAVIE TOWN COUNCIL

MARCH, 1987

BROWARD COUNTY FLORIDA

HOWARD C. FORMAN, CHAIRMAN
BOARD OF COUNTY COMMISSIONERS
357-7005

May 15, 1987

TO: The C.A.R.L. Selection Committee Members

Broward County and the Town of Davie are working together to acquire an environmentally sensitive area known as Pine Island. On November 5, 1986, the Town of Davie passed a resolution authorizing this joint venture. On May 12, 1987, the Broward County Board of Commissioners approved a resolution authorizing the submission of the attached application.

Pine Island is a sandy ridge, an unusual geological feature for the area. It was identified in the 1977 Land Use Plan as a unique natural area. The designation of the area as one of environmental significance was continued in 1981 when it was included in the Conservation Element of the Comprehensive Plan as a Local Area of Particular Concern (LAPC). This designation, which was approved by the County Commission, recognized the site's value as a natural landform, as an area of native vegetation and as an important habitat for wildlife.

More recently, the historical importance of the Ridge as an area of habitation for Florida's early Indians has come to light. An historical survey has indicated that much of the Ridge area contains evidence of both historic and prehistoric Indian activity.

Broward County and the Town of Davie have jointly prepared this C.A.R.L. application. Some of the important features of this application include:

1. Local funds to acquire at least thirty percent of the site;

2. A management plan which addresses both the historic and environmental features of the site; and

3. Local management of the site by the Broward County Parks and Recreation Division.

We appreciate your consideration of this request and, if it is at all possible, we would like to have this site included among those presented to the Governor and Cabinet this July.

Sincerely,

Howard C. Forman
Chairman

HCF:DS:gah
Attachment

BROWARD COUNTY GOVERNMENTAL CENTER • 115 SOUTH ANDREWS AVENUE • FORT LAUDERDALE, FLORIDA 33301

IX. RECOMMENDATIONS

The project survey resulted in the discovery and assessment of seven different archaeological and historic sites within section 20 of Pine Island. Two cultural resource management plans are offered here in respect to appropriate mitigation of the known and possible unknown sites located on the Pine Island ridge. Additional mitigation and public interpretation through the use of historic signs, exhibits, and historic trails is also discussed.

Plan 1: Partial Development - Partial Preservation (fig. 12)

This plan is based on the assumption of clearing and development on some portions of the Pine Island ridge. Three management techniques are offered based on the results of the field and historic survey.

Preservation is recommended for those areas of highest known archaeological and historic significance (and in some cases botanical significance), (see number one areas in figure 12). Areas designated with a number one preservation priority include sites 8Bd1113, 8Bd1115, 8Bd1117, and 8Bd1119. In particular, site 8Bd1117 is one of the best preservated prehistoric village sites in eastern Broward County. The fine preservation quality of this site and its climax hammock community indicate that this area (figure 12, 1-A) of the ridge should be preserved without impact from roads or construction, and should include limited or controlled public access.

Area 1-B is 8Bd1115, or Charlie Willie's Island, as noted on the Fries map of 1898. The large beautiful oak trees add to the general significance of this location. Interpretative signs and trails could make this a very attractive green space area.

Area 1-C represents a portion of site 8Bd1119 that also extends west of the section 20 line. Preservation is recommended for this narrow area of the ridge.

Area 1-D is a prehistoric site (8Bd1113) of considerable significance considering the high quantity of midden refuse. The site offers a good scientific opportunity for learning about the prehistoric adaption on Pine Island. Construction activities, clearing or development should be avoided in this area. Any necessary subsurface construction such as ditch digging or road widening should be subjected to archaeological monitoring.

Management techniques recommended for areas with a number two designation indicate that further study and testing is necessary to fully assess the significance of these areas, or that some level of archaeological excavation is necessary prior to clearing and development of that area.

Area 2-A encompasses the artifact scatter that characterizes site 8Bd1114. It is not clear whether these pot sherds represent refuse from habitation activities or possible association with human burials. Any planned development of this parcel should be preceded with some systematic and representative archaeological excavations under the direction of a professionally qualified archeologist.

Area 2-B is the wetlands "inlet" that is under citrus cultivation and is largely surrounded by the ridge. Its proximity to site 8Bd1114, and its retention of wet organic peaty soil means that this area could contain well preserved artifacts. Some testing should be conducted there prior to any clearing or fill activities.

Area 2-C encompasses a low island with a small prehistoric camp or habitation site 8Bd1118. Some archeological excavation units should be conducted there prior to any clearing or development.

Area 2-D has a moderate sized prehistoric site, 8Bd1116. Although intensive disturbances have affected parts of this site, representative excavation units should be conducted there coupled with adequate monitoring to mitigate any additional loss there from clearing and development.

Area 2-E, just east of 1-A, is recommended for further study for consideration for preservation based on two reasons. First it would help provide a needed buffer to area 1-A, and second, it contains the highest known natural elevation in southeastern Florida, a sandy hill with a 29 foot elevation. Difficult terrain and thick understory made our field testing of this feature limited at best, but its potential archaeological significance is farily high considering that similar natural sandy hills offered the perfect opportunity for use as a burial mound (ie. 8Da45 in Dade County) or as a temple mound. Such human burials could be fairly deep and are out of range of a

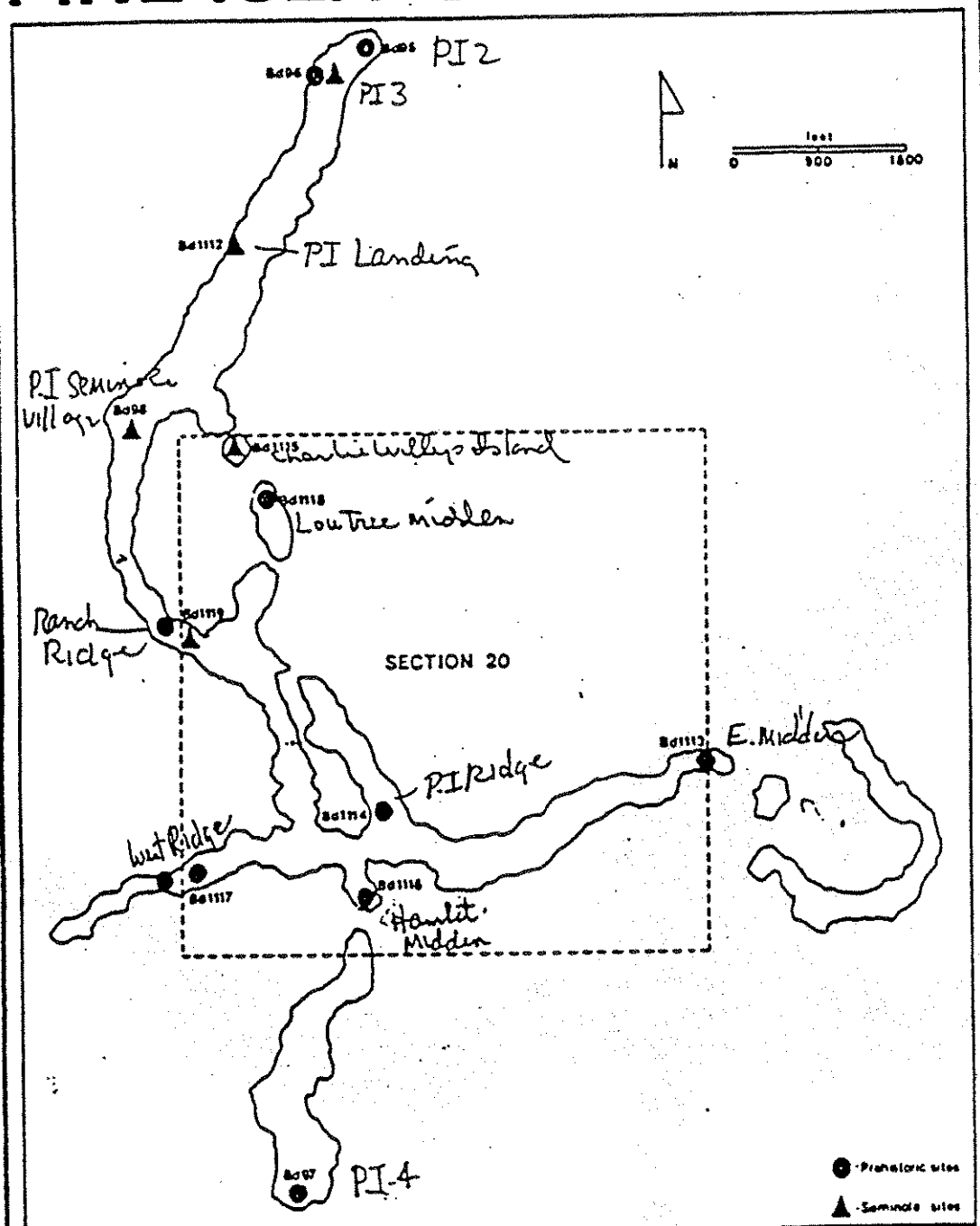
post-hole or auger survey. However, some portions of Area 2-E could be impacted with trails, some clearing (with adequate archeological monitoring), and passive recreational development.

Area three management units encompass the remaining areas of Pine Island. Although no archaeological or historic materials were located there during this survey, the potential loss of unknown sites or artifacts within these areas is still a risk, and mitigation there should be an ongoing archaeological monitoring program that includes an archaeologist working closely with clearing and development activities. The focus of this monitoring program should be to observe, record, and collect significant artifactual materials and features that might be uncovered during construction activities.

Plan 2: Comprehensive Preservation

A comprehensive preservation plan would focus on preserving the entire ridge as green space subdivided with preservation and recreational-use areas. Building and construction would be dispersed throughout the cultivated grove area, and the ridge would exist as a kind of central park and preserve with walking and bicycle trails through much of it. Obviously, the incorporation of Pine Island ridge as a central natural and historic park would have a tremendous draw for potential customers of any proposed development there. The loss of acreage from development, however, should be offset with either public acquisition, the transfer of development rights, or tax incentives offered by various historic easement programs.

FIGURE 10
PINE ISLAND



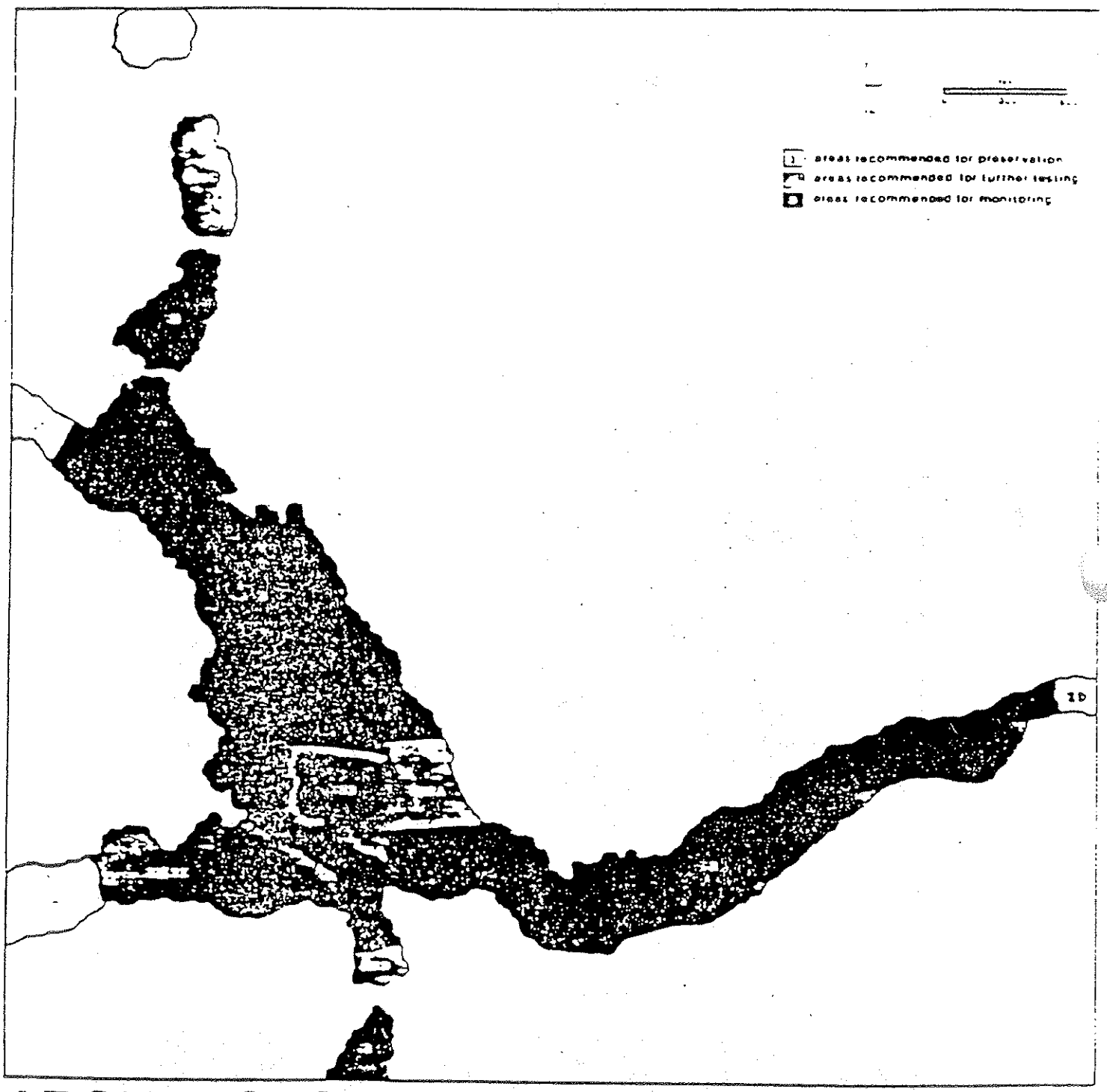
W

E

ARCHAEOLOGICAL SITES

S

FIGURE 12
PINE ISLAND (Section 20, T.50 S., R.41E.)



ARCHAEOLOGICAL MANAGEMENT PLAN 1

Wilderness Packing Guide
Rails To Trails

Heritage Trails Fund

Let's Curb Erosion On Our Trails
Vacations On Horseback
Ruthie Waltenspiel

— A NON-PROFIT ORGANIZATION —
Reaching 20,000 Trail Users Across the Nation and Growing!

SPRING 1987

Start a Prairie Fire Of Action!

Photo courtesy of CA Dept. of Forestry

By Clayton Clark

A "prairie fire of local action" will meet America's growing need for quality outdoor recreation opportunities, predicts Tennessee Gov. Lamar Alexander, chairman of the President's Commission on Americans Outdoors.

To fan these flames, the President's Commission has recommended that $1 billion be allocated each year for development of a nation-wide network of greenways, parks and other recreation areas. Calling for local and state groups to take lead roles as recreation resource protection, the Commission urged the federal government to distribute these monies through its Land and Water Conservation Fund.

The recommendation of the 25-member bi-partisan Commission has been praised as a turning point in the nation's recreation policy. The Commission's study also placed chief responsibility for the creation of the greenways on state and local tourism groups, chambers of commerce and governments.

The potential value of these greenways, concluded the Commission, is well worth the investment. They would not only provide all Americans with access to open spaces and wildlands close to home, but would increase the role of private enterprise and local governments and volunteer groups in recreation and conservation.

According to Commission's Executive Director Victor Ashe, "the commission recommended that state and regional partnerships create a cost-to-cost network of greenways to protect open space, wildlife and plants and to protect recreation opportunities for Americans in cities and suburban communities."

> *"The Commission recommended that state and regional partnership create a Coast-to-Coast network of greenways".....Executive Director Victor Ashe*

Ashe said the Commission gathered its facts and made its conclusions based upon 20 hearings held in 18 states. "The commissioners found a powerful need for national leadership, and a limited, but strong role for the federal government to play especially in providing stable long-term funding assistance."

HTF Executive Director George Cardinet, who presented a report on greenways to the Commission, applauded their findings and looks to the American Trails Network to play a crucial role in its implementation. The American Trails Network was convened by Massachusetts Institute of Technology Engineer Frank Davidson and Rails to Trails Conservancy President David Burwell for the purpose of developing a transAmerican trail network.

The idea of applying a multi-disciplinary approach to the establishment of such a trails network quickly won the

continued on pg 2

Start a "Prairie Fire Of Action"!

continued

enthusiastic support of Cardinet and HTF. "These people are bringing to bring a whole new element into the recreational trails picture by combining the best interests of private enterprise with resource conservation."

Greenways areas envisioned by the American Trails Network would allow such technology as subsurface transmission lines (telecommunications, gas, electricity and water) to exist side by side with recreational uses.

As stated in the Commission's report, these greenways would "reach out from communities all across America to link cities, towns, farms, ranches, parks, refuges, deserts, alpine, wetlands and forests into a vast and varied network of open spaces for recreation and conservation. Many of the pieces of the network are already there: greenways along rivers and rail lines, floodways, Heritage Corridors, wetlands and big game migration routes. It is time to link them up.

HERITAGE TRAILS FUND
c/o Nancy DuPont
1350 Saddle Rock Road, Walnut Creek, CA 94596

Non-Profit Organization
US Postage
PAID
Walnut Creek, CA
Permit No. 100

SPACE

FROM PAGE 1A

"It's forward thinking. I wish them luck," says Boulder Open Space Director Jim Crain.

Thus far the city has acquired 16,100 acres of open space for $48 million. Boulder plans to spend another $32 million for 4,700 more acres, Crain says.

The 22.8 square-mile city already has accumulated more open space acreage than the total acreage (14,592) within its city limits. Most is in the 51-square-mile Boulder Valley in which Boulder lies. Of the 51,840 acres in the valley, 31 percent are preserved as open space.

Crain, who has visited South Florida, says open space is needed to protect the area's resources and keep it appealing for residents.

"Land is like a ranch. A ranch has a certain carrying capacity for animals. Land has a certain capacity for people," he says. "You're working on an ecological disaster in South Florida."

Boulder residents petitioned their city council for a referendum on the open space program and a four-tenths of a cent sales tax to finance it. The tax generates $4.5 million every year. Cities in Colorado, unlike in Florida, can impose their own sales taxes.

Using its revenue, the city has purchased greenbelts on its northern, eastern, western and southern sides. Some of the property is leased to farmers and ranches.

Open space prevents cities from growing into one another, Crain says, as well as providing natural scenery.

Open space lands are open to the public for fishing, hiking, picnicking, jogging, bird watching and other activities at no cost.

"Everybody loves it," he says.

Crain says land has sold for $400 an acre to $160,000 an acre.

Land in Broward would be expensive to acquire, says Miramar [illegible] Lori DeSantis.

"Two thousand acres would cost $60 million in Miramar," he says.

But he is still intrigued.

"If they can do it, certainly, I'd like to sit down with them and see if it is a way to go," DeSantis says. "If I lived in Davie, I'd be for it. It preserves what people move into these areas for."

Rosenbaum says the cost of acquiring open space could be spread out over many years using several devices.

The city could buy development rights to farms and orange groves, allowing them to be used for agriculture but not development. Development rights could be transferred from one tract to another.

Government grants could be acquired and money could be obtained from impact fees charged to developers for recreational facilities such as parks, Rosenbaum says. Land in Davie sells for about $18,000 an acre, Rosenbaum says.

His long range goal is to set aside open space within a 12-square-mile area of western and central Davie. Rosenbaum says the area, nearly a third of the 40-square-mile town, would be reserved for low density uses, such as single-family homes on one acre, parks and agriculture. Within three to five years, Rosenbaum hopes to integrate 1,000 to 2,000 acres into a network of parks, trails, and roadside landscaping.

"It's an old-fashioned concept where cities set aside large tracts for parks, not the rotten piece the developer couldn't sell between the school and the sewer plant," he says.

Jefferson County, Colo., Open Space Director Ray Printz says his program has had tremendous support from the public after it began in 1972. The county of 400,000, south of Boulder, imposed a half-cent sales tax, which generated $100 million, most of which has been used to acquire 16,500 acres.

The county keeps two-thirds of the tax for its open space and divides the remainder among its 11 cities. As in Boulder, the open space program was initiated by Jefferson County residents who feared growth would turn their area into "wall-to-wall suburbia," Printz says.

"None of the cities were for it. The county commission had to be pursuaded to place it on the ballot," he says.

The Davie open space idea germinated about 10 years ago when Town Councilman Bud Jenkins began looking at developing a trail system. He then learned about open space projects elsewhere in the country.

"You can only buy it once. This is a golden opportunity to develop a high-quality community," he says. "The property value of everybody will go nowhere but up."

Broward County Commissioner Howard Forman says the county and Broward's cities have preserved some open space, such as West Lake in Hollywood, Markham Park in Sunrise, Tree Tops Park in Davie, and C.B. Smith Park in Pembroke Pines. He likes the idea of setting aside tracts of land to leave them as they are.

"There is always a need for a place that you got away to as a boy," Forman says.

Comparing Broward to counties in Colorado is like comparing apples and oranges to Broward Commissioner Nicki Grossman.

"We're not buying vistas here. We're buying peace and quiet. Open space is a reminder of the past, something to refresh your memory, not something the eye can see, but something the soul can appreciate," she says.

Grossman says Hollywood residents approved a $7.5 million bond issue in November 1980 to buy the Hollywood Golf Course and Country Club and preserve it as a golf course after a developer proposed building highrises on the links.

"The citizens in Florida have been doing it for some time. We have the Save Our Coast and S[illegible] Our Rivers programs," she say[illegible]

Branca says Miramar is cons[illegible]ering preserving an oak hamm[illegible] near its southern border. "We'd l[illegible] to keep it in its natural state," [illegible] says.

Pembroke Pines officials h[illegible] worked out an agreement with [illegible] developer of Chapel Trail to p[illegible] serve 500 acres at the north[illegible] corner of the proposed residen[illegible] and industrial development a[illegible] U.S. 27. The preserve will be de[illegible]ed to the city to buffer Chapel T[illegible] from a proposed Broward lan[illegible] north of Sheridan Street, and [illegible] protect wetlands. In addition [illegible] 45,000-square-foot tract will be p[illegible]served where Indian artifacts h[illegible] been found.

"Open space sounds great on t[illegible] surface," says Pembroke Pi[illegible] Mayor Charles Flanagan. "It's [illegible] great idea providing the people l[illegible]ing here are willing to pick up t[illegible] tab. All these things have a t[illegible]dancy to cost money."

Bud's Goal: Make Davie 'Oasis Of Green'

With boots, blue jeans, a five-gallon hat and a soft southern drawl, Bud Jenkins fits the country image the Town of Davie is desperately trying to maintain

As promotions man for 5 Star Rodeo, which offers up monthly rodeos at the Davie Arena--the only such shows in the county--he is a lover of horses and wide open spaces

He doesn't want to see the town eaten up by developers turning lush green land into condos

"Once it's [the land] developed, it can't be bought," Jenkins said "You can only buy it once

"I want Davie to be an oasis of green surrounded by a sea of cement in the county "

Town Administrator Irv Rosenbaum and the Town Council agree.

Last week during a press conference Rosenbaum and Jenkins unveiled a proposal to do just that. Called the Open Space program the goal is to accumulate 1,000 to 2,000 acres of open space, mostly orange groves, forests, pine ridges and other undeveloped areas and preserve it

"The idea came up several years ago when Bud was interested in having horse trails throughout the town," Rosenbaum said

Town councilmembers Wednesday night liked the Open Space proposal and gave Rosenbaum the green light to proceed with preservation of open space

There are two parts to the proposal "Roadscape" and "Parkscape "

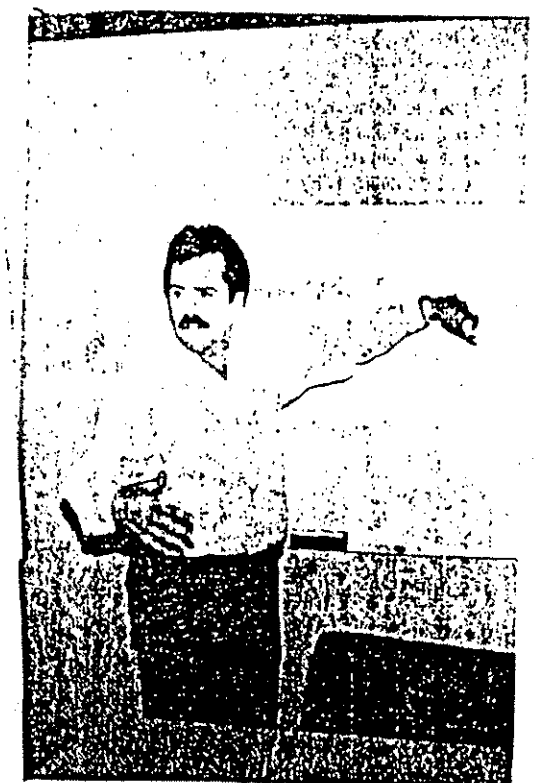
"Roadscape" proposes planting trees along the roads and other open spaces that will connect with "Parkscape" which will be a series of passive parks complete with gazebos, lakes, bicycle paths, and of course, horse trails

"This is a golden opportunity to preserve a developing area ..and develop a high quality community," Rosenbaum said. "We don't need to develop every corner of the town And the cost to [town] taxpayers would be almost negligible "

The central and western portion of Davie is earmarked for the program The land affected is a region east of I-75, west of Pine Island Road, south of Southwest 14 Street and north along Orange Drive

Rosenbaum said the town has enough industrial and commercial development in the eastern and nothern portion of the town to cover costs of the lower density western and central areas

The project will be an on going one, without a total cost or a timetable, Rosenbaum said



SHOWING THE CONCEPT.. Davie Town Administrator Irv Rosenbaum discusses "Roadscape" and "Parkscap

American Greenways

HTF Executive Director, George Cardinet, was one of three members of the President's Commission, Management and Conservation Team, who submitted papers from which the Greenways proposal was distilled. Cardinet's paper follows:

Greenline parks, beltways and senic countrysides are a concept literally as old as the hills.

> Psalms 121-1 "I will lift up mine eyes to the hills from whence cometh my help."

Man since the advent of history has been searching for new horizons, new dimensions externally and internally, concepts and mediums that foster, satisfy and fulfill this primal or instinctive urge.

The grid of development while fundamental to order introduces an element contrary to the searching nature of man.

The Army Corps, tampering with nature, straightened out the beautiful meandering Kissimee River in Florida excessively draining the contiguous wetlands. This dried up land and ground water, delivering the latter in a flood downstream. They are now engaged in restoring the river to its natural course and function. This analogy proves the efficacy of expediting traffic by freeways.

However greenbelts, parkways, trails and scenic countrysides relieve the unnatural "grid" of the urban scene. Man, the creator and habitant of the scene, to escape from the perversion of his nature must literally lift up his eyes to the hills...greenbelts.

Just as we require "freeways" to expedite traffic, we require greenbelts, parks and open space to expedite the preservation of the nature of Man.

The question is asked: "How important is the greenbelt idea?" I would respond, "How important is the preservation of the nature of Man?" Is it not prudent and in the national interest for man to reside in the tranquility of his nature through the medium of greenbelts? Trails, paths and bicycle ways are the normal component of greenbelts.

It is and should be axiomatic "that trails begin where the people live." The old concept was for parks and open space to be specimens for visitation rather than, as today enlightened planning dictates, a component of an integrated community. Thine eyes cannot be "lifted unto the hills" unless the hills are visible.

Greenline parks and beltways can be dual purpose and contain within them a traffic element. Traffic is expedited as well as recreation and acquisition administration and maintainance costs minimized.

Greenbelts such as the Forest Preserves around Chicago have proven a social, recreational and economic boon. Contiguous property values are enhanced.

The East Bay area of California now comprising over 40 parks governed by a master plan which projects their linking by trails which are in themselves linear parks serves as an example of breaking up development with greenbelts. The administrative agencies are brought in intimate contact with the neighborhoods a situation not common under other concepts.

The barriers to fuller realization from implementation of greenbelt, open space, park and trail concepts besides the perverseness of some is the lack of communication, information, creativeness, initiative and adequate administrative tools. The latter include a general plan with recreational element and a park dedication ordinance.

The general plan sets forth the broad concepts of area development and the infrastructure it will require. Thus when development comes along it is required to accomodate the planned infrastructure which should include parks and open space. The key to implementation is the Park dedication ordinance.

The park dedication ordinance, recognizing the implicit recreational needs of a community, prescribes a formula requiring development to contribute cash or land in lieu of a contribution to realize said recreational needs. This ordinance concept has been sustained by the United States Supreme Court.

Developed communities that have neglected or belatedly recognized the imperative of these concepts to the tranquility of man require to have an opportunity, in part, to recover. Remnants of old canal systems which abound in the east and former agricultural lands, abandoned rail-road right of ways and utility corridors all are potentials. Redevelopment should conform to a general plan which includes park and open space elements. With these elements in the general plan a community can eventually be made over. Time, rather than immediacy should be the motivation. Time, patience and vision can insure realization. All of us in our lifetime have seen the razing of the old and building of the new. Unfortunatly in most cases shortsightedness has not foreseen the potential.

Yes, we need regional and national landscape conservation strategies. They need not be compulsory. But with communication, education and wisdom of concept the nature of man will ultimately make them compelling.

Our help cometh from the hills

SATURDAY**FOCUS**

Western cities look at preserving room to roam

Sun Tattler - 6/27/87

By Bob French
Sun-Tattler staff

Davie's vision of preserving tracts of its farmland, orange groves, pine ridges and other areas as open space, a new idea to Broward, is intriguing officials in Pembroke Pines and Miramar whose cities are facing a growth explosion.

"I think it's unique," says Pembroke Pines Commissioner Ira Corliss. "I'd like to see how that will function. It might be an excellent example of preserving the environment and the amenities so many of us moved west for."

But they're not sure about the cost of acquiring territory for open space, an expense Davie Administrator Irv Rosenbaum says can be managed without a large tax increase.

Open space would go beyond obtaining land for parks and recreation, as cities do now from developers, to preserving tracts as they now are, he says.

"It's fantastic. Who died and left him money?" says Miramar Mayor Frank Branca. "It's wonderful. If he comes up with something that makes sense, I'd copy him. It would probably be the greatest thing to happen to South Florida."

The idea isn't new to other parts of the country. But it has cost money.

Boulder, Colo., a town of 80,000 nestled against the Front Range of the Rocky Mountains, embarked on an open space program in 1967.

•please see SPACE, 2A

Davie plan to control growth due

Goal is to preserve town's natural beauty

By KIMBERLY LIFTON
Staff Writer

DAVIE — Town officials, fearing that development will destroy the town's rural character, have devised a comprehensive plan to preserve some land in its natural state.

Town Administrator Irv Rosenbaum said he will unveil a program on Wednesday to preserve between 1,000 to 2,000 acres of natural land in a 12-square-mile area west of Southwest 100th Avenue.

Orange groves, pastures and horse trails are scattered throughout the western fringes of this 42-square-mile town. And officials said the program is needed to prevent the natural beauty of the agricultural land from becoming a thing of the past when developers set sights on it.

"If we don't preserve it, we will regret it," said council member Frank Cannata. "People move here to establish a certain lifestyle. We have to give it to them."

Added Rosenbaum, "The big danger out here is overdevelopment."

His goal is to provide better planning and avoid anymore piecemeal development in Davie.

Town Council members, county planners and environmentalists hailed the program. But some environmentalists said such a program, thought to be the only one of its kind in the county, will not work without full dedication from the town.

"It is an admirable thought if they can pull it off," said Don Stone, a Broward County environmental planner. "It is a worthy undertaking. Everyone seems to want to do this, but it is hard to execute."

The town, which expects to have an ultimate population of 90,000, is 64 percent undeveloped. Most of that land is in the western section. The part of town east of

SEE DAVIE /5B

DAVIE

Sun Sentinel 3/14/87

FROM PAGE 1B

Davie plan to control growth due

Southwest 100th Avenue is nearly developed.

Twelve of the remaining 30 square miles in the county that are zoned agricultural are in Davie, county planners say.

"Davie still has ample open land and time to plan," Rosenbaum said. "We must act now to soften the impact of Interstate 595 and increasing development pressures in town."

Mayor Joan Kovac said the program would be hard to achieve because of the big movement toward development, but would be well worth it.

"This would give us a tool to overcome the hard battle of the push for development," Kovac said.

Officials want to keep Davie's natural beauty that includes orange groves, pastures and horse trails.

Rosenbaum's plan calls for the town to acquire land in a target area and legally stop development there. He said the town could buy the rights to develop property, issue bonds to finance development and charge impact fees to developers.

Rosenbaum, who said he will ask the Town Council on Wednesday if staff can begin implementing the program, said he hopes the program will be under way next month.

THE SUN-TATTLER

Davie adopts plan to save open land

By Bob French
Sun-Tattler staff 6/11/87

DAVIE — To preserve its country atmosphere amid the crush of development in Broward, town officials are embarking on a plan to set aside tracts of open space in a 12-square-mile area.

The plan is the first of its kind in South Florida, said Town Administrator Irving Rosenbaum. Town council members Wednesday approved adding the concept to the city's comprehensive plan.

"We don't need to develop every corner of town," he said.

While he doesn't have a total cost or a timetable for the project, Rosenbaum said the effect on the town's taxpayers would "be almost negligible."

"The cost will be spread out over many years," he said.

His initial goal is to integrate 1,000 to 2,000 acres of mostly undeveloped territory, such as citrus groves, forests, pine ridges, into a network of parks, trails and roadside landscaping throughout central and western Davie. Those acres, in a region east of I-75, west of Pine Island Road, south of Southwest 14th Street and north of the town limit along Orange Drive and Sheridan Street, would be purchased in about three to five years, Rosenbaum said.

Acquiring open space can be accomplished in several ways, he said. The city can purchase development rights to farms and orange groves, allowing it to be used for agriculture but not for development. Development rights could be transferred from one tract to another. Money from impact fees charged to developers and from government grants could be used to purchase property.

"This is a golden opportunity to develop a high quality community," Rosenbaum said.

The open space idea originated about 10 years ago when Town Councilman Bud Jenkins began looking at developing a trail system. Jenkins then learned about open space projects in other cities around the country.

"We could be an island of green in a sea of asphalt and concrete," he said. "This thing is working throughout the U.S. Once it's gone, it's gone."

Rosenbaum said the city has enough industrial and commercial development in its eastern and northern sections, and a strong tax base to cover the costs of the town's services without developing the lower-density western and central areas. By preserving the land, the town's property values would increase, strengthening its tax base, he said.

Davie embraces proposal to buy land for preservation

By CHRIS MURRAY
Staff Writer

DAVIE — Picture this: A dozen acres of wooded area connected with bicycle trails and tree-lined paths, serenity amid the chaos of multifloored buildings and connecting highways.

That's what Town Administrator Irv Rosenbaum on Wednesday night asked residents and Town Council members to picture by 1990, when he hopes the town will own 1,000 acres of undeveloped land preserved under the Open Space program.

"When I thought about this about 10 years ago, I said we could be an island of green in a sea of concrete and asphalt, which is what Broward County will be by the time they get done," Council member Bud Jenkins said. "This doesn't require a lot of maintenance or a lot of financial investment."

The goal of the program is to accumulate 1,000 to 2,000 acres of open space west of Southwest 100th Avenue to preserve for its natural beauty, Rosenbaum said.

The town already has received a grant to buy the Oak Ridge parcel of the Belcher Tract west of Pine Island Road.

"By removing 12 acres [from development] we will be lowering the build-out population," Rosenbaum said. "To have a town economically viable you don't need to develop all your land."

The Open Space proposal will connect the land, not engulf it, he said.

"This is a golden opportunity to preserve a developing area," Rosenbaum said. "You can only buy it once. Once it's developed it can't be bought."

Council members agreed and lavished praise on the town's staff members before authorizing them to proceed with preservation of open space.

Two parts of the proposal, "Parkscape," and "Roadscape," will use landscaping to preserve a serene atmosphere in the town, Rosenbaum said.

"Roadscape" calls for the development of roadside nurseries, planting trees along the streets, and other open spaces.

The Arvida Corp. has already begun a similar program in the Weston and Bonaventure areas west of Davie, Rosenbaum said.

"Roadscape" will connect "Parkscape," which will be a series of passive parks complete with lakes, bicycle and bridle paths and gazebos, he said.

The town is already working on the Visions 2000 project to enhance the quality of life in the town by the year 2000. Although the Open Space project is separate, the two will intertwine when completed.

RESOLUTION NO. R-87-281

A RESOLUTION OF THE TOWN OF DAVIE, FLORIDA, AUTHORIZING A STRAW BALLOT QUESTION REGARDING THE ESTABLISHMENT OF A PROGRAM FOR THE ACQUISITION AND PRESERVATION OF GREENSPACE.

WHEREAS, the Town Council wishes to place on the ballot of the general election to be held on March 8, 1988, a straw ballot question regarding establishment of a program for the acquisition and preservation of Greenspace; and

WHEREAS, the Town Council also wishes to include natural areas such as oak ridges and wetlands, citrus groves, parks and recreational areas in this Greenspace program.

NOW THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF DAVIE, FLORIDA:

SECTION 1. That the following question be placed on the ballot of the March 8, 1988 general election as a straw ballot question:

"SHOULD THE TOWN OF DAVIE ESTABLISH A PROGRAM FOR ACQUIRING AND PRESERVING "GREENSPACE" INCLUDING NATURAL AREAS SUCH AS OAK RIDGES AND WETLANDS, CITRUS GROVES, PARKS AND RECREATIONAL AREAS?"

SECTION 2. The form of ballot for the election is attached hereto as Exhibit "A".

SECTION 3. This Resolution shall take effect immediately upon its passage and adoption.

PASSED AND ADOPTED THIS 28th DAY OF December, 1987.

Mayor/Councilman

Attest:

Asst Town Clerk Barbara L. Bergamini

APPROVED THIS 28th DAY OF December, 1987.

APPENDIX IV - 4B

OPEN SPACE PROGRAM

Should the Town of Davie establish a program for acquiring and preserving **"GREENSPACE"** including natural areas such as oak ridges and wetlands, citrus groves, parks and recreational areas.

☐ YES

☐ NO

GENERAL ELECTION
MARCH 8, 1988

///

WE HEREBY CERTIFY THE RESULTS FOR THE TOWN OF DAVIE GENERAL ELECTION, MARCH 8, 1988.

TOTAL BALLOTS CAST 5755

COUNCILMAN - DISTRICT 1

KATHRYN "KATHY" COX 3507 VOTES

BETTY B. ROBERTS 1906 VOTES

COUNCILMAN-AT-LARGE

FRANK J. CANNATA 3843 VOTES

R. WARREN MEDDOFF 1284 VOTES

OPEN SPACE PROGRAM

Should the Town of Davie establish a program for acquiring and preserving "GREENSPACE" including natural areas such as oak ridges and wetlands, citrus groves, parks and recreational areas?

YES 5137 VOTES

NO 308 VOTES

DAVIE CHARTER AMMENDMENT

Should Section 11 (A) of the Davie Charter be ammended to provide changes to the geographical boundaries of the four (4) council districts from which council members are elected in accordance with Ordinance No. 88-6 of the Town of Davie which contains the exact description of said boundaries both before and after the proposed ammendment.

YES 3760 VOTES

NO 1266 VOTES

BROWARD COUNTY CANVASSING BOARD

CHAIRMAN

SUPERVISOR OF ELECTIONS

COUNTY COMMISSIONER

SAMPLE BALLOT

OFFICIAL BALLOT - GENERAL ELECTION
TOWN OF DAVIE
MARCH 8, 1988

COUNCILMAN DISTRICT 1 VOTE FOR ONE	KATHRYN "KATHY" COX	97 →
	BETTY B. ROBERTS	98 →

COUNCILMAN AT-LARGE VOTE FOR ONE	FRANK J. CANNATA	100 →
	R. WARREN MEDDOFF	101 →

OPEN SPACE PROGRAM

Should the Town of Davie establish a program for acquiring and preserving "GREENSPACE" including natural areas such as oak ridges and wetlands, citrus groves, parks and recreational areas?

YES	105 →
NO	106 →

DAVIE CHARTER AMENDMENT

Should Section 11(A) of the Davie Charter be amended to provide changes to the geographical boundaries of the four (4) council districts from which council members are elected in accordance with Ordinance No. 88-6 of the Town of Davie which contains the exact description of said boundaries both before and after the proposed amendment?

YES	112 →
NO	113 →

SAMPLE BALLOT

OFFICIAL BALLOT - GENERAL ELECTION
TOWN OF DAVIE
MARCH 8, 1988

COUNCILMAN DISTRICT 1 VOTE FOR ONE	KATHRYN "KATHY" COX	97 →
	BETTY B. ROBERTS	98 →

COUNCILMAN AT-LARGE VOTE FOR ONE	FRANK J. CANNATA	100 →
	R. WARREN MEDDOFF	101 →

OPEN SPACE PROGRAM

Should the Town of Davie establish a program for acquiring and preserving "GREENSPACE" including natural areas such as oak ridges and wetlands, citrus groves, parks and recreational areas?

YES	105 →
NO	106 →

DAVIE CHARTER AMENDMENT

Should Section 11(A) of the Davie Charter be amended to provide changes to the geographical boundaries of the four (4) council districts from which council members are elected in accordance with Ordinance No. 88-6 of the Town of Davie which contains the exact description of said boundaries both before and after the proposed amendment?

YES	112 →
NO	113 →

RESOLUTION NO. R- 88-225

A RESOLUTION OF THE TOWN OF DAVIE, FLORIDA, CREATING AN OPEN SPACE ADVISORY COMMITTEE IN THE TOWN.

WHEREAS, The Town of Davie has an Open Space program which provides for the preservation of green areas, and

WHEREAS, public participation is important in the planning process for the open space plan, and

WHEREAS, it is in the best interest of the Town of Davie to form a committee to provide public input to the Town's Consultant Planning Team.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF DAVIE, FLORIDA:

SECTION I. There is hereby created an Open Space Advisory Committee composed of ten (10) members. Each councilmember shall appoint two (2) members to said committee.

SECTION 2. The Open Space Advisory Committee members shall be appointed for a one year period, and shall provide input to the Town's Consultant Planning Team.

SECTION 3. This resolution shall take effect immediately upon its passage and adoption.

PASSED AND ADOPTED THIS 7th DAY OF SEPTEMBER, 1988.

MAYOR/COUNCILMAN

ATTEST:

TOWN CLERK

APPROVED THIS 7th DAY OF SEPTEMBER, 1988.

RESOLUTION NO. R-89-34

A RESOLUTION OF THE TOWN OF DAVIE, FLORIDA, CALLING FOR A REFERENDUM REGARDING THE ISSUANCE OF GENERAL OBLIGATION BONDS BY THE TOWN OF DAVIE IN AN AMOUNT NOT TO EXCEED TEN MILLION DOLLARS FOR THE PURPOSE OF ACQUIRING, IMPROVING AND PRESERVING UNDEVELOPED REAL PROPERTY FOR THE TOWN'S OPEN SPACE PROGRAM; PROVIDING FOR PUBLICATION OF NOTICE OF SAID REFERENDUM; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Town Council of the Town of Davie, Florida, wishes to acquire certain undeveloped real property located within the boundaries of the Town in order to create a program of open space for preservation as passive recreational areas and to construct bike paths, horse trails and hiking trails, provide for roadside landscaping and take other action necessary in connection therewith (the "Open Space Program"); and

WHEREAS, the Town Council wishes to seek approval of the electors for the issuance of general obligation bonds in an amount not to exceed $10,000,000 for the purpose of acquiring, improving and preserving undeveloped real property for the Open Space Program; and

WHEREAS, the Constitution of the State of Florida, Article VII, Section 12, as well as Florida Statute 100.211 and the Town of Davie Charter, Section 12 (T), authorize and require a voter referendum for the approval of the issuance of general obligation bonds by the municipality.

NOW,THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF DAVIE, FLORIDA:

SECTION 1. Subject to a referendum provided for herein and pursuant to subsequent proceedings of the Town, the Town will issue general obligation bonds in an aggregate principal amount not exceeding TEN MILLION DOLLARS ($10,000,000), issuable in one or more series, maturing at such time or times not exceeding thirty (30) years from their date or dates of issuance and bearing interest at a rate or rates not exceeding the legal maximum rate of interest, in each case as shall be determined by resolution of the Town prior to the time of sale thereof ("Bonds"). Such Bonds shall pledge the full faith and credit of the Town and be payable from ad valorem taxes levied by the Town without limit as to rate or amount on all taxable property within the Town. The Bonds will be issued to provide funds which, together with other available funds, will enable the Town to acquire, improve and preserve undeveloped real property for the Open Space Program (the "Project").

SECTION 2. That the Town Council does hereby call a bond referendum pursuant to Article VII, Section 12 of the Constitution of the State of Florida, Florida Statute 100.211 and Section 12 (T) of the Charter of the Town of Davie, to be held in conjunction with the general election on March 14, 1989 for the purpose of determining whether the qualified electors of the Town approve the issuance of the Bonds to finance, together with other available funds, the cost to the Town of the Project.

Said Referendum shall be held at the same polling places in the several precincts, respectively, in the town as the polling places for the general election to be held on the same day. The inspectors and clerks who shall conduct said Referendum ("Election Officials") shall be the same as those selected and appointed for the general election. The polling places for the Referendum shall be open from 7:00 a.m. to 7:00 p.m. on the same day. In ac-

cordance with the Constitution and the laws of the State of Florida, all qualified electors of the Town shall be entitled and permitted to vote in the Referendum.

SECTION 3. That the following bond referendum question be placed on the ballot of the March 14, 1989, general election:

> "Shall the Town of Davie issue general obligation bonds not exceeding $10,000,000, issuable in one or more series, maturing not later than 30 years from their issuance dates, bearing interest not exceeding the maximum allowable by law, payable from ad valorem taxes levied by the Town, to acquire open space lands within the boundaries of the Town and to construct trails, provide for landscaping and take other actions necessary in connection therewith?"

SECTION 4. The form of ballot for the election is attached hereto as Exhibit "A".

SECTION 5. The Town Clerk is hereby authorized and directed to deliver copies of the Ballot set forth herein to the Supervisor of Elections of Broward County ("Supervisor") for printing; to ascertain that the wording of the Ballot is correctly printed thereon; and to ensure that any reprinting, if necessary, is ordered by the Supervisor, all within such time as is necessary to allow compliance with any mailing requirements imposed by law in connection with absentee ballots.

SECTION 6. Absentee ballots containing the questions set forth in Section 3 above shall be prepared for the use of absent, qualified electors entitled to cast such ballots in the Referendum in accordance with Chapter 101, Florida Statutes.

SECTION 7. The referendum shall be held and conducted in the manner prescribed by law for holding general elections in the Town. The Election Officials at each polling place in the several precincts, respectively, shall prepare and file returns of such Referendum and deliver the same to the Broward County Canvassing Board for canvassing in the manner provided by applicable law. Said returns shall be certified to the Town Council of the Town ("Council"), which shall declare the results thereof and record the same in its minutes along with the number of qualified electors of the Town who voted at the Referendum on each question proposed and the number of votes cast for and against approval of the Ballot question. The Council shall certify the results of said Referendum to the Florida Department of State in the manner provided by applicable law.

SECTION 8. If a majority of the votes cast by qualified electors of the Town at the Referendum approve the Ballot question concerning the Project, the Town shall be authorized to issue the Bonds in the manner provided herein. The bonds may be issued all at one time or in part from time to time as the Town may in its discretion hereafter determine by subsequent resolution.

SECTION 9. The Supervisor is hereby authorized and requested to make up and certify a list of the names of all qualified electors residing in the Town. A certified copy of such list shall be furnished to the Town Clerk and filed among the records of the Council.

SECTION 10. The Town Clerk shall prepare a notice of the Referendum in the manner required by law and cause a copy of this Resolution to be published in full, as part of the Notice of Referendum, together with an appropriate caption in such form as the Town Clerk shall determine in the Sun Sentinel/Fort Lauderdale News, a newspaper of general circulation in the Town, once in the fifth and third weeks prior to the week in which the Referendum is to be held, the first publication to be not less than 30 days prior to the date of such Referendum. The Town

Clerk shall secure from the publisher of said newspaper an appropriate affidavit of proof that this Resolution has been duly published, and said affidavit shall be made a part of the record of the Council.

SECTION 11. In the event that any word, phrase, clause, sentence or paragraph hereof shall be held invalid by any court of competent jurisdiction, such holdings shall not affect any court of competent jurisdiction, such holdings shall not affect any other word, clause, phrase, sentence or paragraph hereof.

SECTION 12. This Resolution shall take effect immediately upon its passage and adoption.

PASSED AND ADOPTED THIS 26TH DAY OF JANUARY, 1989.

Mayor/Councilman

Attest:

Barbara Bergamini

Asst Town Clerk

APPROVED THIS 26th DAY OF January, 1989

EXHIBIT "A"

BOND REFERENDUM TO ACQUIRE OPEN SPACE LAND
FOR THE TOWN OF DAVIE

Shall the Town of Davie issue general obligation bonds not exceeding $10,000,000, issuable in one or more series, maturing not later than 30 years from their issuance dates, bearing interest not exceeding the maximum allowable by law, payable from ad valorem taxes levied by the Town, to acquire open space lands within the boundaries of the Town and to construct trails, provide for landscaping and take other actions necessary in connection therewith?

☐ FOR BONDS

☐ AGAINST BONDS

TOWN OF DAVIE
GENERAL ELECTION
MARCH 14, 1989

WE HEREBY CERTIFY THE RESULTS OF THE GENERAL ELECTION FOR THE TOWN OF DAVIE, MARCH 14, 1989:

COUNCILMAN
DISTRICT 2
(vote for one)

TOTAL BALLOTS CAST 4,179 VOTES

M. ARTHUR (ART) LAZEAR 1,509 VOTES

FRANKE McGOVERN 88 VOTES

EARL MORRALL 1,970 VOTES

AL TYLER 612 VOTES

COUNCILMAN
DISTRICT 3
(vote for one)

TOTAL BALLOTS CAST 4,182 VOTES

JOAN KOVAC 2,509 VOTES

SCOTT PLANTE 356 VOTES

GEORGE R. PROCHASKA 1,039 VOTES

J.D. (JOHN) SCISM 278 VOTES

BOND REFERENDUM TO ACQUIRE OPEN SPACE LAND FOR THE TOWN OF DAVIE

Shall the Town of Davie issue General Obligation Bonds not exceeding $10,000,000, issuable in one or more series, maturing not later than 30 years from their issuance dates, bearing interest not exceeding the maximum allowable by law, payable from ad valorem taxes levied by the town, to acquire open space lands within the boundaries of the town and to construct trails, provide for landscaping and take other actions necessary in connection therewith?

TOTAL BALLOTS CAST 3,774 VOTES

FOR BONDS 3,007 VOTES

AGAINST BONDS 767 VOTES

BROWARD COUNTY CANVASSING BOARD

Kathleen A. Kearney
COUNTY JUDGE

SUPERVISOR OF ELECTIONS

COUNTY COMMISSIONER

APPENDIX IV-5 - Recreation Sites Used for Level of Service Determination

Facility	Acreage (+)	Service Level
A.D. Griffin Park	20.0	Community
Arrowhead G. C.	30.0	Community
Berman Park	3.0	Neighborhood
C-11 Canal Bank	36.0	Community
Flamingo Elementary	5.9	Community
Hawkes' Bluff	12.5	Community
Ivanhoe Park	3.3	Neighborhood
Ivanhoe Linear Park	25.0	Community
Lange Park	5.3	Neighborhood
Lyn Mar Park	5.0	Neighborhood
Nova Middle/High	14.0	Community
Oak Hill Equestrian Park	10.0	Community
Orange Park	0.5	Neighborhood
Phase 1 Open Space	110.0	Community
Pine Island Park	38.0	Community
Potter Park	3.7	Neighborhood
Rodeo Arena	10.0	Community
Rolling Hills G.C.	35.1	Community
Shenandoah Park	17.0	Community
SW 36th Court Park	.2	Neighborhood
39th Street Ballfields	4.5	Community
Tree Tops	10.0	Regional
Veterans' Park	15.0	Community
Waterford Park	5.0	Neighborhood
Western High	20.0	Community
Total Acreage	**439.0**	

Source: Town of Davie

BOND REFERENDUM TO ACQUIRE OPEN SPACE LAND FOR THE TOWN OF DAVIE

Shall the Town of Davie issue General Obligation Bonds not exceeding $10,000,000, issuable in one or more series, maturing not later than 30 years from their issuance dates, bearing interest not exceeding the maximum allowable by law, payable from ad valorem taxes levied by the town, to acquire open space lands within the boundaries of the town and to construct trails, provide for landscaping and take other actions necessary in connection therewith?

TOTAL BALLOTS CAST 3,774 VOTES

FOR BONDS 3,007 VOTES

AGAINST BONDS 767 VOTES

BROWARD COUNTY CANVASSING BOARD

Kathleen A. Kearney
COUNTY JUDGE

SUPERVISOR OF ELECTIONS

COUNTY COMMISSIONER

APPENDIX IV-5 - Recreation and Open Space Sites Used for Level of Service Determination

Facility	Acreage (+)	Service Level
Arrowhead G. C.	30.00	Community
Bergeron	3.2	Neighborhood
Berman Park	3.0	Neighborhood
C-11 Canal Bank	36.00	Community
Davie Elementary	5.9	Community
Flamingo Elementary	5.9	Community
Flamingo ESL	155.00	Regional
Hawkes' Bluff	12.50	Community
Ivanhoe Park	3.3	Neighborhood
Ivanhoe Linear Park	25.00	Community
Lange Park	5.3	Neighborhood
Driftwood	0.8	Neighborhood
Oak Hill Equestrian Park	10.0	Community
Orange Park	0.5	Neighborhood
Pine Island Park	38.00	Community
Pine Island Ridge ESL	101.00	Regional
Potter Park	3.7	Neighborhood
Reflections	4.5	Neighborhood
Robbins Lodge	160.00	Community
Rodeo Arena	10.00	Community
Rolling Hills G.C.	35.10	Community
Shenandoah Park	17.00	Community
SW 36th Court Park	0.2	Neighborhood
39th Street Ballfields	4.5	Community
Tree Tops	257.00	Regional
Veterans' Park	15.00	Community
Waterford Park	5.0	Neighborhood
Waverly 100	10.00	Neighborhood
Western High	20.00	Community
Westridge	46.00	Community
Wolf Lake	50.00	Community
Total Acreage	**1073.4**	

Source: Town of Davie

HOUSING ELEMENT

HOUSING ELEMENT:
TABLE OF CONTENTS

TABLE OF CONTENTS ..... V - i
LIST OF TABLES AND FIGURES ..... V - ii
INTRODUCTION ..... V - 1
ANALYSIS OF EXISTING CONDITIONS ..... V - 2
NEEDS ANALYSIS ..... V - 15
GOALS, OBJECTIVES AND POLICIES ..... V - 24
PLAN IMPLEMENTATION ..... V - 26
MONITORING AND EVALUATION PROCEDURES ..... V - 27
GLOSSARY ..... V - 28

HOUSING ELEMENT:
LIST OF TABLES AND FIGURES

TABLES	DESCRIPTION	
V-1	Types of Housing Units	V-2
V-2.1	Tenure of Owners	V-4
V-2.2	Tenure of Renters	V-4
V-3	Age of Housing Stock	V-5
V-4	Contract Rent	V-5
V-5.1	Monthly Owner Costs with a Mortgage	V-6
V-5.2	Monthly Gross Rent	V-6
V-6	Housing Value	V-7
V-7.1	Owner Costs as Percentage of Income	V-8
V-7.2	Renter Costs as Percentage of Income	V-9
V-8	Number & Percentage of Housing Units Having Interior Substandard Housing Conditions	V-10
V-9	Housing Unit Inventory	V-14
V-10	Number of Existing & Projected Households by Household Size for the Town of Davie	V-15
V-11	Number of Additional Households by Household Size Anticipated for 1989-2000	V-15
V-12	Anticipated Number of Households by Income	V-16
V-13	Projected Single-Family Housing Need in Town:1989,1994-2000	V-17
V-14	Projected Multi-Family Housing Need in Town: 1989, 1994-2000	V-18
V-15	Housing Construction Needs: 1989-1994 and 1994-2000	V-19
V-16	Amount of Vacant Land by Land Use Plan Designation & Maximum Gross Density	V-19

FIGURE	DESCRIPTION	
V-2	Location of Group Home Facilities	V-3

HOUSING ELEMENT: INTRODUCTION

The housing element is designed to provide information regarding the existing housing stock, available alternative housing facilities such as group homes and congregate living facilities, and costs of housing. The element also includes an analysis of future housing needs, based on the projected population, for the planning timeframes. This information serves as the framework for implementation of the goals, objectives and policies as set forth herein and which address the Town's commitment to meet projected housing needs. This element provides guidance to both the public and private sectors, to assist in the provision of housing for future Town residents.

HOUSING ELEMENT:
ANALYSIS OF EXISTING CONDITIONS

The Housing Element must contain specific information regarding the characteristics of housing within the Town of Davie. Specifically, the Element must describe housing according to type, whether single-family or multiple family dwellings; tenure of residents; age of housing units; the amount of rent paid for rental units; the estimated value of housing units; monthly housing cost to occupants of owned units; and the ratio of rent or cost, for owner-occupied units, to household income. The following describes each of the dwelling unit characteristics outlined above with data provided by the 1980 Census and Town-generated statistics.

As the following table indicates, at the time of the 1980 Census, multi-family residences comprised 54.8% of dwelling unit types within the Town. Single family residences comprised 40.7%, and mobile home units comprised 4.5% of the housing units.

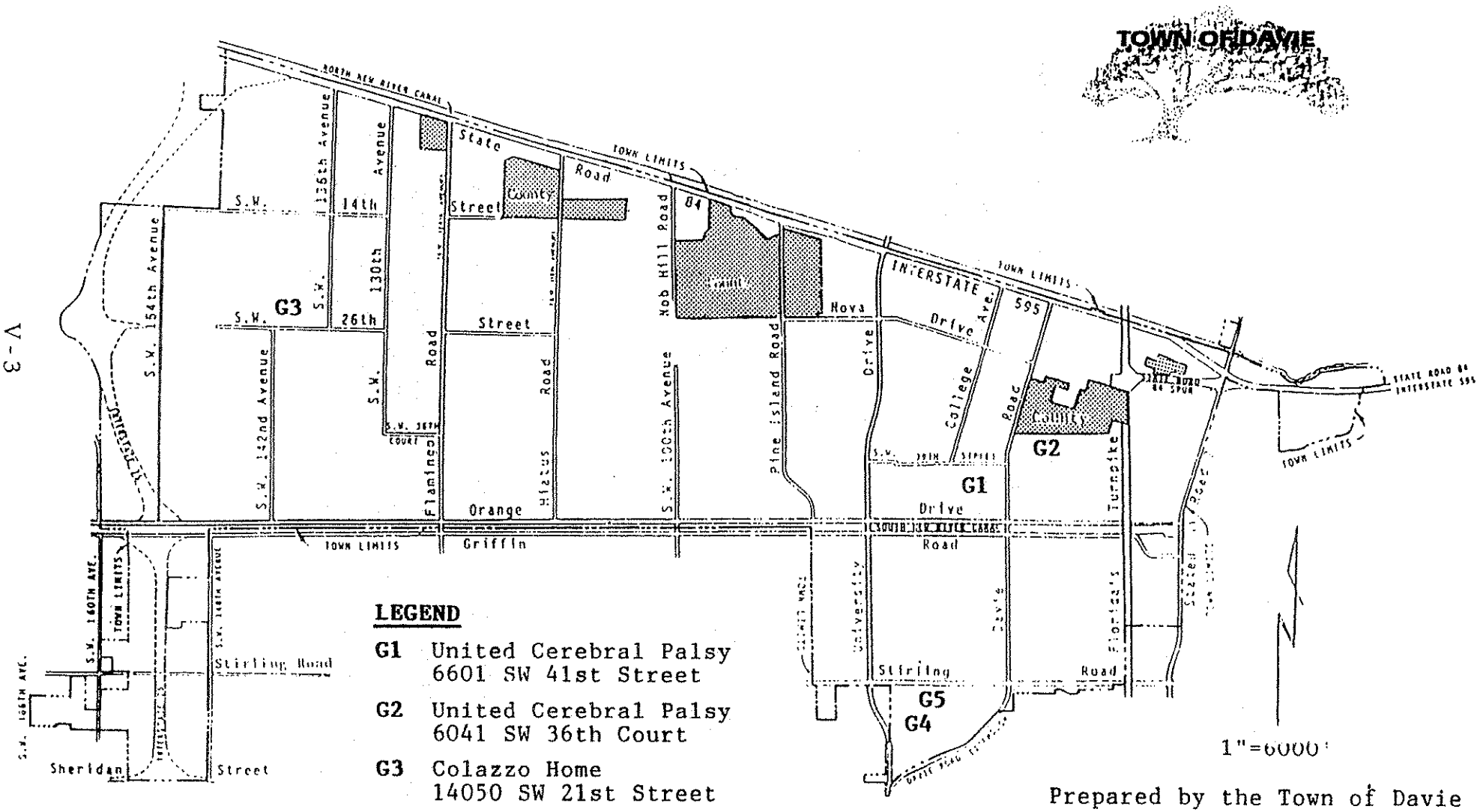
Table V-1
Types of Housing Units

Type	Town	SMSA
Single Family	3149	199,234
Multi-family	4246	253,073
Mobile Home	349	24,949
Total	**7744**	**477,256**

Source: U.S. Dept. of Commerce, Bureau of the Census; 1980

As of March 1980, 90% of the homeowners moved into their units between 1970 and 1980, with 19% moving in during the years 1970 through 1974, 42% moving in between 1975 and 1978, and 29% occupying their home between 1979 and March 1980.

LOCATION OF GROUP HOME FACILITIES



LEGEND

G1 United Cerebral Palsy
6601 SW 41st Street

G2 United Cerebral Palsy
6041 SW 36th Court

G3 Colazzo Home
14050 SW 21st Street

G4 Jones Group Home
7740 NW 40th Street

G5 Foundation for Learning
4100 NW 77th Avenue

Prepared by the Town of Davie
April, 1989

FIGURE V-2

Table V-2.1
Tenure of Owners

Date of Occupancy	Town	SMSA
1979 to March 1980	1602	49755
1975 to 1978	2313	99059
1970 to 1974	1085	76126
1960 to 1969	467	56418
1959 or Earlier	64	18372

Source: U.S. Department of Commerce, Bureau of the Census

As Table V-2.2 indicates, as of March 1980, 97% of the renters moved into the units between the years 1970 to 1980, with 5% moving in between 1970 to 1974, 38% in between 1975 to 1978, and 54% moving in between 1979 and March 1980.

Table V-2.2
Tenure of Renters

Date of Occupancy	Town	SMSA
1979 to March 1980	1078	54444
1975 to 1978	742	42379
1970 to 1974	107	13444
1969 or Earlier	45	7520

Source: U.S. Department of Commerce, Bureau of the Census

The information regarding tenure shows significant in-migration to the Town, by both renters and homeowners, between the years 1975 and 1980. At the time of the 1980 Census, 90% of the existing housing in Davie was constructed between 1960 and 1980; 17% of the residential construction occurred between 1960 and 1969, 35% between 1970 and 1974, 27% between 1975 and 1978, and 11% between 1979 and March 1980. This further corresponds to the patterns identified in the discussion of tenure.

Table V-3
Age of Housing Stock

Year Built	Town	SMSA
1979 to March 1980	931	23,546
1975 to 1978	2,246	69,505
1970 to 1974	2,897	141,187
1960 to 1969	1,433	145,406
1950 to 1959	481	76,134
1940 to 1949	85	13,696
1939 or Earlier	86	7,994

Source: U.S. Department of Commerce, Bureau of the Census

As of March 1980, there were 1885 renter-occupied units. This constitutes 24% of the total housing stock.

Table V-4
Contract Rent

	Town	SMSA
Specified renter-occupied Units	1885	115,464
Median Rent	$271	$266

Source: U.S. Department of Commerce, Bureau of the Census, 1980

According to information collected during the 1980 Census, approximately 37% of all owner occupants of mortgaged housing reported spending less than $400 per month for monthly owner costs. The median monthly owner cost was $488, as compared with a countywide expense of $389 per month.

Table V-5.1
Monthly Owner Costs with a Mortgage

Selected Monthly Owner Costs	Town	SMSA
Less than $100	0	883
$100 to $199	185	14,084
$200 to $299	225	25,330
$300 to $399	528	27,696
$400 to $599	844	38,689
$600 or More	724	23,440
Total	**2506**	**130,122**
Median	**$488**	**$389**

Source: U.S. Department of Commerce, Bureau of the Census, 1980

Of the total respondents to the Census inquiry regarding monthly renter costs, approximately 86% reported monthly costs of less than $200.

Table V-5.2
Monthly Gross Rent*

Selected Monthly Renter Costs	Town	SMSA
Less than $100	0	2,001
$100 to $149	13	4,189
$150 to $199	121	9,076
$200 to $249	168	15,776
$250 to $299	362	20,434
$300 to $349	429	18,545
$350 to $399	342	16,147
$400 or more	377	26,038
No cash rent	85	4,381
Median	$328	$312

* includes fuel and utilities
Source: U.S. Department of Commerce, Bureau of the Census, 1980

According to information supplied by owner occupants, the median reported housing value was $75,100, as compared with the County median of $60,900.

Table V-6
Housing Value

Specified Owner-Occupied Housing Units	Town	SMSA
Less than $10,000	6	623
$10,000 to $14,999	7	895
$15,000 to $19,999	23	1,739
$20,000 to 24,999	38	3,455
$25,000 to $29,999	56	4,942
$30,000 to $34,999	123	7,807
$35,000 to $39,999	122	10,287
$40,000 to $49,999	294	27,076
$50,000 to $59,999	292	26,936
$60,000 to $79,999	685	40,814
$80,000 to $99,999	453	19,995
$100,000 to $149,000	567	17,737
$150,000 to $199,999	193	4,945
$200,000 or More	122	4,591
Total	**2981**	**171,842**
Median	**$75,100**	**$60,900**

Source: U.S. Department of Commerce, Bureau of the Census, 1980

The following reflect monthly owner costs as a percentage of income as reported by census respondents. The percentages are grouped according to income ranges.

Table V-7.1
Owner Costs as Percentage of Income

Household Income of Less than $10,000	Town	SMSA
Less than 15 percent	50	4,670
15 to 24 percent	39	6,901
25 to 29 percent	25	2,831
30 percent or more	248	15,911
Not computed	12	1,390
Total	**374**	**31,703**
Median	**45.3**	**31.9**
Household Income: $10,000 to $19,999		
Less than 15 percent	131	14,996
15 to 24 percent	161	12,284
25 to 29 percent	37	5,684
30 percent or more	316	13,596
Total	**645**	**46,560**
Median	**29.1**	**21.8**
Household Income: $20,000 or more		
Less than 15 percent	692	44,271
15 to 24 percent	738	33,044
25 to 29 percent	178	7,589
30 percent or more	211	7,030
Total	**1,819**	**91,952**
Median	**17.5**	**15.4**

Source: U.S. Department of Commerce, Bureau of the Census, 1980

The following figures reflect gross rent as a percentage of household income. Again, the percentages are grouped according to household income ranges.

Table V-7.2
Renter Costs as Percentage of Income

Household Income of Less than $10,000	Town	SMSA
Less than 15 percent	—	294
15 to 19 percent	—	728
20 to 24 percent	6	1,403
25 to 29 percent	23	2,631
30 to 34 percent	15	2,766
35 percent or more	459	33,884
Not computed	100	4,681
Total	**603**	**46,387**
Median	**50+**	**50+**

Household Income: $10,000 to $19,000	Town	SMSA
Less than 15 percent	30	1,929
15 to 19 percent	40	4,961
20 to 24 percent	195	8,660
25 to 29 percent	186	8,915
30 to 34 percent	160	6,784
35 percent or more	109	9,507
Not computed	25	1,393
Total	**745**	**42,149**
Median	**27.6**	**27.7**

Household Income: $20,000 or more	Town	SMSA
Less than 15 percent	178	9,940
15 to 19 percent	178	8,612
20 to 24 percent	101	5,213
25 to 29 percent	50	2,392
30 to 34 percent	13	713
35 percent or more	—	274
Not computed	29	907
Total	**549**	**28,051**
Median	**17.3**	**17.1**

Source: U.S. Department of Commerce, Bureau of the Census, 1980

Based on several data sources, the vast majority of the housing units in the Town of Davie are structurally sound. According to the U.S. Bureau of the Census, in 1980, only a small percentage of the housing stock was substandard. Table V-8 specifies the number and percentage of housing units having interior substandard housing conditions.

Table V-8
Number and Percentage of Housing Units Having Interior Substandard Housing Conditions in the Town of Davie

Characteristic	Number of Units	%-age of Units
Units lacking complete plumbing	67	.83
Units lacking complete kitchen facilities	85	.93
Units lacking central heating	233	2.54
Units overcrowded (1.01 or more persons/room)	277	3.69

Source: U.S. Department of Commerce, Bureau of the Census, 1980

Due to the year-round warm weather, lack of central heat is not considered substandard in a South Florida dwelling unit. The total number of units having interior substandard housing conditions cannot be determined from this data. Some of the units may have more than one of these characteristics and thus be represented twice in the table. This data is somewhat useful in helping to understand the extent of the substandard housing problem. It shows that in 1980 a very small percentage of the housing stock had substandard interior housing conditions. The majority of this information, however, is not readily available at below the Census Tract level and thus determining a general location for it is hampered by the form of its presentation which identifies the specific house needing attention.

While the above information focuses on the interior of the housing unit, poor exterior conditions can also contribute to a substandard housing stock. Dr. Richard Orman, in his 1988 Redevelopment Study for the Town of Davie, identifies a substandard residential area based on demographic information and substandard housing conditions. The site he describes in his report is one of the oldest developed areas of Davie and is known as Potter's Park. The Town's Community Redevelopment Agency also targets this area in it's 1988 Redevelopment Plan as needing an improvement in its quality of housing. A field survey of this area identified a small number of housing units exhibiting exterior substandard conditions. The field check, reconfirmed in April of 1989, examined the housing units for the following:

a. Broken or missing materials in small areas of exterior wall and roof
b. Indications of foundation or roof line shifting or rotting
c. Poorly fitted or rotting doors or window sills
d. Open cracks in exterior walls
e. Porch steps unstable, unsafe or in disrepair

A house is considered substandard if it has one or more of the above characteristics. Five single family units and four duplexes were identified as substandard, pursuant to

the field study. Seventeen units, of which six are single family, three are duplexes and the remaining five are in a multifamily structure, have a badly weathered appearance but do not appear to be substandard.

There are two Public Housing facilities within the Town limits: Ehlinger Apartments, and Griffin Gardens, each of which contain 100 units. Both buildings are owned by the Broward County Housing Authority (BCHA). Tenants are required to pay a maximum of only thirty percent of their income for rent. The BCHA, through Section 8 of the Community Development Act, provides rental subsidies to 53 families living in privately owned housing within the Town. Additionally, the owners of Alpine Village, to be known as El Jardin, a development containing 233 units, is taking advantage of a federal program monitored by the BCHA. The development is benefiting from a Section 8 moderate rehabilitation program. Sixteen units have been upgraded. The remaining units will be finished by February of 1990. As the units are completed, low income families move in and a subsidy is associated with the unit instead of the family. If the family moves, the potential to subsidize a family remains with the unit.

A residential care facility providing 80 units for the elderly and handicapped is planned. Funding is to be provided from Section 202 (U.S. Housing and Urban Development or H.U.D.) money and from donations raised by the Jewish Federation of South Broward.

According to HRS, there are four licensed group homes within the Town of Davie; one home, sponsored by the Foundation for Learning, is under construction.

Name of Facility	Address	Capacity
United Cerebral Palsy	6601 SW 41 St.	15
United Cerebral Palsy	6041 SW 36 Ct.	8
Colazzo Home	14050 SW 21 St.	12
Jones Group Home	7740 NW 40 St.	6
Stirling Road Apartments*	4100 NW 77 Ave.	15

*under construction
Source: Town of Davie

According to the 1988 Broward County Housing Unit Inventory, Mobile Homes constitute 4% of the housing stock in the County. Mobile Homes constitute 17% of the housing stock in Davie, according to the Town's Data Base.

Generally the majority of the mobile home parks are located in the northwest portion of the Town, though mobile home parks exist elsewhere within the Town. Rental Mobile Home Parks are subject to licensure by HRS through the Broward County Public Health Department. According to the County Public Health Department, the following mobile home parks are licensed.

Name of Park	Address	Number of Units
The Anchorage	4631 SW 73rd Ave.	8
Cheron Village (Tropical Park)	13202 SW 9th Ct.	145
The Dell Trailer Park	4633 SW 73rd Ave.	14
Driftwood Acres Mobile Home Park	4800 Griffin Road	54
Modern Mobile Home Court	4855 SW 82nd Ave.	80
Moonlight Ranch Mobile Home Park	4651 Griffin Road	73
Orange Park Club	841 SW 133rd Ave.	68
Orange Park Club Sec. II	900 SW 133rd Ave.	--
Palm Haven Mobile Homes	4791 SW 82nd Ave.	79
Paradise Village	12850 St. Rd. 84	473
Ponderosa Mobile	4701 SW 73rd Ave.	20
Riverside Mobile Home Park	4615 Griffin Rd.	45
Seminole Health Club	3800 SW 142nd Ave.	50
Stirling Road Mobile Home Pk	5401 Stirling Road	65
Sunshine Village	13453 SW 5th St.	358
Swaying Palms	4851 Griffin Road	80
Western Hills Estates	13000 SW 5th Ct.	380

Source: Town of Davie

The following Mobile Home Parks contain individually owned units and lots:

Name of Park	Address	Number of Units
Alander Subdivision	650 SW 136th Ave.	34
Carlan Mobile Home Park	13400 SW 7th Pl.	76
Garden Park Estates	13001 SW 7th Ct.	38
Grove Park Estates	1500 SW 130th Ave.	32
Grove Park Estates Addition	12851 SW 14th Pl.	13
Orange Blossom Mobile Home Court	6651 SW 45th St.	101
Saga Estates	13200 SW 7th Pl.	111
Cinnamon Tree Estates	700 SW 134th Way	20

Source: Town of Davie

Currently, there is one historically significant house listed on the Florida Master Site File, but none on the National Registry of Historic Places. The site listed is the Wray Everglades Museum. This museum emphasizes the history of South Florida and the Everglades and is the former residence of Floyd Wray. A map showing its location is provided in the Future Land Use Element.

The total number of housing units in Davie has significantly increased since the 1980 Census. According to the Town of Davie Data Base, the estimated total number of units within the Town is 15,726. This shows an increase of 7962 dwelling units, or 102% growth, in the total number of dwelling units within the Town as determined between the period of March 1980 and October 1987.

Table V-9
Housing Unit Inventory

Type of Unit	1980	1987	% Growth
Single Family	3149	5522	75%
Multi Family	4266	7432	74%
Mobile Home	349	2772	690% *
Total	**7764**	**15726**	**102%**

* The significant increase in mobile home units is primarily due to a major annexation that occurred in 1981.

Source: Town of Davie Data Base

Currently, approximately 55% of the existing dwelling units are single-family, and 48% are multi-family. However, the recent building trend for 1986-1988 shows that 79% of the new construction is single-family and 21% is multi-family. Assuming this trend continues the percentage of single-family will slowly increase over the next 10 years.

HOUSING ELEMENT:
NEEDS ANALYSIS

In order to help insure that the appropriate type of housing, in terms of size and cost, will be available to meet future needs it is important to ascertain what that future need will be. A first step in doing that is projecting the number of households by size. In general, it can be assumed that the demand for the size of the dwelling unit will vary with the number of people in a household.

Based on the population projections prepared by Broward County, the number of households and distribution of household size was estimated. This information is presented in Table V-10.

Table V-10
Number of Existing and Projected Households by Household Size for the Town of Davie

Year	1/hh	2/hh	3/hh	4/hh	5/hh	6/hh	Total
1989	2,763	5,277	3,195	2,538	1,126	719	15,618
1994	3,154	5,937	3,678	2,911	1,326	882	17,888
2000	3,643	6,732	4,194	3,270	1,525	1,076	20,440

Source: Town of Davie and Broward County Office of Planning

From this information the number of additional households by household size is presented in Table V-11. As can be seen, the number of households between 1989 and 1994 will increase by about 2,270, and from 1994 to the year 2000, by 2,552. Also, the smaller households will predominate while the number of new large households will, for the most part, actually decrease from 1994 to 2000 as compared with 1989 to 1994.

Table V-11
Number of Additional Households by Household Size Anticipated for 1989-2000: Town of Davie

Years	1/hh	2/hh	3/hh	4/hh	5/hh	6/hh	Total
1989-1994	391	660	483	373	200	163	2,270
1994-2000	489	795	516	359	199	194	2,552

Source: Town of Davie and Broward County Office of Planning

The anticipated number of household by income is detailed in Table V-12. The projections were developed by multiplying the number of households by income group percentages derived from the 1980 Census. It also reflects the assumption that there will be no change during the 20 years in the percentage of residents within each of the income levels.

Table V-12
Anticipated Number of Households by Income for the Town of Davie

Year	Income Range	No. of Households
1989	Less than $5,000	1420
	$5,000 - 14,999	3919
	15,000 - 24,999	4240
	25,000 - 49,999	4979
	50,000 or more	1060
1994	Less than $5,000	1626
	$5,000 - 14,999	4488
	15,000 - 24,999	4857
	25,000 - 49,999	5703
	50,000 or more	1214
2000	Less than $5,000	1858
	$5,000 - 14,999	5128
	15,000 - 24,999	5549
	25,000 - 49,999	6516
	50,000 or more	1388

Source: Town of Davie and Broward County Office of Planning

As depicted in Table V-12, there shall be a need for a total of almost 20,500 dwelling units by year 2000. In addition to household size and income, anticipating the demand for renter and owner-occupied housing is desirable. According to the 1980 Census, 26 percent of the housing units in Davie were renter-occupied and 74 percent were owner-occupied. Determining the future demand for single-family and multi-family units is also a key part of anticipating the need for housing. According to the Town of Davie Data Base in 1987 and as reflected in Table V-9, 35% of the dwelling units were single-family, 47% were multi-family and more than 17% were mobile homes. Between 1980 and 1987 the number of mobile homes increased by 690%, from 349 to 2,772, primarily due to annexations. It is not assumed that the demand for mobile homes will match they 1980-1987 increase as this was based on the redelineation of the Town's boundaries rather than actual demand over time within the same geographic area. In Broward County from 1980-1988, the number of mobile homes increased a total of approximately 52% or about six percent a year. While it may be presumed that, based on recent trends, the demand for mobile homes in the Town might result in a similar increase, it should be noted that recent legislation affecting the developability (and redevelopment)

of mobile home properties makes it less likely that new parks may be developed.

Tables V-13 and V-14 depict the housing needs of the anticipated population for the years 1989, 1994, and 2000. The information is grouped by type, tenure and cost. The estimates are based on population projections provided by Broward County, projected number of households, current data on the single-family/multi-family ratio, desired vacancy rates and 1980 Census data. The assumptions used in determining these estimates are, first, that there will be a vacancy rate of two percent for single-family and seven percent for multi-family homes. Second, the single-family/multi-family ratio existing today will not change substantially. Third, it is also assumed that the relative demand for housing based on costs will be similar to that in 1980. The dollar amounts provided are constant 1980 dollars.

Table V - 13: Projected Single-Family Housing Need in Town of Davie: 1989, 1994, 2000

YEAR: 1989	Cost Ranges:		
Tenure	less than $250	$250 - 400	$401 or more
Renter Occupied	634	1345	520
Owner Occupied (mortgaged)	1130	2078	2703
	less than $100	$100 - 249	$250 or more
Owner Occupied (not mortg.)	293	385	106
YEAR: 1994	**Cost Ranges:**		
Tenure	less than $250	$250 - 400	$401 or more
Renter Occupied	732	1604	600
Owner Occupied (mortgaged)	1304	2399	3122
	less than $100	$100 - 249	$250 or more
Owner Occupied (not mortg.)	339	445	123
YEAR: 2000	**Cost Ranges:**		
Tenure	less than $250	$250 - 400	$401 or more
Renter Occupied	837	1833	686
Owner Occupied (mortgaged)	1490	2742	3568
	less than $100	$100 - 249	$250 or more
Owner Occupied (not mortg.)	387	509	140

Data presented in constant 1980 dollars

Source: Town of Davie

Table V - 14: Projected Multi-Family Housing Need in Town of Davie: 1989, 1994, 2000

YEAR: 1989	Cost Ranges:		
Tenure	less than $250	$250 - 400	$401 or more
Renter Occupied	479	1016	393
Owner Occupied (mortgaged)	851	1568	2039
	less than $100	$100 - 249	$250 or more
Owner Occupied (not mortg.)	220	290	80
YEAR: 1994	**Cost Ranges:**		
Tenure	less than $250	$250 - 400	$401 or more
Renter Occupied	553	1174	455
Owner Occupied (mortgaged)	984	1811	2355
	less than $100	$100 - 249	$250 or more
Owner Occupied (not mortg.)	253	335	93
YEAR: 2000	**Cost Ranges:**		
Tenure	less than $250	$250 - 400	$401 or more
Renter Occupied	632	1341	519
Owner Occupied (mortgaged)	1124	2069	2690
	less than $100	$100 - 249	$250 or more
Owner Occupied (not mortg.)	290	383	106

Data presented in constant 1980 dollars.
Source: Town of Davie

The Davie Community Redevelopment Agency (CRA), in its proposed Community Redevelopment Plan, recommends the replacement of seven single-family homes, one duplex, and one five-unit apartment within the designated redevelopment area. These dwellings are located in a predominantly industrial area, proposed by the CRA for redevelopment as an commerce/office and industrial area. The Plan recommends that funding for acquisition and relocation of existing residents come from tax increment financing or other sources. The Town is reviewing the CRA's proposal and shall investigate the recommendations in light of the need for appropriately priced housing. Continued maintenance of the housing stock by owners and agressive code enforcement activities should maintain the remaining existing housing, including older homes. Additionally, the Town is seeking a grant from HUD to fund a low-interest loan program for the rehabilitation of previously identified substandard housing. These activities will preclude the need to replace any additional existing units.

The Town of Davie is experiencing increased urbanization and a decrease in the amount of agricultural activities. Thus, no new housing units for rural and farm worker households will be needed.

Table V-15 summarizes the housing construction needs for the years 1989-1994 and 1994-2000 based on new household formations and the allowance for a desirable vacancy rate.

Table V-15
Housing Construction Needs: 1989-1994 and 1994-2000

Factor	1989-1994	1994-2000
Units for new household formations	2270	2552
Allowance for vacancies	91	102
Total construction needs	2361	2654

Source: Town of Davie

There is currently within the Town adequate land to meet the anticipated housing construction needs. According to the Existing Land Use Study, there are 8345 acres of vacant, undeveloped land within the Town. This represents approximately 42.2% of the total Town acreage. Of this amount, there are 6482.3 acres land use designated for residential development. Table V-16 specifies the amount of vacant land designated for residential use on the Future Land Use Plan map and the density buildout.

Table V-16
Amount of Vacant Land by Land Use Plan Designation and the Maximum Gross Density in the Town of Davie

Category Units	Acreage	Dwelling
1 du/ac	4506.4	4506
2 du/ac	97.9	196
3 du/ac	225.2	675
3.6 du/ac	528.1*	2232
5 du/ac	833.2	4166
6 du/ac	4.1	24
8 du/ac	16.7	133
10 du/ac	156.0	1560
16 du/ac	106.5	1704
20 du/ac	8.2	164
TOTAL	**6482.3**	**15,360**

* Net acreage
Source: Existing Land Use Study, Town of Davie (July 1988)

Assuming that the 1 du/ac to 4 du/ac acreage, and approximately one-half of the 5 du/ac acreage is for single-family development, there is enough land for 9692 single-family units. This far exceeds the approximately 4000 single-family units needed through the year 2000. The remaining vacant land which is designated for residential use will be used for multi-family housing and will provide enough land for 3585 multi-family units. Again, this is more than adequate for the approximately 1002 multi-family units needed.

The private sector currently provides approximately 98 percent of the housing supply in the Town. It is expected that the primary provider of housing will continue to be the private sector and that the portion provided will approach 100 percent of new housing construction.

The middle through high income groups will have all of their housing needs met by the private sector. Single-family homes, according to recent sales figures recorded by the Broward County Property Records, range in price from $40,000 and upward. New single-family housing generally ranges from $75,000 for clustered and zero lot line houses to over $200,000 for custom built homes on large lots. The new multi-family units generally start in the $60,000 range, while the existing multi-family structures generally sell from $30,000 to $90,000. Rental units are also available. In 1980, rental units comprised twenty-seven percent of all dwelling units. Due to the supply of condominiums surpassing demand in the 1980's, a number of condominiums are for rent and, thus, also help meet the demand for rentals.

The private sector provides and will continue to supply the housing for the moderate income households and, for the most part, the low income households as well. Currently, housing in the area generally located east of Davie Road, north of Orange Drive, south of Oakes Road and west of 54 Avenue provides low to moderate priced housing. A review of the Broward County Property Records show that three bedroom, two bath homes in this area have recently sold in the low $50,000 range. Assuming a buyer provides 10 percent down on a $53,000 house and secures a ten percent mortgage his payments would be approximately $500.00 a month. According to the housing cost/household income ratio, a household with a current income of $19,980 could afford such a house. Two bedroom houses have, within the last year, sold in the low $40,000 range. Multi-family units are also low-priced in this area with units selling from the upper teens to over $40,000. Mobile homes are currently a major supply of low and moderate income housing. As mentioned earlier 17 percent of our housing stock consists of mobile homes. And, the existing condominium market will continue to provide reasonably priced rental units.

For those households needing public assistance, the two public housing developments, the Broward County Housing Authority's Ehlinger Apartments and Griffin Gardens, will continue to provide housing for 200 low-income families. At these developments, tenants pay only 30% of their income in rent. Alpine Village is currently receiving Section 8 moderate rehabilitation funding. At this time, approximately 16 of the 233 units are renovated. All units are expected to be rehabilitated by February 1990. Additionally, the construction of 80 Section 202 (H.U.D.) housing units by the Jewish Federation of South Broward shall provide another resource.

The private sector housing delivery process is affected by many variables including the availability of land, services, financing and by the Town's regulations. In terms of land availability, the Town of Davie is quite attractive to developers. The Existing Land Use Study indicates that approximately 46.1% or 9748.8 acres of the Town is vacant and undeveloped. Of that amount 77.7% is Land Use Plan designated as residential. While most of it is low density, a significant portion is at higher densities as shown in Table V-16. In terms of services, the private sector must pay for the infrastructure it requires. Currently, the Town assesses impact fees for local parks and recreation. The Town shall be exploring the feasibility of initiating additional impact fees for other essential services.

Certainly an important aspect in the provision of housing is the availability of home mortgage financing at rates which potential buyers can qualify. Currently home loan interest rates are averaging about 11% and appear to be edging upward. It is not possible to predict what the interest rates will be in the future. However, as interest rates climb, it has the potential of reducing the number of buyers who qualify for loans Broward County maintains a Housing Assistance program which provides low-cost mortgages for first-time homebuyers exhibiting a moderate range of household income; Town residents may participate in and qualify for this program.

With respect to development regulations, regulations contained in the Town's zoning and development code allows developers some flexibility in their project design. Using innovative zoning regulations, developers can and do create plans which preserve open areas and contain a more economically configured project, resulting in more affordable housing for the home buyer. Several developers have utilized these regulations to provide affordable housing for a wide variety of households.

The Town of Davie has a concurrency requirement which mandates that all infrastructure required for development be in place prior to the structure being approved for occupancy. In accordance with standards promulgated by the Broward County Public Health Unit, the regulatory agency responsible for permitting potable water facilities, individual/private potable water wells or developer-constructed extensions to existing water transmission facilities are required for all new construction. The Town requires that the developer pay his fair share of the infrastructure costs. This occurs in the form of the developer constructing the improvements and paying impact fees. As described earlier, the Town has an impact fee system based on the number of bedrooms in a unit to pay for park and recreation needs. Impact fees are also required by the County to pay for the costs of building County roads, schools and County parks.

In terms of infrastructure for low and moderate income housing, Davie has provided water and sewer service and roads for one low-income area, the Davie Little Ranches/Potter Park subdivision. The money used to accomplish this was acquired from a Community Development Block Grant (CDBG) program sponsored by HUD. Future low and moderate income development occurring in this location can take advantage of the infrastructure already in place.

Only a small portion of Davie's housing stock is substandard, according to the stringent criteria discussed above. The units identified as exhibiting characteristics of the criteria

primarily need aesthetic, not structural, improvements. As mentioned above, the Davie Little Ranches/Potter Park area, which encompasses some of the substandard and weathered housing, benefited from Community Development Block grant money in the early 1980's. Water and sewer service was extended to this area and road improvements were made. However, the structural and aesthetic condition of these houses still require attention.

In response to those needs, the Town has applied for a $100,000 Community Development grant. The money, which will be funneled through the Broward County Housing Authority, will provide low interest loans to property owners to rehabilitate their homes. Owners in the Davie Little Ranches/Potter Park area whose income is below the Town's median income may apply for a loan. Finally, continued code enforcement efforts in the Potter Park and Little Ranches areas will aid in the aesthetic improvement of the housing. These activities have resulted in improved maintenance in recent years. This strategy is expected to continue to have a positive impact on this area.

There currently exists adequate sites for mobile homes within the Town. As was mentioned earlier, approximately 17 percent of the Town's Housing Stock consists of mobile homes. In April 1988, mobile homes represented approximately five percent of Broward County's housing supply, an amount which, proportionately, is much smaller than the Town's share. Two mobile home parks, Paradise Village Mobile Home Park and Stirling Road Mobile Home Park, contain vacant mobile home sites which, in total, can accommodate an additional 192 mobile homes.

It is expected that the current supply of housing will, for the most part, meet the needs of low and moderate income families. Low income families will continue to take advantage of the Section 8 Housing Program which subsidizes renters in private housing. However, there are over 250 acres of vacant higher density land (10 to 16 du/ac) which would be suitable for multi-family development, and over 800 acres of undeveloped land for moderate density (5 dwelling units per acre) single-family homes. This acreage is far in excess of the land required for the 1841 low and moderate income units needed through the year 2000.

It is the Town's continuing policy to permit the development of group homes and foster care facilities in appropriately zoned residential areas. At this time, group homes and foster care facilities are permitted by code in four types of residential districts: R-8 and R-10 medium density dwelling districts and R-12 and R-16 medium-high density dwelling districts. The Town is committed to the de-institutionalizing and returning to the mainstream of those individuals requiring some mental, physical assistance or guidance, hence the inclusion of these facilities as a permitted use in residential areas. The vacant land available at higher residential densities ensures an adequate supply for these uses.

The Town's Building Division currently monitors the number of residential alterations and demolitions occurring each month and year. This information should be regularly analyzed and presented in such a form so as to determine at what scale these conservation, rehabilitation and demolition activities are occurring and in which areas. Rehabilitation efforts which may result if the Town is awarded a CDBG grant it is

currently seeking will be monitored through the building permit process, code enforcement and from information supplied by the Broward County Housing Authority. This agency will be responsible, in part, for processing the low-interest loans to be used for rehabilitating homes.

As for historically significant housing and neighborhoods, the Town does not have a program in place to identify such structures and neighborhoods. Houses 50 years or older are considered to be historically significant. The 1980 Census data indicates there were existing 86 homes built prior to 1940 within the Town. Using Census data and working with the Davie Historical Society, the Town could identify historically significant neighborhoods and historically significant houses. Grant money from the Bureau of Historic Preservation in Tallahassee could be sought to help fund this research.

The Redevelopment Study identifies five conservation areas varying by density. They are generally located around the Downtown Davie area. These areas shall be the subject for future study and consideration with respect to conservation and rehabilitation efforts.

HOUSING ELEMENT
GOALS, OBJECTIVES AND POLICIES:

GOAL: **Provide opportunities for affordable and adequate housing to meet the needs of the existing and future populations of the Town.**

OBJECTIVE 1: No later than December 1, 1989, the Town shall adopt and implement land development regulations, including subdivision regulations, that will encourage and facilitate residential development in accordance with the Future Land Use Plan, and in an aesthetically and environmentally sound manner.

- **Policy 1-1:** The Town shall investgate and implement, as appropriate, innovative land development regulations that afford flexibility in developing residential communities while maintaining adequate standards necessary to promote the health, safety and welfare of Town residents.

- **Policy 1-2:** Land development regulations shall require the maintenance of properties and implement this requirement through code enforcement efforts.

- **Policy 1-3:** Promote the aesthetic enhancement of residential neighborhoods through code enforcement, Safe Neighborhoods programs, and community awareness efforts.

OBJECTIVE 2: Facilitate and promote a wide variety of residential development to address the different needs of the projected population.

- **Policy 2-1:** Provide information and technical assistance to the private sector to maintain housing production capacity sufficient to meet the required needs.

OBJECTIVE 3: Encourage the preservation of identified conservation areas and the rehabilitation of substandard housing as identified in this element.

- **Policy 3-1:** Seek Community Development Block Grant money to provide low interest loans for housing rehabilitation to home owners in the Davie Little Ranches/Potter Park area. Publicize program to potential loan recipients.

- Policy 3-2: Promote the conservation and rehabilitation of housing in the Potter Park area, to improve the quality of life, through code enforcement efforts and the Neighborhood Improvement District program.

OBJECTIVE 4: Permit housing for low and moderate income families, mobile homes, and specialized housing opportunities in a wide range of residential categories of the Future Land Use Plan.

- **Policy 4-1:** Review and evaluate the Future Land Use Plan and amendments thereto to insure that housing for low and moderate income families and mobile homes are adequately provided for in the residential category.

- **Policy 4-2:** Permit alternative residential facilities, such as group homes, foster care homes, and congregate living facilities, in residential districts and deemphasize their placement in non-residential categories.

OBJECTIVE 5: Identify all historically significant housing in the Town of Davie by 1992.

- **Policy 5-1:** Work with the Davie Historical Society and seek grant money from the Bureau of Historic Preservation to identify historically significant housing in the Town and provide owners with information on improving or maintaining these properties, pursuant to criteria established by applicable regulatory agencies.

OBJECTIVE 6: Formulate a Housing Implementation Program.

- **Policy 6-1:** Compile and monitor the programs and efforts herein described and referenced.

- **Policy 6-2:** Review regulatory and permitting processes for improvement and/or streamlining.

HOUSING ELEMENT
PLAN IMPLEMENTATION SECTION:

All departments in the Town participating in the implementation of this Element shall be required to operate within the framework established by the Goals, Objectives and Policies. All decision-making with regard to capital improvements and expenditures, shall reflect the Goals, Objectives and Policies. Annual budget review and capital improvement programming shall reflect consideration of needs that have been determined with respect to the Goals, Objectives and Policies. Town land development regulations shall be amended, as necessary, to implement the requirements of this Element.

HOUSING ELEMENT
MONITORING AND EVALUATION PROCEDURES:

The following procedures address the requirement of Chapter 9J-5, F.A.C. to provide monitoring and evaluation procedures for each element:

- Evaluate and, as necessary, amend adopted land development regulations to insure adequate housing opportunities through conventional and innova tive zoning techniques (Objective 1).
- Monitor development patterns, to verify the provision of a housing type va riety, affordable to the projected population (Objectives 2, and 4).
- Assess maintenance activities associated with housing (Objective 3).
- Coordinate with appropriate agencies to ascertain the location and condi tion of all historically significant housing (Objective 5).
- Ongoing analysis shall be assured once Objective 6 is completed.

Insofar as the preponderance of data used in this element consisted of 1980 Census information, this element should be completely reevaluated subsequent to the receipt of the 1990 Census information.

HOUSING ELEMENT:
GLOSSARY

- **BCHA, Broward County Housing Authority:** is an agency created by the State for the purpose of implementing both federal and State housing assistance programs.

- **Census:** is the official enumeration by the United States Census Bureau of the characteristic of the population of the United States. The census is conducted on a decennial basis at the beginning of each decade through survey research. Responses to the questionnaires are self-reported.

- **Group Home:** means a facility which provides a living environment for unrelated residents who operate as the functional equivalent of a family, including such supervision and care as may be necessary to meet the physical, emotional, and social needs of the residents.

- **HRS, FDHRS, Florida Department of Health and Rehabilitative Services:** is a State Agency which implements and provides health and social services.

- **Mobile Home:** is a manufactured, transportable, detached single family dwelling unit designed for long term occupancy and arriving at the site where it is to be occupied as a complete dwelling unit, containing all conveniences and facilities.

- **Section 8 Rental Assistance Program :** was established by the Housing and Community Development Act of 1974 to provide rental subsidies to eligible low to moderate income families.

- **Section 202 Housing Program:** provides direct federal loans to assist private non-profit corporations and consumer cooperatives in the development of new or substantially rehabilitated housing and related facilities to serve elderly, physically handicapped, or developmentally disabled adults.

- **SMSA, Standard Metropolitan Statistical Area:** is a statistical standard developed for use by the Federal agencies for the production, analysis, and publication of data on metropolitan areas.

INTERGOVERNMENTAL COORDINATION ELEMENT

Intergovernmental Coordination Element: Introduction

The purpose of the Intergovernmental Coordination Element is to evaluate and recommend policies for improving planning and implementation between the Town of Davie and its neighboring municipalities, Broward County, regional and state agencies, Federal agencies, and independent districts. The two broad purposes of this element are:

- to identify and resolve any incompatible goals, objectives, policies, and development proposed in this Comprehensive Plan which are not consistent with or are at odds with the Comprehensive Plans of adjacent municipalities and regional or state agencies; and

- to determine and respond to the needs of various coordination processes and procedures with adjacent local governments, and regional and state agencies.

Therefore, effective implementation of planning policies from all levels of government requires:

- the identification of all governmental agencies with which the Town of Davie must or should coordinate; and

- an inventory and analysis of the role of each of these governmental agencies and their relationship to Davie; and

- the development and continuous improvement of coordination mechanisms to carry out policies and approved development proposals.

This element has been revised as needed in order to be consistent with changes in Florida law.

Intergovernmental Coordination Element: Existing Conditions

Federal Agencies

Bureau of the Census
The Town of Davie coordinates with the Bureau of the Census for the provision of demographic information about the Town and to confirm the Town's municipal boundaries for the decennial census. The existing mechanisms involve direct interaction with the Town's Planning and Zoning Division and the Town Clerk's Office.

Bureau of Indian Affairs
A Federal Indian Reservation is located along an eastern border of the Town of Davie. Though no formal coordination mechanisms exist, the Town, in the past, has provided the Reservation with information. The primary departments involved in the exchange of information have been the Police Department and the Planning and Zoning Division.

Environmental Protection Agency (EPA)
Coordination with the EPA occurs primarily through the Florida Department of Environmental Protection (DEP). EPA, in conjunction with DEP, is a formal licensing, permitting, and monitoring agency for water and wastewater facilities. EPA, again in conjunction with the state is also involved in surface water management and drainage. (See the discussions of SFWMD and the independent drainage districts.) The existing mechanisms involve direct interaction with the Utilities Department concerning the licensing, permitting and monitoring of the Town's water and wastewater treatment facilities.

Federal Emergency Management Agency (FEMA)
The Town has a formal relationship with FEMA regarding the National Flood Insurance Program. FEMA provides the Town with floodplain maps, and the Town on an annual basis provides FEMA with information regarding any annexations or de-annexations, the number of building permits, and any code changes related to development of floodplains. The Development Services Department has primary responsibility for coordination.

Federal Highway Administration
Coordination with the Federal Highway Administration occurs primarily through the Florida Department of Transportation for the construction of federal primary roadways. The Engineering Division of the Development Services Department has primary responsibility for coordination.

Housing and Urban Development (HUD)

HUD's overall goal in community planning and development is to develop viable urban communities by providing decent housing and a suitable living environment, to expand economic opportunities for low-and moderate-income individuals and families, and to strengthen the partnerships between all levels of government and the private sector, including for-profit and not-for-profit organizations, in the production of affordable housing sufficient to meet the needs of the community. HUD implements these goals by providing funding to entitled states, counties, and municipalities under a variety of programs. The coordination mechanism for the Town's interaction with HUD is the grant application process which is administered through Broward County's Office of Housing Finance. The Housing and Community Development Office has primary responsibility for coordination and interaction.

The United States Army Corp of Engineers

The United States Army Corp of Engineers is a permitting agency for the dredge and fill of wetlands and all navigable waterways. The permitting process involves the Planning and Zoning and Engineering Divisions, of the Development Services Department.

State Agencies

Department of Agriculture and Consumer Services

There are several Department of Agriculture and Consumer Services offices located within the Town of Davie. The Town utilizes the Department of Agriculture in an advisory capacity for agricultural related issues.

Department of Community Affairs (DCA)

A formal relationship exists between the Town and DCA concerning land use issues. DCA has responsibility for implementing the State Growth Management Act which includes the review and approval of local government comprehensive plans, developments of regional impact (DRIs), and land use plan amendments. The Development Services Department has primary responsibility for coordination.

Department of Environmental Protection (DEP)

The Town of Davie Utilities Departments and Engineering Division have a formal relationship with DEP for the licensing, inspecting, and permitting of the water and wastewater treatment facilities. There is also additional coordination through the Broward County Water Resources Division for assistance in the maintenance of the Town's wastewater facilities. The Town Public Works Department coordinates with DEP for the removal and disposal of hazardous waste. DEP also provides funding (through grants) for the acquisition of local areas of particular concern. The Development Services Department and the Town Administrator have primary responsibility for the submission of these grant applications.

Department of Health (DOH)

The Town of Davie interacts with DOH in conjunction with the County's Water Resources Division for the permitting of wells and septic tanks in areas of the Town not served by city water and wastewater facilities. The existing coordination mechanisms are formal licensing and permitting functions, including plat review and building permit issuance. The Development Services Department has the primary responsibility for coordination.

Department of Children and Families (DCF)

The Town of Davie interacts with DCF for the licensing of day care, residential care, rehabilitation, and group home facilities. The existing coordination mechanisms are formal licensing and permitting functions, including plat review and building permit issuance. The Development Services Department has the primary responsibility for coordination.

Department of Business and Professional Regulation (DBPR)

DBPR is a formal licensing agency with which the Town interacts concerning occupational, alcoholic beverage, and contractor licenses. The offices with primary responsibility for coordination are the Administrative Services Department and Development Services Department.

Department of State/Division of Historical Resources

The Division of Historical Resources maintains the State Master File of all identified historical resources. The offices with primary responsibility for coordination are the Administrative Services Department (which maintains historical information for the Town) and the Town Administrator's Office.

Department of Transportation (DOT)

DOT is a formal grant funding agency for the construction of roadways and the acquisition of rights-of-way. The primary office involved is the Development Services Department.

Enterprise Florida, Inc.

Enterprise Florida, Inc. is a partnership between Florida's government and business leaders and is the principal economic development organization for the State of Florida. The mission of Enterprise Florida is to increase economic opportunities for all Floridians, by supporting the creation of quality jobs and globally competitive businesses. The Town of Davie coordinates with Enterprise Florida on issues of economic development within the Town. The Office of Economic Development has primary responsibility for this coordination.

Regional Agencies

South Florida Regional Planning Council (SFRPC)

The South Florida Regional Planning Council acts as an advisory body to the Town with regard to the DRI process and the comprehensive planning process. SFRPC also provides an informal mediation process to resolve conflicts between cities. The Planning and Zoning Division has the primary responsibility for coordination and interaction with SFRPC.

South Florida Water Management District (SFWMD)

The South Florida Water Management District is a permitting agency which provides for the construction and operation of surface water management systems. Further, the Central Broward Drainage District works in conjunction with SFWMD for the protection and regulation of surface water within its jurisdiction. The Engineering Division has primary responsibility for the coordination.

County Agencies

Broward County Air Quality Division

The Broward County Air Quality Division is the monitoring agency for air and noise pollution. The Utilities Department is primarily responsible for coordination regarding compliance with the County's regulations.

Broward County Biological Resources Division (BRD)

BRD is involved in the development of local areas of particular concern through the preparation of an Environmental Impact Report concerning the site. The Development Services Division has primary responsibility for coordination.

Broward County Board of Rules and Appeals

The Board's primary function is to interpret the South Florida Building Code which is the official building code used in the Town. The Board is made up of 23 (13 voting members and 10 alternates) members that are appointed by the County Commission and the League of Cities. The Town Building Department coordinates any necessary interpretations and/or appeals to the Board.

Broward County Commission

The Broward County Commission, which has jurisdiction over regional and countywide issues, is the elected body within Broward County which approves subdivision plats and land use plan amendments for all areas within the County. The Broward County Commission's jurisdiction involves the Development Services Department, and the Town Administrator's Office.

Broward County Comprehensive and Neighborhood Planning Division (CNPD)

The Town coordinates with CNPD concerning the comprehensive planning process. The Development Services Department has primary responsibility for coordination.

Broward County Department of Planning and Environmental Protection (DPEP)

DPEP is responsible for the regulation of land development within unincorporated Broward County. The Town of Davie Planning and Zoning Division reviews comprehensive plan amendments, zoning change requests and other County development permit actions which may impact the Town through County resolutions.

DPEP is responsible for the preparation of population estimates and projections for Broward County. The Town coordinates with DPEP to prepare population estimates and projections that accurately reflect existing conditions within the Town.

Broward County Development Management Division (DMD)

The Town interacts on a formal basis with DMD through the platting and Development Review Committee process. This involves issues of land use and compliance with the Broward County Trafficways Plan. The Department of Development Services has primary responsibility for coordination.

Broward County Engineering Division

A formal relationship exists between the Town and the Broward County Engineering Division through the County Development Review Committee process. The subject of the relationship is plat review for the acquisition/reservation of right-of-way and the construction of roadways. The office with primary responsibility for coordination is the Engineering Division.

Broward County Environmental Services Division

Broward County Environmental Services Division is a service provider to a small portion of the Town. The office with primary responsibility for coordination is the Utilities Department.

Broward County Housing Authority (BCHA)

BCHA functions within the Town through the operation of two public housing projects in Davie (100 units of family housing and 100 units of elderly/disabled housing). They also manage 230 units of privately owned Section 8 moderate rehabilitation units and 84 intra-jurisdictional vouchers. The office with primary responsibility for coordination is the Housing and Community Development Office.

Broward County League of Cities Technical Advisory Committee (TAC)

The Town's Planning and Zoning Division is represented on the Technical Advisory Committee (TAC), which reviews proposed comprehensive plan amendments, statutory amendments affecting growth management, and related technical issues affecting the individual municipalities, the County, the South Florida region and the State of Florida. TAC provides a forum for the individual municipalities to coordinate with the County and other regulatory agencies (such as SFRPC, the School District, the Planning Council, MPO, FDOT, SFWMD, WAB and DCA) on multi-jurisdictional, countywide, regional and statewide issues.

Broward County Legislative Delegation (BCLD)

The Town coordinates with BCLD concerning annexations. BCLD adopted a policy, approved by the Broward County Commission that requires all unincorporated areas of the county to be annexed into municipalities by 2010. The Development Services Department has primary responsibility for coordination with BCLD.

Broward County Mass Transit Division

An informal relationship exists between the Mass Transit Division and the Town for the purposes of information exchange. The Development Services Department has primary responsibility for coordination.

Broward County Metropolitan Planning Organization (MPO)
The MPO is an agency which provides for the coordination among municipalities within the County. The Town is member of the MPO. The Engineering Division has primary responsibility for coordination.

Broward County Office of Housing Finance (OHF)
The Town of Davie operates under the Broward County Local Housing Assistance Plan (LHAP), for the disbursement of State Housing Initiative Partnership (SHIP) funds, as well as contracts for specific services, e.g. third party income verification. Additionally, the Town works with OHF to secure tax exempt bonds for affordable rental housing. The Housing and Community Development Division has primary responsibility for coordination.

Broward County Office of Integrated Waste Management (IWM)
The Town coordinates with IWM on issues of solid waste, recycling, and materials recovery. The Town has entered into an agreement with IWM to utilize the Materials Recovery Facility located within the incorporated limits of Davie in order to reduce the size of the waste stream and generate power to sell to Florida Power and Light. The Town's Public Works Department has primary responsibility for coordination.

Broward County Parks and Recreation Division
The Town maintains an informal relationship with Broward County Parks and Recreation for the provision and maintenance of county-level parks. Tree Tops and Vista View Parks, County Sub-Regional parks, are located within the corporate limits of the Town. The offices with the primary responsibility for coordination are the Community Services and Development Services Departments. The Broward County Parks and Recreation Division is also involved in the planning of the "land fill park," as well as the recreational use of the Pine Island Ridge located on the former Belcher property.

Broward County Planning Council
A formal relationship exists between the Town and the Planning Council concerning issues of land use and comprehensive planning. The Planning Council is responsible for certifying the Town's Land Use Plan, as well as approving amendments to this Plan and the Broward County Trafficways Plan. In terms of comprehensive planning, the Planning Council is responsible for preparing the Future Land Use Element for the County Comprehensive Plan. Through the Technical Advisory Committee of the League of Cities, the Town has been involved in that planning process. The office with primary responsibility for coordination is the Development Services Department.

Broward County Property Appraiser's Office
The Town has a formal relationship with the Property Appraiser's Office for the provision of information for demographic planning and other purposes. The Property Appraiser's Office interacts primarily with the Development Services and Budget Finance Departments.

Broward County Public Health Department

This Department is charged with the responsibility for monitoring the quality of treated water for consumptive use. The Town's Utility Department tests, reports to and coordinates with the Department on matters of potable water quality.

Broward County Safety and Emergency Services Department

A formal relationship exists between the Town and Broward County's Safety and Emergency Services Department for hurricane preparedness, hazard mitigation and multi-jurisdictional police, fire and emergency service issues. The Town Administration has primary responsibility for coordination of hurricane preparedness and hazard mitigation issues through the Hazard Mitigation Task Force. The Town's Police and Fire Departments have primary responsibility for coordination of multi-jurisdictional emergency service issues through mutual aid agreements.

Broward County Sheriff's Office

The Town Police Department coordinates with the Sheriff's Office in the area of law enforcement through mutual aid agreements.

Broward County Supervisor of Elections

A formal relationship exists between the Town and the Supervisor of Elections for the coordination of elections. The Town Clerk's Office has primary responsibility for coordination.

Broward County Traffic Engineering Division

The platting and Development Review Committee process is the existing coordination mechanism concerning trafficways and roadways. The Town is also involved in the coordination for signalization, pavement markings, and traffic studies. The Engineering Division has primary responsibility for coordination.

Broward County Water Resources Division (WRD)

WRD is a licensing and permitting agency for water and wastewater facilities as well as for wells and septic tanks for areas which are not served by city water and sewer facilities. WRD also sets level of service standards with which water and wastewater facilities must comply. The Utilities Department and the Engineering Division of the Development Services Department have primary responsibility for coordination.

Special Districts

Broward County School District

The Town coordinates with Broward County School District for the provision and location of school sites, for the leasing of park sites, and for participation in the comprehensive planning process.

Currently there are thirteen public schools within the Town of Davie as follows:

Elementary Schools (6)

1) Davie Elementary School ..... 7025 SW 39 Street
2) Flamingo Elementary..... 1130 SW 133 Avenue
3) Fox Trail Elementary School..... 1250 Nob Hill Road
4) Nova Blanche Forman Elementary- School..... 3521 Davie Road
5) Nova Eisenhower Elementary- School ..... 6501 SW 39 Street
6) Silver Ridge Elementary..... 9100 SW 36 Street

Middle Schools (2)

1) Indian Ridge Middle School..... 1355 Nob Hill Road
2) Nova Middle School..... 3602 College Avenue

High Schools (3)

1) Nova High School..... 3600 College Avenue
2) McFatter Technical..... 6500 Nova Drive
3) Western High School..... 1200 SW 136 Avenue

Centers/Vocational Schools (2)

1) McFatter Vocational..... 6500 Nova Drive
2) Nova-Tequesta Adult Education..... 3600 College Avenue

The thirteen public schools are housed in eleven school buildings: the two vocational schools are located in existing high school facilities. The Development Services Department has primary responsibility for coordination of proposed school sites. It is noted that a charter school located at the northeast corner of Pine Island Road and Orange Drive has recently received approval by the Town.

In terms of park sites, the Town holds the following leases with the Broward School District for the joint use of educational facilities:

1) Davie Elementary School (39 Street ballfields) ..... 7099 SW 39 Street
2) Flamingo Elementary..... 1130 SW 130 Avenue
3) Western High School..... 1200 SW 136 Avenue
4 Nova High School..... 3600 College Avenue

These sites constitute 34.8 acres which the Town utilizes for recreation purposes. The Community Services Department has primary responsibility for coordination with regard to recreational use of educational facilities. With regard to the comprehensive planning process, the Town interacts with the School District informally through the League of Cities' Technical Advisory Committee. The Planning and Zoning Division has primary responsibility for this coordination.

Broward County Solid Waste Disposal District

The Town entered into an interlocal agreement by which the Town became a member of the Broward County Solid Waste Disposal District. The Broward County Solid waste disposal district is required to prepare a Special District Facility Report pursuant to Chapter 189.415 F.S.

Central Broward Drainage District (CBDD)

CBDD has area-specific jurisdiction within the Town for maintenance of drainage easements and canals, and for the review of development permits to ensure adequate onsite drainage and surface water management. The Town has a formal relationship with CBDD, through the platting, development review, and building permit review processes. The Engineering Division acts formally and informally with the Drainage District.

South Broward Drainage District (SBDD)

SBDD has jurisdiction within the Town for maintenance of drainage easements and canals within a limited portion of the Town. The Town has a formal relationship with SBDD, through the platting, development review, and building permit review processes. The Engineering Division has primary responsibility for coordination.

North Broward Hospital District/South Broward Hospital District

The Town of Davie falls within the jurisdiction of both the North and South Broward Hospital districts. The Hospital Districts have a formal relationship with the Town in the form of taxing for the provision of healthcare facilities. The Finance Department has primary responsibility for coordination.

Tindall Hammock Drainage District (THDD)

THDD has jurisdiction within a limited portion of the Town for maintenance of drainage easements and canals. The Town has a formal relationship with, THDD through the platting, development review, and building permit review processes. The Engineering Division has primary responsibility for coordination.

Municipalities

Cooper City

The City of Cooper City borders the central portion of the Town of Davie to the south. Formally, the Development Services Department coordinates with Cooper City on land use issues through the comprehensive planning processes of TAC, MPO and SFRPC. Additionally, the Town has a water service agreement with Cooper City. A formal interlocal agreement exists, and the Town Utilities Department has primary responsibility for coordination for water services.

Fort Lauderdale

The Town of Davie has an interlocal agreement with the City of Fort Lauderdale for the provision of water and wastewater service. The Town is adjacent to Fort Lauderdale's service area within Unincorporated Broward County. The Town Utilities Department has primary responsibility for coordination. The Town Development Services Department also interacts with the City of Fort Lauderdale through TAC, MPO and SFRPC.

Hollywood

Hollywood borders the Eastern portion of the Town of Davie to the south. The Development Services Department coordinates land use issues with Hollywood through the comprehensive planning processes with TAC, MPO and SFRPC.

Pembroke Pines

Pembroke Pines borders the westernmost portion of the Town of Davie to the south. The Development Services Department coordinates land use issues with Pembroke Pines through the comprehensive planning processes with TAC, MPO and SFRPC.

Plantation

Plantation borders the Town of Davie to the north, west of the Florida Turnpike and east of 136 Avenue. The Development Services Department coordinates land use issues with Plantation through the comprehensive planning processes with TAC, MPO and SFRPC.

Sunrise

Sunrise borders the Town of Davie to the north, west of 136 Avenue until the western boundary of the Town. The Development Services Department coordinates land use issues with Sunrise through the comprehensive planning processes with TAC, MPO and SFRPC. The Town also coordinates with the City of Sunrise for the provision of water and wastewater services to the western portion of the Town no longer served by wells and septic tanks. There is an interlocal agreement between the Town and the City of Sunrise to provide these. The Utilities Department has primary responsibility for coordination.

Weston

Weston borders Davie to the west, west of I-75. The Development Services Department coordinates land use issues with Weston through the comprehensive planning process with TAC, SFRPC and MPO.

Unincorporated Broward County

Within the Town there are several enclaves of unincorporated areas. Unincorporated areas also exist along the Town's southern and western boundaries. The Broward County Commission serves as the local governing body for unincorporated areas. The Development Services Department coordinates land use issues through the comprehensive planning process with TAC, MPO and SFRPC, as well as Broward County's Comprehensive and Neighborhood Planning and Development Management Divisions.

Other Agencies

American Planning Association (APA)

APA is a national professional association with members from both the public and private sectors. APA has a local chapter which provides a basis for informal interaction for planners, and planning related professionals within the County.

AT&T Broadband

A franchise agreement between the Town and AT&T Broadband exists for the provision of cable television services. The Town Council, through the Town Administrator's Office and the Administrative Services Department, has primary responsibility for coordination.

Ferncrest Utilities

Ferncrest Utilities is a private utilities company which has a service agreement with the Town for the provision of water and wastewater service to the former Hacienda Village area. The Utilities Department has primary responsibility for coordination.

Florida Power and Light (FP&L)

A franchise agreement between the Town and FP&L exists for the provision of electrical services. The Town Council, through the Town Administrator's Office and Administrative Services Department, has primary responsibility for coordination.

Broward County League of Cities

The Broward County League of Cities is a local branch of the Florida League of Cities, a state branch of the National League of Cities. The primary purpose of the National League of Cities is to "strengthen and promote cities as centers of opportunity, leadership, and governance". The Town Development Services Department interacts with the Broward County League of Cities primarily through the Technical Advisory Committee concerning issues of land use and the comprehensive planning process. Additionally, the Town, as a member of the League of Cities, is regularly and routinely involved in efforts supported by the League to coordinate and communicate with other cities in the county and throughout the state. Town Council members attend League functions regularly and participate in activities sponsored by local, state, and national League organizations.

South Broward Utilities

South Broward Utilities is a private utilities company which has a service agreement with the Town for the provision of water and wastewater services to the Ivanhoe Development. The Utilities Department has primary responsibility for coordination.

Southern Bell

A franchise agreement between the Town and Southern Bell exists for the provision of telecommunication and cable television services. The Town Council, through the Town Administrator's Office, and Administrative Services Department, has primary responsibility for coordination.

Waste Management

Waste Management is a privately owned national company that provides solid waste removal and disposal services. The Town has a franchise agreement with Waste Management-for these services. The Town Council, through the Town Administrator's Office and Administrative Services Department, has primary responsibility for coordination.

Intergovernmental Coordination Element: MATRIX

The following matrix represents a summary of the Town of Davie relationships with its neighboring municipalities, Broward County, regional and state agencies, federal agencies, and independent districts.

[illegible]	EXISTING COORDINATION MECHANISM	SUBJECT NATURE OF RELATIONSHIP	PRIMARY RESPONSIBILITY	EFFECTIVENESS OF MECHANISM
Bureau of the Census	Formal Interaction	Demographics and other statistical data	Planning and Zoning Administrative Services	Effective
Bureau of Indian Affairs	Informal Interaction	Indian Reservation at Town's eastern border/provision and exchange of information	Planning and Zoning Police Department	Effective
Environmental Protection Agency	Through the State DEP	Formal relationship for the permitting, licensing, inspecting water and wastewater facilities	Utilities Engineering	Effective
Housing and Urban Development	Through County Housing Authority	Formal relationship through grant funding for community redevelopment	Housing and Community Development	Effective
Federal Highway Admin.	Through State DOT	Formal relationship for construction of primary roadways	Planning and Zoning Engineering	Effective
Federal Emergency Management Agency	District Interaction	Formal relationship regarding the National Flood Insurance Program	Development Services Department	Effective
United States Army Corp of Engineers	District Interaction	Formal relationship for permitting of dredge and fill involving wetlands and navigable waterways	Planning and Zoning Engineering	Effective
State Agencies:				
Department of Agriculture and Consumer Services	Informal Interaction	Agriculture	Development Services	Effective
Department of Children and Families	Licensing/permitting facilities in conjunction with County	Child and residential care facilities/Formal relationship	Planning and Zoning	Effective
Department of Community Affairs	DRI process Comprehensive plan process land use plan amendment process	Formal relationships involving land use and comprehensive planning	Development Services	Effective
Department of Environmental Protection	Grant funding, licensing, permitting, inspecting facilities	Formal relation for the provision of utility services and surface water management and funding of local areas of particular concern	Utilities Public Works Development Services Town Administrator	Effective
Broward County Commission	Approves plats and Land Use Plan Amendments	Formal relationship involving land use and plats	Development Services Town Administrator	Effective

Plannin		and popula estimates and projections		
Broward County Safety and Emergency Services	Mutual aid agreements and membership on Hazard Mitigation Task Force	Hurricane Preparedness Emergency Medical Services	Town Administration Fire Department Police Department	Effective
Broward County Development Management Division	Development Review Committee	Formal relationship involving platting and traffic	Development Services	Effective
Broward County Engineering Division	Development Review Committee	Formal relationship involving trafficways and roadways	Planning and Zoning Engineering	mandatory participation is effective
Broward County Housing Authority	Consolidated Plan	Public housing projects	Housing and Community Development	Effective
Broward County Legislative Delegation	Annexation process	Formal relationship concerning annexation	Development Services	Effective
Broward County Office of Environmental Services	Informal interaction	Utility service provider	Utilities	Effective
Broward County Office of Housing Finance	SHIP program	Formal relationship; funding for community redevelopment	Housing and Community Development	Effective
Broward County Office of Integrated Waste Management	Interlocal agreement	Formal relationship concerning solid waste, recycling and materials recovery	Public Works	Effective
Broward County Mass Transit Division	Informal interaction	Mass Transit Routes and local bus service within the Town	Administrative Services	Effective
Broward County Metropol. Planning Organization	Permanent member	Comprehensive planning and land use	Planning and Zoning Engineering	Effective
Broward County Parks and Recreation	Informal interaction	Provision of park sites	Planning and Zoning Community Services	Effective
Broward County Planning Council	Certification of land use plans	Formal relationship concerning land use and Trafficways Plan	Development Services	Effective
Broward County Property Appraisers	Informal interaction	Property information and demographics	Development Services Budget and Finance	Effective
Broward County Public Health Department	Formal monitoring	Potable water quality	Utilities	Effective
Broward County Sheriff's Office	Mutual aid agreement	Formal interaction concerning law enforcement	Police Department	Effective
Broward County Supervisor of Elections	Informal interaction	Coordination for elections	Town Clerk	Effective
Broward County Traffic Engineering Division	Platting process	Formal relationship concerning trafficways and roadways	Development Services Engineering	Effective

		Planning septic tanks, wells, and water and wastewater treatment facilities	Utilities Engineering	
Special Districts:				
Broward County School District	League of Cities Technical Advisory Committee	Formal interaction concerning location of school sites and comprehensive planning	Development Services	Effective
Broward County Solid Waste Disposal District	Interlocal agreement	Solid waste	Public Works	Effective
Central Broward Drainage District	Platting Process; Development Review Comm Building permit process	Formal relationship concerning drainage and maintenance of drainage easements, canals	Engineering	Effective
North Broward Hospital District	Taxation	Formal relationship concerning healthcare	Finance	Effective
South Broward Drainage District	Devel. Review Comm.; Platting process Building permit process	Formal relationship; drainage review, maintenance of drainage easements, canals	Engineering	Effective
South Broward Hospital District	Taxation	Formal relationship concerning healthcare	Finance	Effective
Tindall Hammock Drainage District	Platting process Development Review Comm. Building permit process	Formal relationship concerning drainage, easements, canals	Engineering	Effective
Municipalities:				
Cooper City	MPO, TAC, Interlocal Agreement and SFRPC	Formal relationship concerning comprehensive planning, land use, and emergency water service	Planning and Zoning Utilities	Effective
Fort Lauderdale	Interlocal Agreement, MPO, TAC, and SFRPC	Formal relationship concerning emergency water service and comprehensive planning and land use issues	Utilities Development Services	Effective
Hollywood	MPO, TAC and SFRPC	Formal relationship concerning comprehensive planning and land use	Planning and Zoning	Effective
Pembroke Pines	MPO, TAC and SFRPC	Formal relationship concerning comprehensive planning and land use	Planning and Zoning	Effective

		land use		
Sunrise	MPO, TAC, Interlocal Agreement and SFRPC	Formal relationship concerning comprehensive planning, land use, and the provision of utility services	Planning and Zoning Utilities	Effective
Unincorporated Broward County	MPO, TAC and SFRPC	Formal relationship concerning comprehensive planning and land use	Planning and Zoning	Effective
Weston	MPO, TAC and SFRPC	Formal relationship concerning comprehensive planning and land use	Planning and Zoning	Effective
Other Agencies:				
American Planning Association	Membership of individuals	Formal relationship for the provision of technical advice and continuing education	Individual to members	Effective
AT&T Broadband	Franchise agreement	Formal provision of cable television services	Town Council via Town Administrator and Administrative Services	Effective
Ferncrest Utilities	Interlocal Agreement	Formal provision of water/wastewater to Hacienda Village	Utilities	Effective
Florida Power and Light	Franchise Agreement	Formal provision of utility services	Town Council via Town Administrator and Administrative Services	Effective
Broward County League of Cities Technical Advisory Committee (TAC)	Technical Advisory Comm.	Formal participation on committee concerning land use and comprehensive planning	Planning and Zoning	Effective
South Broward Utilities	Interlocal Agreement	Formal; provision of water and wastewater to Ivanhoe Subdivision	Utilities	Effective
Southern Bell	Franchise Agreement	Formal relationship for the provision of telephone and cable television services	Town Council via Town Administrator and Administrative Services	Effective
Waste Management	Franchise Agreement	Formal; provision of solid waste removal	Town Council via Town Administrator and Administrative Services	Effective

Intergovernmental Coordination Element: Summary of Existing Mechanisms

The informal mechanisms which the Town currently has in place are effective coordination mechanisms. These mechanisms facilitate the daily planning activities of the Town and involve an ongoing exchange of information, ideas, and coordination of efforts at all staff levels. Similarly, the formal mechanisms which the Town currently has in place are effective coordination mechanisms. These mechanisms are integral to the functions of the Town and generally consist of memberships on committees or commissions.

No specific problem areas have been identified in the area of intergovernmental coordination. The Town is continually seeking to improve its coordination among area governments and jurisdictions. The impact of the continued growth of the Town will necessitate greater intergovernmental coordination on a regional and sub-regional level.

Enhanced intergovernmental coordination is suggested in the areas of state transportation. Coordination with the State Department of Transportation in the area of right-of-way acquisition is essential to the Town's capability to address the impacts of transportation corridors on development patterns.

Intergovernmental Coordination Element: Summary of Additional Mechanisms

In 1996, the Florida Legislature adopted amendments to Chapter 163, Florida Statutes requiring local governments to address additional coordination mechanisms including: joint planning areas, collaborative planning for multi-jurisdictional issues, voluntary dispute resolution processes, special district coordination, and coordination with campus master plans.

Joint Planning Areas

Definition: A joint planning area (JPA) is an area where one jurisdiction provides services to another, where two jurisdictions provide services to the same area, or where a jurisdiction intends to provide services to an area which is proposed to be annexed. The intent of establishing a joint planning area is to achieve increased efficiency and effectiveness of providing services to an area through a coordination of efforts by one or more jurisdictions. Chapter 163, F.S., requires the Intergovernmental Coordination Element to include provisions to establish JPAs especially for the purposes of joint infrastructure service areas, annexation and municipal incorporation.

Joint Infrastructure Service Areas

As referenced previously in this Element and discussed in detail in the Utilities Element of this Comprehensive Plan, the Town of Davie currently coordinates with Broward County, the City of Cooper City, the City of Hollywood, the City of Fort Lauderdale, and the City of Sunrise for the provision of utility service. It is recommended that in addition to considering the capital improvements schedules of adjacent jurisdictions and other governmental units, the Town should provide information relating to the Town's anticipated capital improvements to be completed within, adjacent to or benefiting adjacent jurisdictions or governmental units for their consideration during preparation of their respective capital improvement schedules and budgets.

Annexation and Municipal Incorporation

As referenced previously, all annexations proposed within Broward County are to be coordinated with BCLD pursuant to its adopted process for annexation. BCLD's adopted annexation process requires coordination of municipal services and interlocal agreements with Broward County and the annexing municipality as well as an extensive public hearing process. The Town of Davie will continue to coordinate with BCLD and monitor the implementation of formalized joint planning processes relating to annexation and/or municipal incorporation through coordination with the League of Cities Technical Advisory Committee.

Joint Processes for Collaborative Planning and Decision Making for Multi- Jurisdictional Issues

Chapter 163.3177, F.S., requires that local governments use joint planning processes for collaborative planning and decision-making in preparing population projections, public school siting, the location and extension of public facilities subject to concurrency, and the siting of facilities with countywide significance including locally unwanted land uses. The following is a brief description of the existing and recommended joint processes used (or recommended to be used) by the Town of Davie to address these issues.

Population Projections

The Town of Davie provides information relating to development to the Broward County Planning Council and Property Appraiser's Office to allow for the preparation of population estimates and projections which accurately reflect the existing or anticipated development within the Town of Davie. The Town reviews the population estimates and projections prepared by Broward County to identify whether or not the estimates and projections accurately reflect the existing and anticipated conditions within the Town of Davie. In the event that the Town determines the estimates and projections prepared by the County do not reflect conditions within the Town of Davie, the Town's Development Services Department should provide supplemental information to the County relating to development conditions within the Town to facilitate adjustment of the estimates or projections.

Public School Siting

The Town strives to coordinate with the School District in order to collocate public facilities such as parks, libraries and community centers with schools to the extent possible and has been successful in the collocation of such facilities and implementation of joint use agreements relating to those facilities, as described elsewhere in this Comprehensive Plan.

The Town of Davie coordinates with the Broward County School District, primarily through attendance at the Broward County League of Cities Technical Advisory Committee (TAC). However, the Town coordinates directly with the School District on issues relating to the siting of public schools, as appropriate.

The Town will continue to coordinate with the Broward County School District relating to the location and collocation of public school facilities in order to assist the School District in the provision of an adequate amount of public schools to meet with the Town's identified needs.

Location and Extension of Public Facilities Subject to Concurrency

The Town of Davie uses the coordination mechanisms described previously in this element relating to the provision of public facilities subject to concurrency.

The Town will pursue formalized coordination mechanisms identified in this element through the establishment of joint use agreements in order to comply with the requirements of state law through continued coordination with TAC as well as individual service providers.

Siting of Facilities With Countywide Significance Including Locally Unwanted Land Uses.

The Town currently addresses the need for facilities with countywide significance through coordination with TAC. TAC provides a forum for the municipalities, Broward County, regulatory agencies and service providers within Broward County to address multi-jurisdictional issues which would include the location of locally unwanted land uses. Therefore, it is recommended that the Town continue to coordinate with TAC as necessary to address the need for, and location of, facilities with countywide significance.

Voluntary Dispute Resolution Processes

Land use and comprehensive planning issues
The Town of Davie strives to participate in the intergovernmental processes described in this element by considering the impacts of comprehensive plan amendments (proposed by the Town or another jurisdiction) and future development/redevelopment within the Town on the Town's and other jurisdictions' ability to implement their comprehensive plans and to address area wide land use needs.

All municipalities are required by the Broward County Charter to be consistent with the Broward County Future Land Use Plan, which prevents development from occurring that would be inconsistent with the Broward County Future Land Use Plan. The Town currently coordinates with the Broward County Planning Council (as do all municipalities in Broward County) to maintain consistency between the Town's Future Land Use Plan and the Broward County Future Land Use Plan.

Transportation issues
The Town provides minibus service to its residents. This service is coordinated with the Broward County Mass Transit Division, who is also responsible for the provision of regular bus service within the Town of Davie.
The Town coordinated with the Department of Transportation concerning the acquisition of right-of-way. The Town considers this issue essential to its ability to address the impacts of transportation corridors on development patterns.

Special District Coordination

The Town coordinates with the Special Districts located within, providing services to or benefiting the Town of Davie, through the mechanisms discussed previously in this element. In all cases where Special District Public Facility Reports are required to be prepared, the Town shall review the report and consider amendment of the Town's Comprehensive Plan as may be necessitated by the report's content. In the event that conflicts arise as a result of the content of a facility report, the Town shall coordinate with the governing board of the appropriate district to resolve any identified conflicts.

Coordination with Campus Master Plans

As previously mentioned, Florida Atlantic University (FAU) is the only state university with an adopted campus master plan located in the Town of Davie. The Town coordinates with FAU as required by state law. FAU has expansion plans that will have to be reviewed for consistency with the Town of Davie Comprehensive Plan. Further, the Town should work with FAU to ensure that appropriate buffers or transition areas are in place to reduce any adverse impacts the University's uses may have on adjacent non-University uses.

Intergovernmental Coordination Element: Goals, Objectives, and Policies

GOAL: **Provide effective opportunities for intergovernmental coordination to implement the goals, objectives and policies of the Comprehensive Plan relating to development and the provision of essential services in the Town.**

OBJECTIVE 1: The Town shall participate in advertised, as well as informal, meetings and programs of planning groups and agencies, to maximize opportunities for coordination with the state, region, county, other municipalities, special districts, and organizations.

- Policy 1-1: A designated staff member of the Development Services Department shall attend and participate as a member of the Broward League of Cities' Technical Advisory Committee meetings, to facilitate an exchange of information and ensure that implementation of the Town's Comprehensive Plan is coordinated with the plans of adjacent municipalities, other governmental units or agencies providing service within, adjacent to, or benefiting the Town of Davie.

- Policy 1-2: Advise the South Florida Regional Planning Council of any development proposals which might have an interjurisdictional impact and support the use of the Council's informal dispute resolution process to mediate any conflicts which may arise.

- Policy 1-3: Town staff shall coordinate planning efforts with the Broward County Planning Council, to ensure consistency of the Town's Future Land Use Plan with the Broward County Land Use Plan.

- Policy 1-4: Continue to serve on the Metropolitan Planning Organization as a voting member of the Board and as a member of the Technical Coordinating Committee.

- Policy 1-5: Continue coordination with the Broward County Housing Authority in the implementation of the Section 8 Program, as identified in the Town's Consolidated Plan.

- Policy 1-6: Maintain cooperation with the US Department of Housing and Urban Development (HUD) in the administration of the CDBG program and/or other beneficial programs referenced in the Town's adopted Consolidated Plan.

- Policy 1-7: The Town shall continue to use the State Housing Initiatives Partnership (SHIP) allocation to expand or preserve the existing housing stock and to create new affordable housing opportunities through financing for construction, home purchase loans, counseling, minor home repair/weatherization, land acquisition, and housing for people with special needs as identified in the Town's adopted Local Housing Assistance Program (LHAP).

OBJECTIVE 2: The Town shall coordinate planning activities with adjacent municipalities and, for the unincorporated area, Broward County through existing mechanisms.

- Policy 2-1: Notify adjacent jurisdictions in the event a proposed change in land use designation or zoning category affects property that may have an impact on that jurisdiction.

- Policy 2-2: Coordinate with Broward County's Mass Transit Division in improving regular bus service and minibus service throughout the Town.

- Policy 2-3: The Town shall continue its informal exchange of information with the Seminole Indian Reservation adjacent to the Town's eastern border.

- Policy 2-4: Utilize the informal mediation process with the South Florida Regional Planning Council to resolve conflicts with other local governments.

OBJECTIVE 3: The Town shall continue to coordinate planning and development activities with agencies and other units of local government providing essential services to the Town and which do not have regulatory authority over land use, to ensure coordination in the provision of essential services pursuant to the adopted level of service standards.

- Policy 3-1: Notify affected service providers providing services within the corporate limits of the Town of proposed annexations, changes in land use, changes in zoning and/or development phasing, and request they assess the proposed change in impact and advise as to service availability.

INTERGOVERNMENTAL COORDINATION ELEMENT

- **Policy 3-8:** Pursuant to Chapter 163.3177(h) F.S., the County, School Board and the Town shall coordinate their planning and permitting processes consistent with the procedures established within the ILA as follows:

  (a) Review and update of the annual DEFP containing the financially feasible schedule of capital improvement for school facilities needed to achieve and maintain the adopted level of service standards in all CSA's.

  (b) Coordinate County and municipal land use planning and permitting processes with the School Board's site selection and planning process to ensure future school facilities are consistent and compatible with land use categories and enable a close integration between existing and planned school facilities and the surrounding land uses.

  (c) Coordinate the preparation of County and the municipal projections for future development with the School Board's school enrollment projections to ensure consistency between the County and the municipal future land use maps and the long term school planning process.

  (d) Coordinate with the School Board through the Staff Working Group and Oversight Committee regarding the preparation of County and municipal annual comprehensive plan updates and the School Board's annual update of the DEFP to ensure consistency between the plans.

  (e) Coordinate with the School Board on the planning, siting, land acquisition, permitting and development of new school facilities to ensure the availability of public facilities, services and grounds, especially for purposes of exploring collocation opportunities.

  (f) Revise County and municipal land development codes and School Board policies to establish a county-wide public school concurrency system.

- Policy 3-2: Continue to coordinate with the Broward County School District in the provision of essential services and facilities. Specifically, the Town and Broward County shall work together to maintain a unified data base that will include population projections, school boundary changes, land use, and public facility capacities. This unified data base will help to ensure the proper siting of new schools and the collocation of public facilities, such as parks and community centers.

- Policy 3-3: Coordinate, at the staff level, with the Broward County School District on any development applications which may affect the safety of public school students, enhance public education or alter the Town's existing or anticipated future needs for public school facilities.

- Policy 3-4: The Development Services Department shall, pursuant to the Broward County Administrative Code, continue to provide quarterly demolition reports to the County for use in preparation of population estimates and projections to be used in transportation, School District and other countywide planning activities.

- Policy 3-5: The Town shall establish a staff-level Educational Committee that will coordinate with the Broward County School District, as may be necessary, to facilitate expansion of existing or location of additional public school facilities within the Town of Davie, consistent with the policies of the Future Land Use Element of the Comprehensive Plan.

- Policy 3-6: The Town shall inform the Broward County School District of any proposed changes to the Town's Comprehensive Plan.

- Policy 3-7: The Town shall, to the best of their ability and as permitted by the Town's Land Development Regulations, streamline the development review and permitting process for new schools. The Town shall also review education facility projects for onsite and offsite impacts and work cooperatively with the Broward County School District to mitigate these impacts.

OBJECTIVE 4: The Town shall promote intergovernmental coordination in multi-jurisdictional efforts involving all governmental and quasi-governmental entities in Broward County.

- Policy 4-1: Invite the participation of other cities, County, State, and Federal agencies in the planning of pedestrian linkages and open spaces to maximize existing resources, including the programming and placement of recreational pathways that link jurisdictions.

- Policy 4-2: Promote coordination with Broward County, EPA, DEP, and other regulatory agencies having jurisdiction over the Broward Landfill site in the clean up, rehabilitation and reuse of the now-closed facility.

- Policy 4-3: Through Interlocal Agreement, the Town shall coordinate efforts with Broward County in promoting and implementing recycling efforts as mandated by the Solid Waste Management Act of 1988. The Town shall attend and participate in the Broward County Resource Recovery Technical Advisory Committee meetings.

- Policy 4-4: The Town shall continue to participate in effective mutual aid agreements for the provision of emergency services and other special purpose task forces to address multi-jurisdictional police, fire, and emergency medical service issues.

- Policy 4-5: Work with Broward County as necessary to comply with the requirements of Broward County Joint Municipal National Pollutant Discharge Elimination System (NPDES) Permit.

- Policy 4-6: Review public facility reports prepared according to state law and identify potential conflicts with the Town's adopted Comprehensive Plan. Any conflicts shall be resolved through informal coordination with the governing boards of the independent special districts.

- Policy 4-7: The Town shall request an opportunity to review comprehensive plan amendments proposed by adjacent municipalities (Sunrise, Hollywood, Cooper City, Weston, Pembroke Pines, Plantation, Southwest Ranches) in order to identify potential impacts to or conflicts with (1) existing or future development within the Town or (2) the ability of the Town to successfully implement the Goals, Objectives and Policies of the Comprehensive Plan. Upon identification of impacts or conflicts as a result of said review, the Town shall provide written comments to the respective municipality in order to address or resolve the identified impacts or conflicts.

OBJECTIVE 5: The Town shall work with adjacent municipalities and Broward County in the identification and implementation of joint planning areas (JPAs) for annexation and infrastructure service areas.

- Policy 5-1: The Town shall coordinate with Broward County in the annexation of land currently within the unincorporated area.

- Policy 5-2: Pursue and support the establishment of JPAs with adjacent municipalities, Broward County and agencies or other governmental units that provide facilities and services, including but not limited to the maintenance of roadway, drainage, public schools, solid waste and park and recreation facilities, in order to enhance, improve or increase the efficiency with which these facilities are currently provided.

- Policy 5-3: JPAs described in Policy 5-2 shall be established, as necessary, through formal agreements between the appropriate governmental bodies in order to address intergovernmental coordination activities related to population projections as well as Policies 8-6 and 8-7 relating to locally unwanted land uses. JPAs shall include but not be limited to as many of the following planning considerations as possible:

    - Cooperative planning and review of land development activities within the areas covered by an agreement.

    - Specification of service delivery.

    - Funding and cost sharing issues.

    - Enforcement/implementation.

OBJECTIVE 6: The Town shall coordinate with local and private universities, as well as the State University System, in the campus plan process.

- Policy 6-1: Work with Broward Community College, Nova Southeastern University, and Florida Atlantic University to ensure that the campus plans are consistent with the Town's Comprehensive Plan.

- Policy 6-2: Coordinate with Broward Community College, Nova Southeastern University, and Florida Atlantic University to mitigate any adverse effects the universities may have on adjacent uses.

OBJECTIVE 7: The Town shall use voluntary dispute resolution processes to resolve conflicts with other local governments.

- Policy 7-1: Utilize the South Florida Regional Planning Council's dispute resolution process when necessary to mediate the resolution of conflicts with other local governments and regional agencies. The Town may use alternative procedures whenever appropriate for matters of imminent dispute,

including agreements authorized by state law, or other non-judicial approaches.

OBJECTIVE 8: The Town will identify and establish joint processes with other local governments for collaborative planning on population projections, school siting, facilities subject to concurrency, facilities with countywide significance, and problematic land uses.

- Policy 8-1: Provide information annually to Broward County relating to the location and timing of anticipated capital improvement projects contained within the Town's adopted five year schedule of capital improvements for the purpose of achieving a coordination of efforts relating to the maintenance and/or extension of existing and location of new public facilities subject to concurrency.

- Policy 8-2: During review of the Town's five year schedule of capital improvements, the Town will consider the schedules of adjacent municipalities and other providers of public facilities within, adjacent to, or benefiting the Town in order to identify the potential for a coordination of efforts relating to the maintenance and extension of existing public facilities, as well as the location of new public facilities subject to concurrency.

- Policy 8-3: Pursue joint funding opportunities with SFWMD, FDEP, Broward County, FDOT, and other relevant public/private agencies having jurisdiction within the corporate limits of the Town, to establish joint processes and collaborative planning efforts, when feasible, to complete capital improvements. The Town shall meet annually, or more frequently if needed, with these public and private entities to discuss joint funding opportunities for capital improvements.

- Policy 8-4 The Town will consider amendment of its Comprehensive Plan and land development regulations based upon the recommendations contained within the adopted Broward County Local Mitigation Strategy.

- Policy 8-5: Attend meetings of the Hazard Mitigation Task Force, as necessary, to coordinate with the implementation and update of local mitigation strategies.

- Policy 8-6: Coordinate with the Broward County Planning Council, the South Florida Regional Planning Council, the League of Cities Technical Advisory Committee, appropriate agencies, or ad hoc committees in the development, review and recommendation of efficient countywide guidelines to govern the identification and location of facilities with

countywide significance, including those which may be locally unwanted land uses.

- Policy 8-7: Upon establishment of uniform countywide guidelines for the identification and location of facilities with countywide significance, pursuant to Policy 8-6, the Town will conduct a review of its location standards to determine:

    - whether conflicts exist between the Town's regulations and the regulations of other jurisdictions, what can be done to resolve any conflicts identified, and

    - any improvements in the effectiveness or efficiency to be gained through the countywide approach to location standards.

Intergovernmental Coordination Element: Plan Implementation

All departments in the Town participating in the implementation of this Element shall be required to operate within the framework established by the Goals, Objectives, and Policies. As mentioned in the Goals, Objectives and Policies of this Element, the Town shall strive to include any adjacent jurisdictions and utility service providers that may be affected by a planning and development activities in the review process to ensure opportunities for comment. All decision-making with regard to capital improvements and expenditures shall reflect the Goals, Objectives, and Policies of this Element. Annual budget review and capital improvement programming shall reflect consideration of needs that have been determined with respect to this Element's Goals, Objectives, and Policies.

Town land development regulations shall be amended, as necessary, to implement the requirements of this Element.

Intergovernmental Coordination Element: Monitoring and Evaluation

Objectives 1 and 4 shall be evaluated as to the number of meetings attended and the maintenance of agendas, minutes, and backup materials for all meetings, shall be accomplished. Objective 2 can be measured by the number of notices sent to adjacent/affected jurisdictions, as well as the jurisdictions' participation in the Town's planning activities. The evaluation procedure for Objective 3 is the monitoring of adopted levels of service, to ensure compliance with standards set forth in the Comprehensive Plan. The evaluation procedure for Objective 5 shall be based on the number of joint planning areas considered, as well as those established on an as needed basis. Objective 6 shall be evaluated by the number of contacts with Broward Community College, Nova University, and Florida Atlantic University regarding campus growth and impact issues. Objective 7 shall be evaluated as to the number of times SFRPC is considered and utilized, if needed, for dispute resolution, as well by counting the number of agreements entered into pursuant to state statutes. The evaluation procedure for Objective 8 shall be based on the number and effectiveness of joint processes the Town establishes with other governments units, agencies, or special districts to address population projections, school siting, facilities subject to concurrency, facilities with countywide significance, and locally unwanted land uses.

CAPITAL IMPROVEMENTS ELEMENT

CAPITAL IMPROVEMENTS ELEMENT: TABLE OF CONTENTS

TABLE OF CONTENTS ..... VII-i

LIST OF TABLES AND FIGURES ..... VII-ii

INTRODUCTION VII-1

ANALYSIS OF EXISTING CONDITIONS VII-2

NEEDS ASSESSMENT VII-11

GOALS, OBJECTIVES AND POLICIES VII-15

PLAN IMPLEMENTATION VII-19

GLOSSARY VII-20

CAPITAL IMPROVEMENTS ELEMENT: LIST OF TABLES AND FIGURES

TABLES	DESCRIPTION	
VII-1	Public Schools within Town of Davie	VII-3
VII-2	Traffic Circulation Needs, 1995-2000	VII-4
VII-3	Parks and Recreation Improvement Program, 1995-2000	VII-7
VII-4	Budget Summary for Town of Davie, F.Y. 1995	VII-9
VII-5	General Fund Budget Summary for Town of Davie	VII-10
VII-6	Capital Improvements Needs 1994-2000	VII-13
VII-7	Revenue and Expenditure Projections, FY 1995-2000	VII-14

FIGURES	DESCRIPTION	
VII-1	Hospital Districts	VII-5
VII-2	Utility Service Areas	VII-6

Capital Improvements Element: Introduction

The 1985 Local Government Comprehensive Planning and Land Development Regulation Act, Chapter 163, F.S., established the concept that urban services must be provided concurrently with the impact of new development. Levels of service have been used in the various elements of this Plan to quantitatively evaluate essential services and determine infrastructure necessary to provide these services at the accepted level.

The purpose of this element is to evaluate the need for public facilities as identified in the other elements of this Plan, to estimate the cost for improvements for which the Town has fiscal responsibility, to analyze the fiscal capability of the Town to finance and construct these improvements, to guide the funding of improvements through the adoption of financial policies, and to schedule the funding and construction of improvements so as to provide capital improvements when required pursuant to the other elements of the Plan.

To be effective, this element must be coordinated with all other elements of the Plan, and shall be reviewed on an annual basis. Any changes, modifications or amendments to the Comprehensive Plan must involve an analysis of its impact on the capital planning and programming effort. The planning time frame is the five-year period from 1995 through 2000.

Capital Improvements Element: Analysis of Existing Conditions

Services and Facilities

Public Education Facilities

The Town of Davie is served by the School Board of Broward County, a special taxing authority that provides a county-wide educational system. The Board operates five elementary, one middle, and two high schools as well as a vocational school. The names and locations of these facilities are identified in Table VII-1.

The South Florida Educational Center (SFEC) houses the Central Campus of Broward Community College, a two-year junior college; Nova University, which provides preschool through graduate and special programs; the McFatter Vocational Technical School; the School Board's ITV or Instructional Television facility; branches of Florida Atlantic University and Florida International University; Broward County Fire Academy and Criminal Justice Institute; and the Nova elementary, middle and high schools.

Public Health Facilities

The Town of Davie falls into the jurisdiction of both the North and South Broward Hospital Districts. The geographic areas of these districts are shown in Figure VII-1. These are special purpose taxing districts which maintain full service hospital facilities, including emergency rooms. While neither District operates a hospital located within the Town's municipal limits, adequate health care facilities currently exist within a reasonable proximity to Town boundaries and are programmed to accommodate Town needs for the planning period.

Traffic Circulation Needs

The traffic circulation needs of the Town of Davie are presented in the Traffic Circulation Element of this Comprehensive Plan. The element examines current deficiencies and the improvements required to make the collector and arterial system operate at the established acceptable level of service, Level Of Service "D". A five-year improvement program based on projected traffic volumes, existing conditions, programmed improvements, and LOS "D" capacity was identified. The results of these two analyses are summarized in Table VII 2.

TABLE VII- 1 Public Schools within Town of Davie

Name of School	Principal	Address
Davie Elementary	Mr. Edmund Cannon	7025 SW 39 St.
Dwight D. Eisenhower Elem.	Ms. Shirley McCray	6501 SW 39 St.
Flamingo Elementary	Ms. Cathleen Morris	1130 SW 133 Ave.
Nova Blanche Forman Elem.	Ms. Margaret Underhill	3521 Davie Rd.
Silver Ridge Elementary	Ms. Marcia Pann	9100 SW 36 St.
Nova Middle School	Mr. Steven Friedman	3602 College Ave.
Nova High School	Dr. Steven Pomerantz	3600 College Ave.
Western High School	Dr. David Hogg	1200 SW 136 Ave.
McFatter, William T. Voc-Tech.	Mr. Horace McLeod	6500 Nova Dr.
Nova Community School	Mr. John Stafford	3600 College Ave.

Source: Town of Davie Planning Dept. & Broward Co. School Board.

Sanitary Sewer Needs

The Davie Utilities Department provides for the operation and maintenance of sanitary sewer collection and treatment functions within the approximately 12 square mile Service Area that is shown in Figure VII-2;. Within the Service Area, there are more than 22 miles of gravity mains, 24 pumping stations, a 3.0 million gallons per day (mgd) treatment plant (in the Process of expanding to 5.0 mgd), and effluent disposal facilities. Developers are required to construct infrastructure within proposed development and connect this infrastructure to existing service lines; this may include the installation of lift stations and extension of mains, as necessary. Additional discussion may be found in the Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element of this Plan.

Potable Water Needs

When the Town of Davie acquired two privately owned and operated water treatment and distribution systems in 1981 and 1982, the combined plant capacity was 4.8 million gallons per day (mgd). The Town began a series of phased expansions in 1985 financed by bonds. The first phase of the water treatment plant expansion has increased combined plant capacity to 7.0 mgd. In addition, the system includes a raw water wellfield and approximately 60 miles of distribution mains. Pursuant to the analysis contained in the Sanitary Sewer, Solid Waste, Drainage, Potable Water and

TABLE VII-2 Traffic Circulation Needs, 1995-2000

Roadway/Segment Description	Existing Level of	Proposed Level of Service (year)
Griffin Rd; Univ. Dr. to State Road & (F.D.O.T.)	E	B ('97-'98)
State Road 7; Griffin Rd. to Stirling Rd.	E	C (Unfunded)
Nova Drive from University Drive to Davie Road	E	(Unfunded)

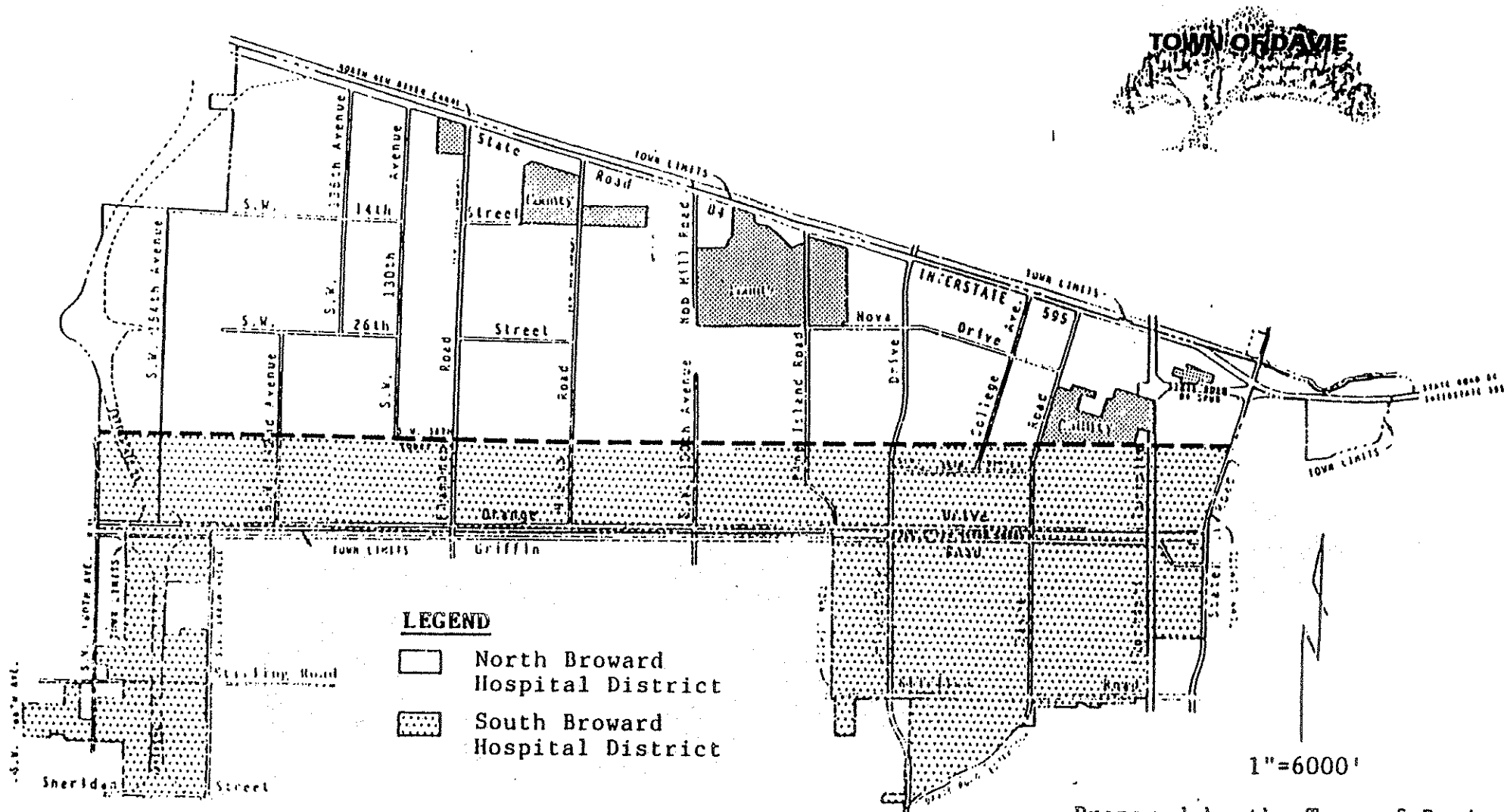
Natural Groundwater Aquifer Recharge Element, treatment capacity is adequate to meet the projected demand through the year 2000 at the adopted level of service. The distribution system will be expanded by developers as required to meet the needs of their proposed developments. The Town will continue to monitor the quality of well water drawn from municipal wells pursuant to the requirements of the Environmental Protection Agency (EPA), Florida Department of Environmental Protection, Broward County Public Health Unit, and South Florida Water Management District.

Drainage/Recharge Needs

The ideal stormwater management system is one that balances the need for the rapid drainage of impervious surfaces such as roofs, streets, and parking lots, with the need to retain runoff on-site so as to promote cleaner canals and lakes and greater aquifer recharge. The South Florida Water Management District and Central Broward Drainage Districts have moved toward such a balanced system by reducing the reliance on direct drainage improvements such as canals outfalling to the Atlantic Ocean, and increasing the requirement for retention, i.e. impoundments which release stormwater by percolation into the ground with no direct discharge into surface waters. Additionally, the Town addresses this essential function of reducing flooding and improving water quality by promoting the preservation of natural drainage features such as isolated wetlands, and regulating land uses in high flood hazard areas. The Town promotes the reduction of dependence on potable water for non-essential purposes by encouraging xeriscape in project landscaping, and consolidation of green spaces in development to maximize irrigation efforts. The Town shall continue to require the elevation of building pads and street and lot drainage improvements to accommodate flood concerns, pursuant to standards promulgated by agencies such as the Federal Emergency Management Agency (FEMA) and the South Florida Water Management District (SFWMD). Finally, the Town has undertaken an Open Space Program described in the Recreation, Open Space and Conservation Element of this Plan which promotes the retention of open, green spaces throughout the Town thereby creating additional natural drainage and aquifer recharge opportunities.

FIGURE VII-1

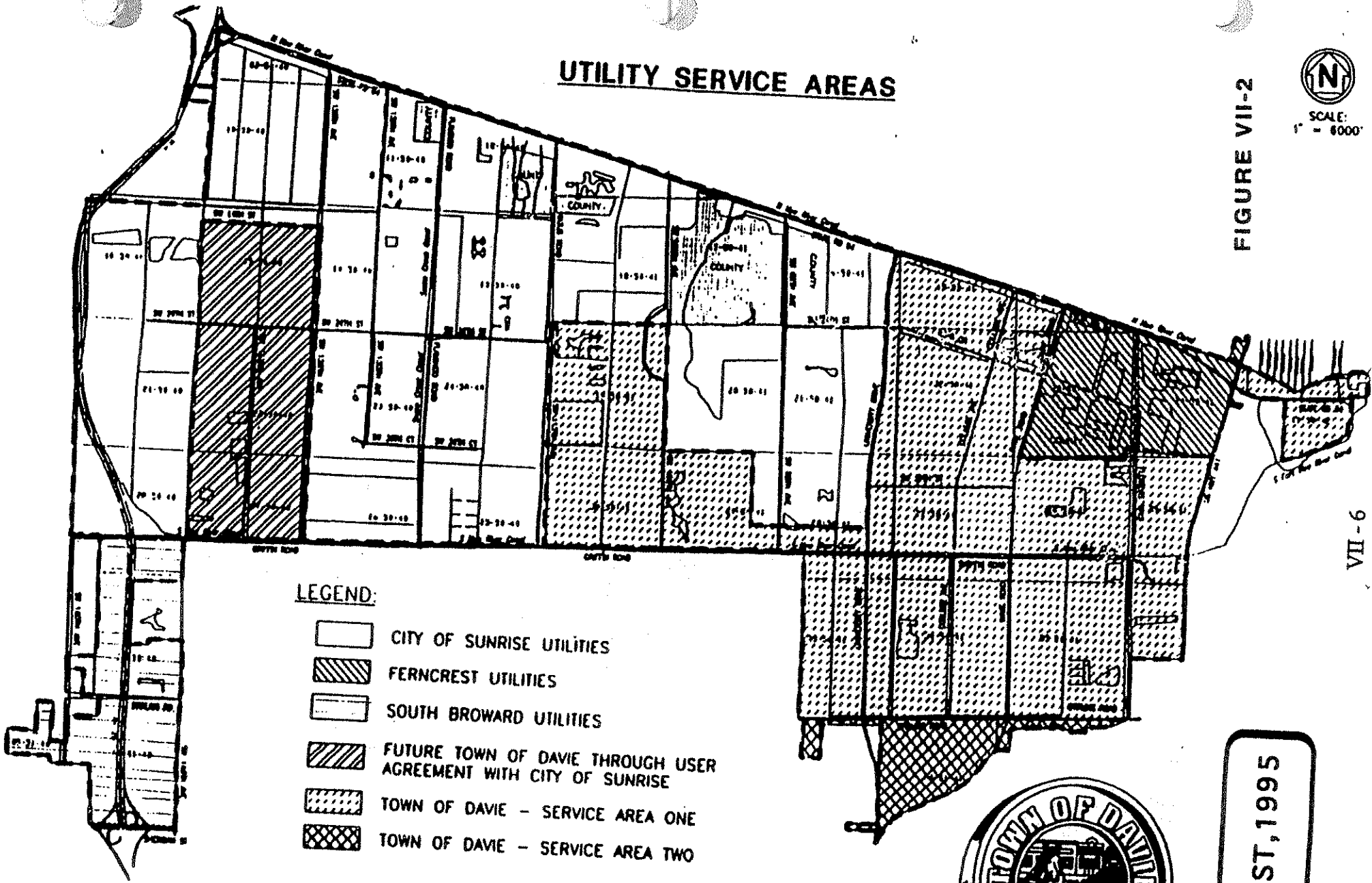
HOSPITAL DISTRICTS



Prepared by the Town of Davie
April, 1989

UTILITY SERVICE AREAS

FIGURE VII-2



TOWN OF DAVIE FLORIDA

AUGUST, 1995

Solid Waste Collection and Disposal Needs

The curbside collection of solid waste in the Town is handled by a franchised private carting company and is planned to be handled in this manner in the future. The disposal of the collected solid waste is a countywide function; the Town has, through interlocal agreement, pledged its waste stream to the County. The County has constructed two resource recovery plants, each of which has a capacity of 2,250 tons per day. The combined capacity of these facilities and county landfills will accommodate the projected solid waste disposal demand until the year 2005, thus maintaining the adopted level of service described in the Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element.

Parks and Recreation Needs

The Recreation, Open Space and Conservation Element of this Plan includes goals, objectives and policies that express the Town's needs and priorities regarding the provision of recreational and open space lands. As described within the elements of this plan, there is a direct relationship between the provision of recreational facilities and open space, and the preservation of natural resources. Recreation and Open Space activities necessary to maintain the adopted level of service as contained in the Recreation, Open Space and Conservation Element are listed below in Table VII-3.

TABLE VII-3 Parks and Recreation Improvement Program, 1995-2000

Project Description	Year	Cost
Linear Park	1998	$90,000.00
Lyn Mar Park	1998	$150,000.00
Oak Hill Equestrian Park	1998	$20,000.00
Orange Park	1995	$5,000.00
Pine Island Park	1997	$6,000,000.00
	1998	$6,000,000.00
Potter Park	1995	$55,000.00
	1996	$40,000.00
	1997	$20,000.00
Reflections Park	1996	$25,000.00
Shenandoah Park	1995	$375,000.00
	1998	$1,520,000.00
Southwest Sports Complex	1998	$20,000.00
39 Street Ballfields	1995	$25,000.00
Veterans Park	1995	$80,000.00
Waterford Park	1998	$150,000.00
Waverly 100 Park	1998	$150,000.00
Western High School	1995	$70,000.00

Source: Town of Davie Department of Fiance

Police and Fire Services

The protection of life and property is the primary function of the Town of Davie Police Department and Fire Department. These are labor-intensive services that rely primarily on the skill and courage of its personnel. However, these men and women could not perform effectively without capital improvements such as administrative buildings, stations and equipment. This planning period proposes the construction of Ivanhoe Fire Station to serve the western portions of the Town.

Existing Revenue Sources

Growth in population, development and tax base generally establish and maintain Davie's stable financial condition. The Town's general operating budget has ranged from $3,730,811 in 1981 to approximately $32,000,000 in 1995, and has been sufficient to address operational needs. It is anticipated that with continued development and growth and, as projected, modest adjustments to the millage rate, the Town should be able to maintain its current favorable financial condition.

All figures used in this discussion are taken from the adopted 1994-1995 Town of Davie budget. The fiscal year for the Town begins on October 1 of each year and ends on September 30. A summary of the Town's budget for FY '95 with respect to revenue sources and accounts is provided in Tables VII-4 and VII-5.

TABLE VII-4: Budget Summary for Town of Davie, F.Y. 1995

	General Fund	Capital Projects	Enterprise	Internal Sevice	Total
Cash Balances Brought Forward	3,962,971	1,429,699	2,050,357	2,241,330	9,684,357
Revenues					
Property Taxes	10,231,505	—	—	—	10,231,505
CRA	106,000	—	—	—	106,000
Voter Approved Dept. Recreation	187,254	—	—	—	187,254
Voter Approved Dept. Open Space	187,254	—	—	—	187,254
Franchise Taxes	3,806,811	—	—	—	3,806,811
Utility Service Taxes	4,445,000	—	—	—	4,445,000
Licenses and Permits	331,000	—	—	—	331,000
Intergovernmental	4,203,780	—	—	—	4,203,780
Charges for Sevices	2,505,389	—	6,234,102	2,578,313	11,317,804
Fines and Forfeitures	390,968	—	—	—	390,968
Interest and Other	2,371,871	—	—	—	2,371,871
Other Financing Sources In	0	—	—	—	0
Operating Transfers	—	—	—	450,000	450,000
Total Estimated Revenue and Other	28,766,832	0	6,234,102	3,028,313	38,029,247
Total Estimated Revenue and Balanc	32,729,803	1,429,699	8,284,459	5,269,643	47,713,604

Source: Town of Davie, Budget & Finance Dept.

TABLE VII-5 General Fund Budget Summary for Town of Davie, '95

Account Description	Y-T-D	Total Forecasted	% of Total
Total Operating Millage	8,714,304	10,231,505	35.29%
CRA Property Taxes	99,914	106,000	0.36%
Total Debt Service Millage	877,967	374,508	1.27%
Total Franchise Taxes	2,590,601	3,806,811	12.89%
Total Utility Service Taxes	3,475,067	4,445,000	15.05%
Total Occupational Licenses	275,636	331,000	1.12%
Total Rev. fom Other Gov's	2,953,830	4,203,780	14.32%
Total Miscellaneous Revenues	496,111	614,280	2.08%
Total Development Revenue	1,865,897	2,015,739	6.83%
Fines and Forfeitures	472,857	390,968	1.32%
Total Recreation Revenues	373,373	489,650	1.66%
Interest on Investments	980,613	1,220,000	4.13%
Enterprise Fund Contibutions	0	250,000	0.85%
Tansfer Out	0	0	0.00%
Proceeds of GLTD	4,644,214	0	0.00%
Fire Assessments	54,689	65,626	0.22%
Park Impact Fees	205,024	221,425	0.75%
Appropriation of Fund Balance Res	0	522,677	1.85%
Total Budget	28,080,097	29,288,969	100%

Source: Town of Davie Buget and Finance Dept.

The budget maintains four funds: the general fund, the capital projects fund, enterprise funds, and internal service funds. The General Fund deals with the provision of police and fire services, public works, parks and recreation, debt service, and supporting administrative functions. The Capital Projects Fund supports long-term infrastructure improvements such as those required for public safety, recreation, and general government. The Enterprise Funds include the Water and Sewer Fund which finances utilities expansion, operation, and replacement; the Rodeo Arena Fund which finances the operation and promotion of the Davie Rodeo; and the Concession Fund which finances the operation of concessionary activities at parks and recreation facilities. Last, the Internal Service Funds serve to accumulate costs and charge them back to using departments.The Town has historically maintained a low millage rate since ad valorem taxation was initiated in 1981 and first collected in 1982.

Capital Improvements Element: Needs Assessment

Current Policies and Practices

The concurrency requirement of Chapter 163.3177(10)(h), F.S. requires that public facilities needed to support development shall be available concurrent with the impacts of such development. The Town of Davie has been practicing such a policy, through the adoption and implementation of its Development Review Code and other related ordinances. In conjunction with the Broward County Commission and the South Florida Regional Planning Council, the Town Council has established a growth management system which provides that new development pay for those facilities required to serve that development. The existing residents of Davie are not paying for infrastructure shortfalls caused by the continued growth of the Town.

The following activities require developer participation in the provision of essential services:

- right-of-way dedication consistent with the Broward County Trafficways Plan and Town right-of-way requirements.

- regional traffic circulation improvements, including construction or installation of additional travel lanes, turning lanes, and signalization, as determined and required by Broward County. Impact fees for the regional roadway network are collected by the County Commission during the platting process.

- improvements to local streets necessary to accommodate development. The developer may bond for these improvements at plat recordation, and construct the improvements concurrent with development of the property.

- dedication of land for recreation and open space purposes, or payment of fees in lieu thereof. Broward County implements this requirement for regional parks and recreation needs; the Town enforces this provision to insure adequate neighborhood and community level recreation and open space facilities. Funds collected during this process are placed in a non-lapsing Trust Fund utilized only for the acquisition and development of recreational and open space lands.

- utility connection charges levied at the time of platting, site planning or building permit application to defray the cost of infrastructure related to the provision of water and wastewater treatment services.

- water distribution and wastewater collection and transmission facilities necessary to accommodate the development are constructed by developer and conveyed to the Town. This includes lift stations, service lines internal to the development, extensions to existing mains, and connections to existing facilities.

- drainage rights-of-way and easements are conveyed to the appropriate drainage district and a stormwater management system is constructed in accordance with S.F.W.M.D. and C.B.D.D. permits.

- land for school sites is conveyed and/or educational impact fees are paid by developers during the platting process. This requirement is implemented by Broward County through its development review process.

Costs and Fiscal Implications

Capital improvements necessary to correct existing deficiencies and accommodate newgrowth at adopted levels of service was presented in the Analysis of Existing Conditions. Table VII-6 describes each of these required improvements, the year the im- provement is needed, the approximate cost for the improvement and the funding source.

TABLE VII-6. Capital Improvements Needs
Town of Davie, 1994-2000

Project Description	Year	Estimated Cost ($1,000s)	Funding Program
Griffin Road from Pine Island Road to State Rd. 7	97-00	14,000	FDOT
State Road 7 from Stirling Rd. to Griffin Road	96-97	2000	FDOT
Nova Drive fom University Dr, to Davie Road	—	—	unfunded
SW 136 Avenue from SW 8 St. to SW 14 Street	—	—	unfunded
Davie Road			
a.) University Drive to Stirling Road	98-99	3500	BC
b.) Nova Drive to State Road 84	98-99		unfunded

Linear Park	98	98	CP
Lyn Mar Park	98	150	CP
Oak Hill Equestrian Park	98	20	CP
Orange Park	95	5	CP
Pine Island Park	97	6,000	CP
	98	6,000	CP
Potter Park	95	55	CP
	96	40	CP
	97	20	CP
Reflections Park	96	10	CP
Shenandoah	95	25	CP
	98	375	CP
Southwest Sports Complex	98	1,520	CP
39 Street Ballfields	95	20	CP
Veterans Park	95	25	CP
Waterford Park	98	80	CP
Waverly 100 Park	98	150	CP
Western High School	95	70	CP
Wastewater Treatment Plant Epansions (Phase III)	96	4,488	CP

BC = Broward County
FDOT = Fla. Dept. of Transportation
CP = Davie Capital Projects Fund
G= GRANT

Source: Budget and Finance Dept, Town of Davie

Ability To Finance Improvements

Revenues are expected to increase, due to growth in population and tax base; expenditures are expected to similarly increase, to accommodate this growth.

TABLE VII-7. Revenue and Expenditure Projections, FY 1995-2000

Fiscal Year	Revenues	Expenditures
1995	28,767,000	28,767,000
1996	30,062,000	30,062,000
1997	30,970,000	30,970,000
1998	32,521,000	32,512,000
1999	33,813,000	33,813,000
2000	35,503,000	35,503,000

Source: Town of Davie Budget & Finance Dept.

Summary and Conclusion

Growth in population, development and tax base generally establish and maintain Davie's stable financial condition. As stated earlier, it is anticipated that with continued development and growth the Town should be able to maintain its current favorable financial condition while retaining a relatively low tax burden for its property owners.

The Town does not suffer from the fiscal maladies of other cities that assumed growth would pay for itself. The Town does not rely heavily on intergovernmental revenues, particularly Federal revenue sharing, as a general fund source. Expenditures per capita have not, and are not projected to, exceed revenues per capita. Uncollected revenues are nominal; the amount of uncollected property tax as a percentage of net property tax levy is less than 1 percent. And, user charges adequately maintain the enterprise funds.

The Town implements an aggressive growth management program that requires development to assume the responsibility of infrastructure improvements necessitated by that development. This includes developer participation in the construction of, or the collection of impact fees for, parks and open space, water, sewer, and local street construction. In addition, the developers within the Town are subject to the Broward County impact fees for regional schools, roads, and park facilities. Another fiscal advantage for the Town is the relatively large percentage of vacant, developable land left within its municipal limits, as discussed in the Future Land Use Plan. This provides an opportunity for the Town to fully implement a financially feasible growth management program while addressing existing needs.

CAPITAL IMPROVEMENT ELEMENT:
GOALS, OBJECTIVES AND POLICIES

GOAL: **The Town of Davie shall protect the substantial investments in public facilities that already exist and shall plan for and finance new facilities to serve residents at adopted levels of service in a timely, orderly, and efficient manner that encourages intergeneration equity between taxes collected and services received.**

OBJECTIVE 1: The Capital Improvements Element shall identify those capital facilities necessary to serve existing and proposed development in the Town of Davie at adopted levels of service identified in this Comprehensive Plan.

- **Policy 1.1:** Each fiscal year the Town Council shall adopt a five-year capital budget listing all capital improvements which are proposed to be undertaken during the ensuing five fiscal years. The capital improvement program shall include cost estimates, method of financing, and recommended time schedules for each listed improvement.

- **Policy 1.2:** The five-year capital budget shall be consistent with this element, as amended and updated, and shall use this element as a basis for the inclusion of projects and projected construction dates.

- **Policy 1.3:** The five-year capital budget will only include those projects which are financially feasible.

- **Policy 1.4:** This element shall reflect the capital improvements needs identified in other elements of the Plan.

- **Policy 1.6:** Capital projects shall be prioritized, with consideration given to the following criteria:

  (a) The immediacy of the need.
  (b) The financial feasibility of the project. This analysis shall consider developer contributions and grants from other also governmental units.

(c) The adopted plans of Broward County, adjacent municipalities and special districts. Interjurisdictional projects should be programmed to capitalize on simultaneous construction funding.
(d) The need for periodic replacement and renewal of existing capital facilities.
(e) The location of projects, with priority given to those located in newly developing areas, redevelopment areas, and communities' demonstrable need.
(f) The operating expenses associated with each new capital improvement. The Town should not undertake projects which cannot be adequately operated and maintained.
(g) In the event it has been determined that a condition exists that creates a public hazard, priority shall be given to the capital project(s) designed to correct such condition.

- **Policy 1.7** The Town shall consider the feasibility of formulating an Education Element or sub-element of the Future Land Use Element to be consistent with that of Broward County in order to sufficiently plan for the educational needs of the anticipated populations in the Town.

OBJECTIVE 2: Land use decisions which impact the provision of public facilities and services shall take into consideration the ability of the Town of Davie to maintain adequate Levels Of Service as described in the elements of this Comprehensive Plan.

- **Policy 2.1**: All proposed development shall be analyzed based on maximum development impact, unless appropriate sureties that reflect less than maximum impact are provided, to insure that the adopted levels essential services are available to accommodate such development. This determination shall be made during the platting process for land which must be platted or replatted prior to development, or during the site plan review process if platting is not required.

- **Policy 2.2**: No plat or site plan shall be approved which will result in the regional transportation network operating below the adopted level of service as established in the Traffic Circulation Element.

- **Policy 2.3**: No plat or site plan shall be approved without the reservation of adequate wastewater treatment capacity based on the projected need of the proposed development (projected average daily generation, in gallons), or which does not provide an adequate wastewater collection system.

- **Policy 2.4:** No plat or site plan shall be approved without the reservation of potable water treatment capacity based on the projected need of the proposed development (projected average daily consumption, in gallons), or which does not provide an adequate distribution system.

- **Policy 2.5 :** No plat or site plan shall be approved which does not provide for the dedication of land for municipal recreation and open space purposes pursuant to the adopted level of service contained in the Parks, Recreation and Open Space element. The Town shall reserve the right to determine if the dedication of land is consistent with Comprehensive Plan goals, objectives and policies, or if payment into the Recreational Trust Fund is more appropriate.

- **Policy 2.6:** No plat or site plan shall be approved which does not provide a storm water management system appropriate for the proposed development, in accord with the criteria of the appropriate drainage district(s) and the Town.

- **Policy 2.7:** No plat or site plan shall be approved which does not provide the capacity to store and collect solid waste generated by the proposed development for recycling and/or disposal.

OBJECTIVE 3: The Town will implement revenue policies which prevent undue or unbalanced reliance on certain revenues, especially property taxes, which distribute the costs of municipal services fairly, and which provide adequate funds to operate programs.

- **Policy 3.1:** Deficit financing is an inappropriate vehicle for the provision of public services needed to correct existing deficiencies.

- **Policy 3.2:** User fees may be utilized to offset current operating costs and to create reserves for replacement of deteriorated or obsolete capital facilities.

- **Policy 3.3:** Tax increment financing may be an appropriate tool for financing capital improvements in redevelopment areas established pursuant to Chapter 163, Part III, F.S.

- **Policy 3.4:** The Town will continually seek categorical grants-in-aid and discretionary grants from other units of government and private foundations for use in capital improvement financing; however, the Town shall not rely on these sources as a primary means of financing capital improvements.

- **Policy 3.5:** The Town will coordinate with the Tax Collector's office to maintain a very high tax collection rate, to the extent consistent with the marginal costs of collection.

- **Policy 3.6:** The Town will support economic development and the annexation of residential, commercial, and industrial parcels, provided such annexation is consistent with the Goals, Objectives and Policies of this Plan.

- **Policy 3.7:** The Town will continue its low reliance on intergovernmental revenues as funding sources for normal operations and services.

- **Policy 3.8:** The Town will maintain water and sewer rate structures which are adequate to insure that this enterprise fund remains self-supporting, and accommodates the costs of operation, capital plant maintenance, debt service, depreciation, and system expansion other than that required by new development.

CAPITAL IMPROVEMENTS ELEMENT

OBJECTIVE 4: The County, in collaboration with the School Board and the Town shall ensure that public school facilities are available for current and future students consistent with available financial resources and the adopted LOS.

Policy 4.1: Consistent with policies and procedures within the Interlocal Agreement for Public School Facility Planning (ILA), the DEFP shall contain a 5 year financially feasible schedule of capital improvements to address existing deficiencies and achieve and maintain the adopted LOS in all CSA's. This financially feasible schedule shall be updated on an annual basis and annually adopted into the CIE.

Policy 4.2: The uniform, district-wide LOS shall be 110% of the permanent FISH capacity for each public elementary, middle and high school.

Policy 4.3: The adopted LOS shall be applied consistently by Broward County, the municipalities and the School Board, district-wide to all schools of the same type.

Policy 4.4: The School Board's DEFP adopted by the School Board on August 1, 2007, are adopted by reference into the CIE.

Capital Improvements Element: Monitoring,Evaluation And Plan Implementation

The Capital Improvements Element shall be reviewed annually, as required by Chapter 163, F.S., to ensure that adopted level of service standards are maintained with respect to the infrastructure improvements necessary to maintain the standards. The annual review is also designed to ensure that adequate funding is available for public facilities and services, at the time they are needed, to meet concurrency requirements of Chapter 163, F.S.

The following procedures shall be used to annually review the Capital Improvements Element:

1. Review of the Capital Improvements Element for internal consistency with other Comprehensive Plan Elements and its support of the Future Land Use Plan.

2. Review of the implementation schedule for capital expenditures to determine the continued need of the expenditure, and the relative priority in comparison to other scheduled improvements in this Element.

3. Review of the Town's ability to meet or maintain its adopted Level of Service standards.

4. Review of the Town's current and projected cost and revenue estimates to ensure the continued capability of providing the capital expenditures recommended in each element of the Comprehensive Plan.

5. Review of the Town's progress towards eliminating service and facility deficiencies as identified in other comprehensive plan elements.

6. Review of the ratio of debt service to total revenue.

7. Review of impact fee schedules, assessments, land dedications and other requirements used to assess new developments a share of the public service and facility costs necessary to provide the adopted Levels of Service.

8. Review of cost estimates for improvements to or expansion of public facilities and services, as detailed in Table VII-5 as amended from time to time.

9. At least once every five years, monitor trends in the Town's financial condition.

Capital Improvements Element: Glossary

- **Bonds**: a certificate of debt issued by a local government guaranteeing payment of a specific amount of borrowed funds plus interest payments on specific dates.

- **Capital Budget**: the first year of the capital program which includes capital project appropriations and the revenues required to support the projects.

- **Appropriation**: the legal authorization given by the Town Council to make expenditures and incur obligations using town funds.

- **Capital Outlay**: expenditures which result in the acquisition of or addition to fixed assets.

- **Capital Plan**: a compilation of all capital and infrastructure needs which are not funded in the Capital Program.

- **Capital Program**: all capital expenditures planned for the next five years. The program specifies both proposed projects and the resources estimated to be available to fund projected expenditures.

- **Contingency**: costs which may arise as a result of conditions undetermined at a given date.

- **Debt Service**: payments of principal and interest on obligations resulting from the issuance of bonds.

- **Enterprise Fund**: a fund which pays for the cost of its operations and capital improvements from user fees and does not generally receive property tax support.

- **Fiscal Year**: the period of time for which funds are appropriated and accounted for. The Town's fiscal year begins annually on October 1st and ends of September 30th of the next calendar year.

- **General Obligation Bonds**: bonds financed with the ad valorem taxes "or full faith and credit" of the issuing government. These bonds must be approved by a majority of voters.

- **Grants**: contributions or gifts of cash or other assets from another government to be used or expended for a specific purpose, activity, or facility.

- **Impact Fees**: funds collected from a developer to fund the improvements required to serve the residents or users of the development. The Town currently collects impact fees for municipal parks and open space needs.

- **Infrastructure:** the land, equipment, facilities and other capital improvements necessary to provide services.

- **Revenue Bonds:** bonds financed with charges paid exclusively by the users of the public improvement or with another specific revenue source except ad valorem taxes.

- **Revenues:** the taxes, fees, charges, special assessments, grants and other funds collected and received by the town in order to support the services provided.

- **Special Assessments:** a compulsory charge made against certain properties to defray part or all of the cost of a specific improvement or service deemed to primarily benefit those properties.

- **User Charges or Fees:** the payment of a fee for direct receipt of a public service by the person or entity benefiting from the service.

PUBLIC SCHOOL FACILITIES ELEMENT

Exhibit "D"8. – Adopted Maps – Future Conditions

LIST OF ADOPTED MAPS

MAP #

Short-Range – (2007– 2012)

1 Future Conditions - Elementary Schools – Five Year Plan

2 Future Conditions - Middle Schools – Five Year Plan

3 Future Conditions - High Schools – Five Year Plan

4 Future Conditions - Charter Schools – Five Year Plan

5 Future Conditions - Special Schools – Five Year Plan

6 Future Conditions - Ancillary Plant Locations – Five Year Plan

Long-Range – (2007 – 2017)

7 Future Conditions - Elementary Schools – Ten Year Plan

8 Future Conditions - Middle Schools – Ten Year Plan

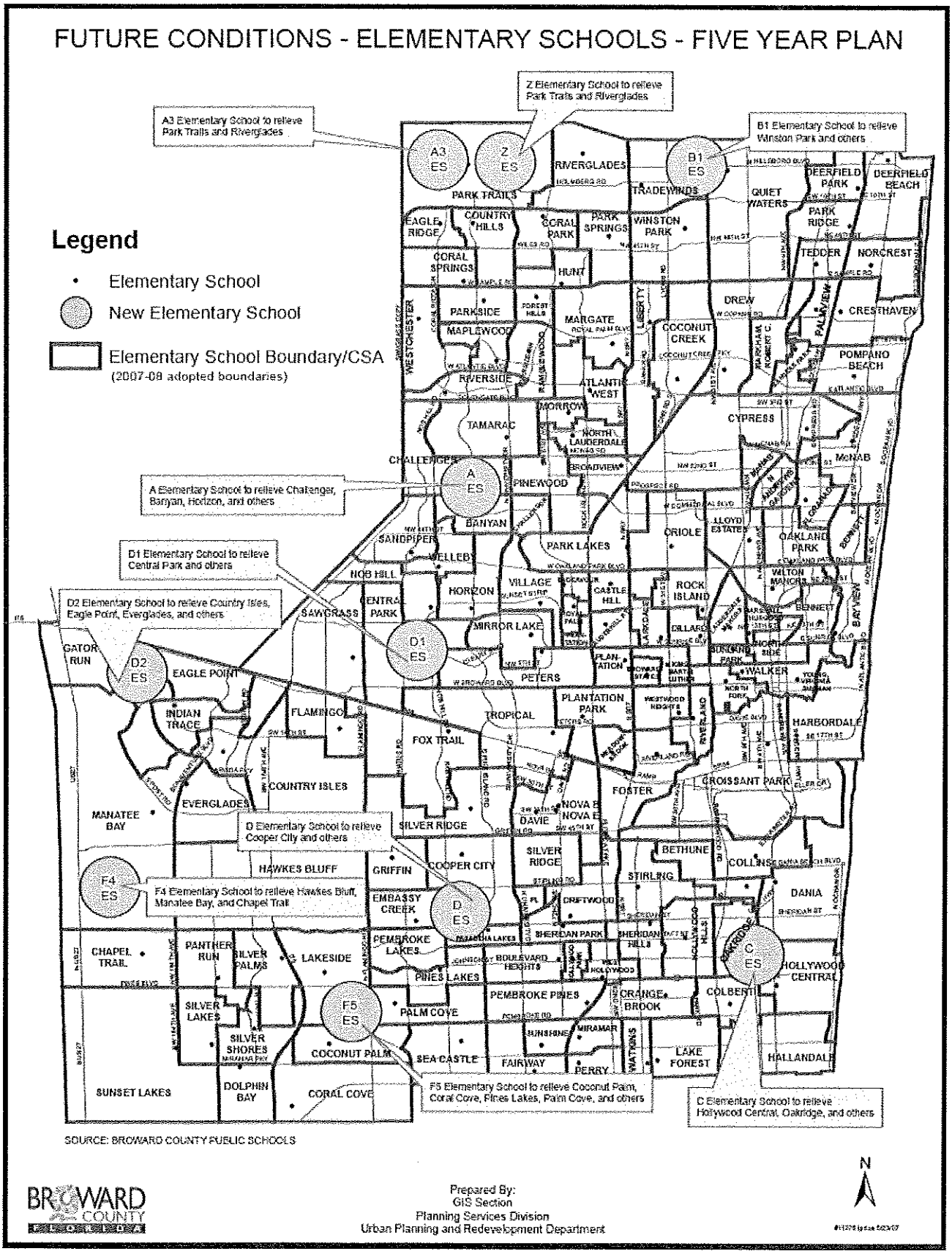
9 Future Conditions - High Schools – Ten Year Plan

10 Future Conditions - Charter Schools – Ten Year Plan

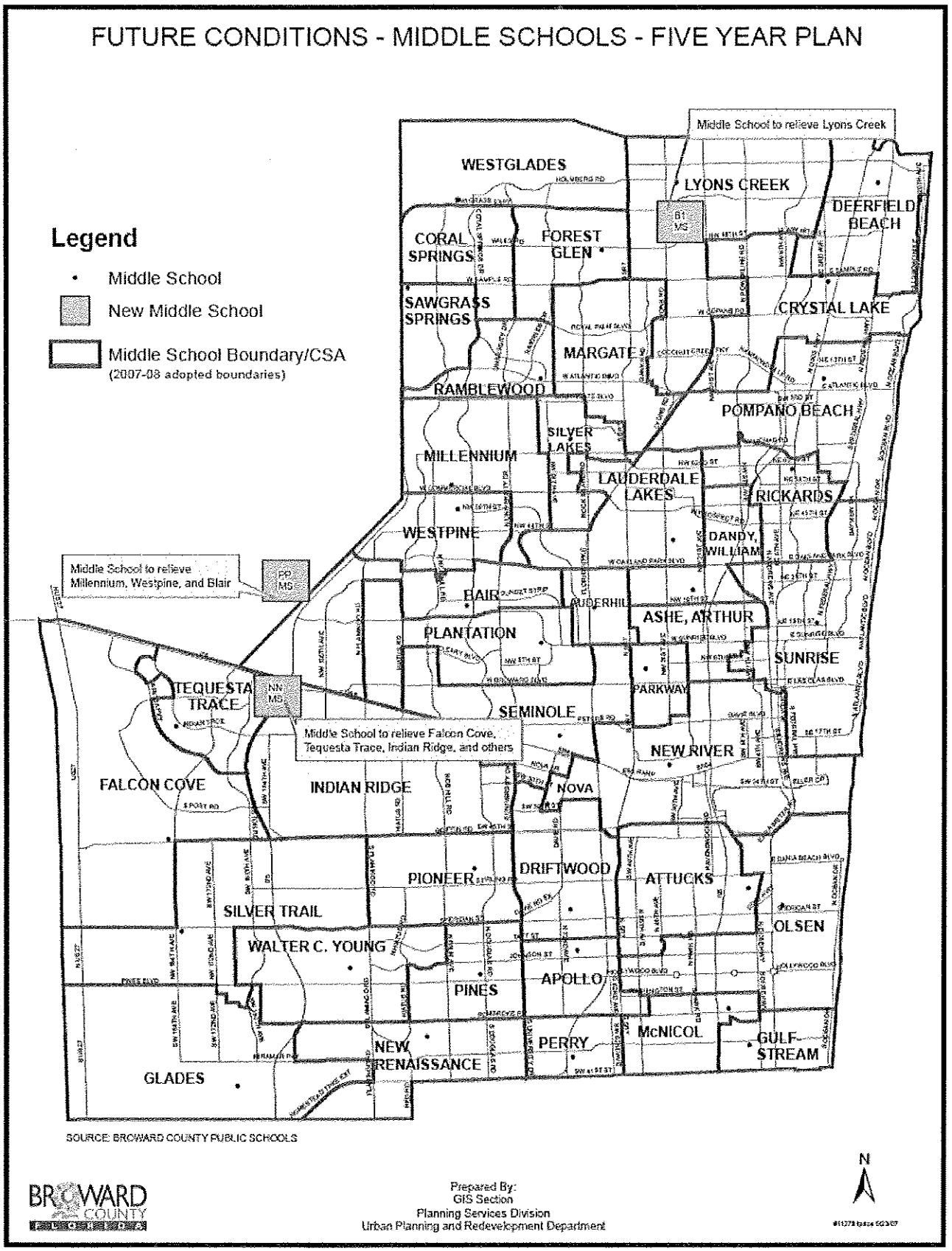
11 Future Conditions - Special Schools – Ten Year Plan

12 Future Conditions - Ancillary Plant Locations – Ten Year Plan

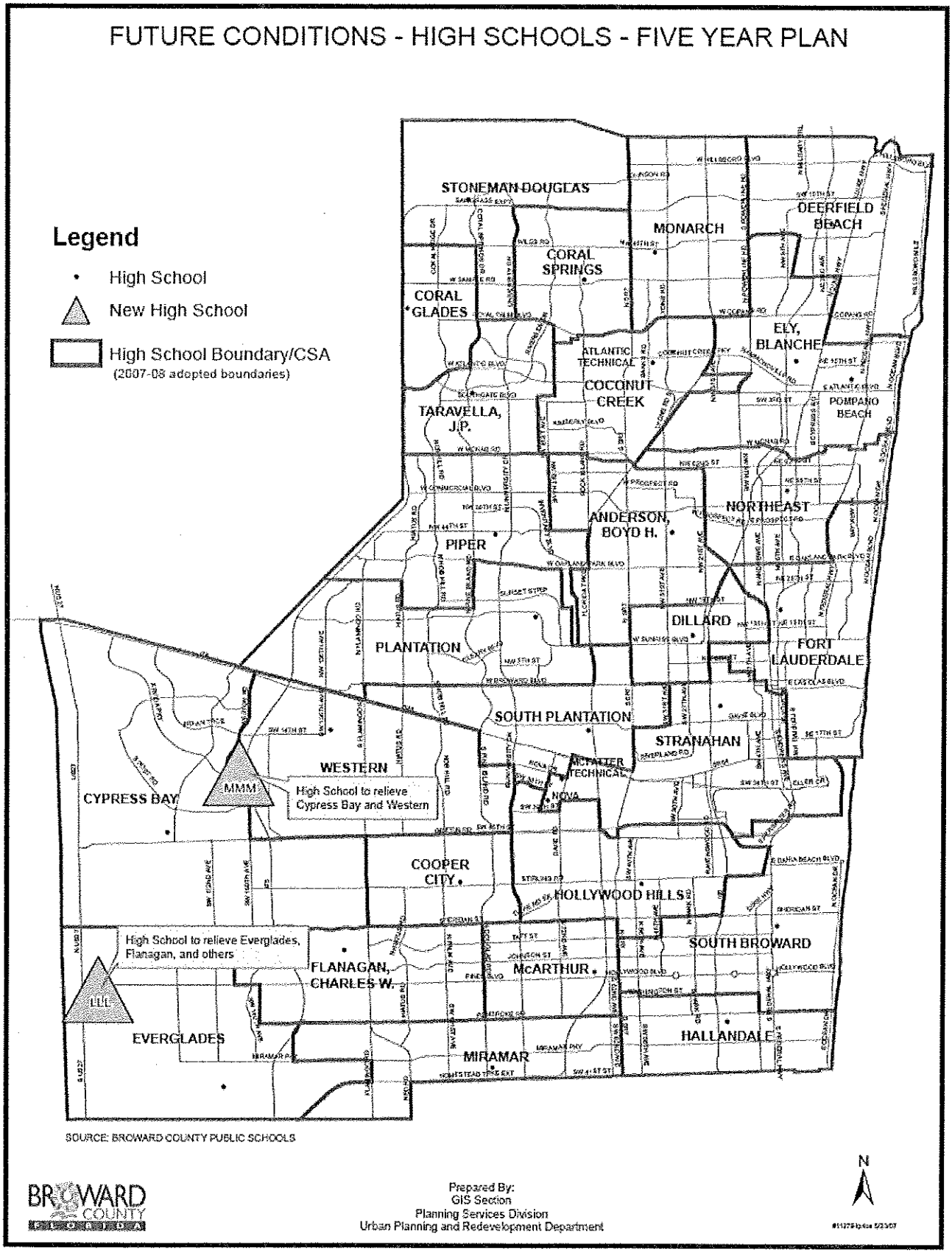
MAP 1: Future Conditions – Elementary Schools – Five Year Plan



MAP 2: Future Conditions – Middle Schools – Five Year Plan

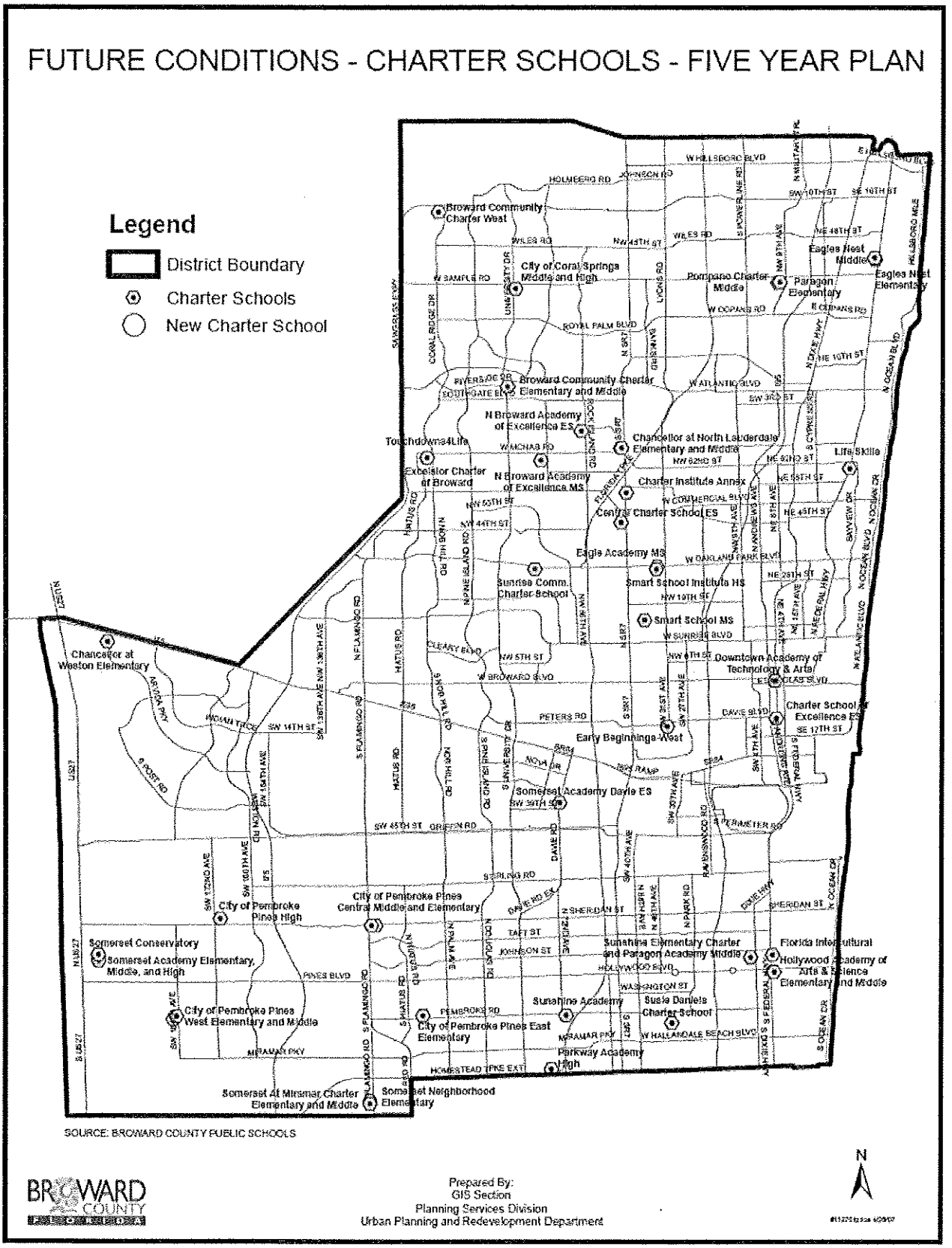


MAP 3: Future Conditions – High Schools – Five Year Plan

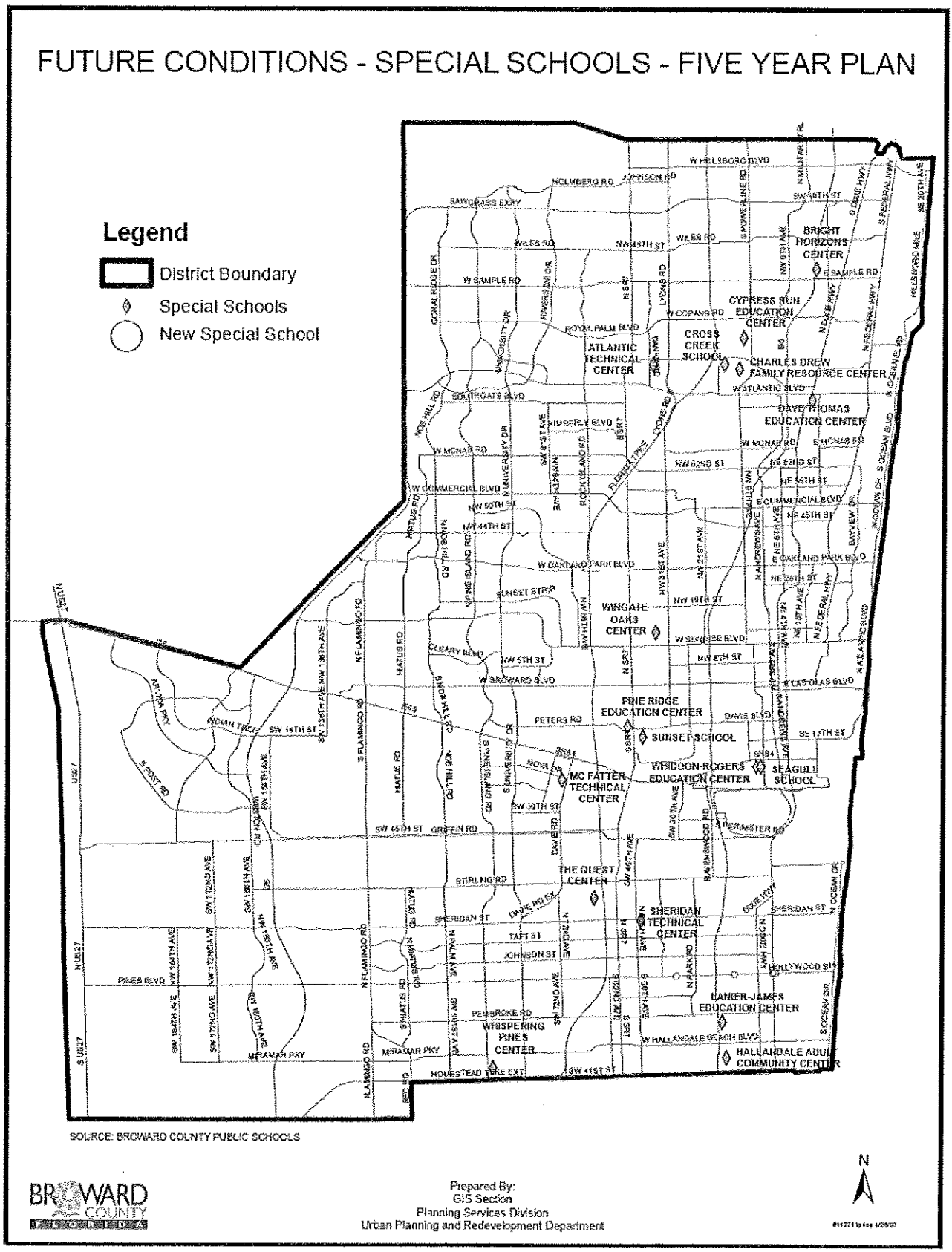


SOURCE: BROWARD COUNTY PUBLIC SCHOOLS

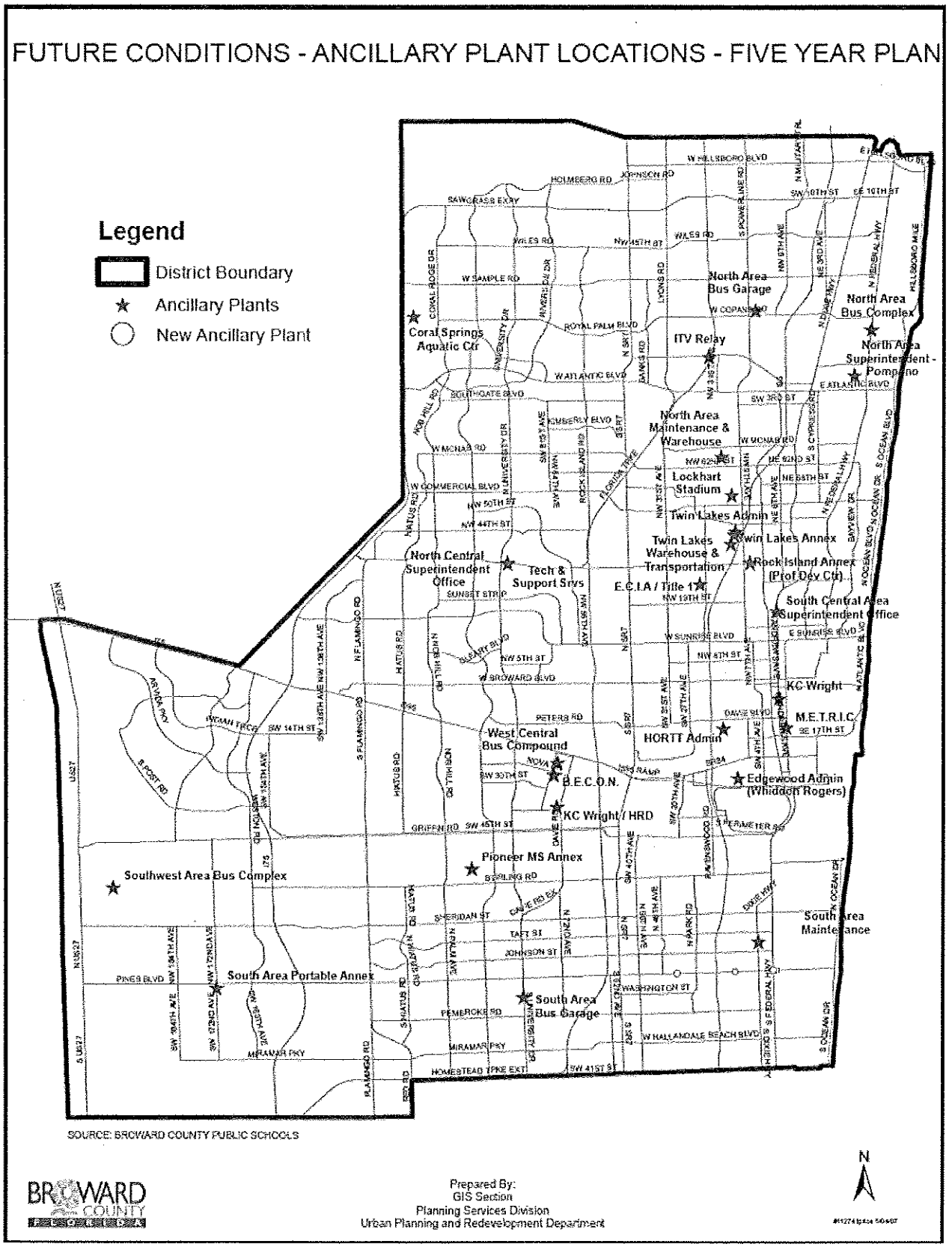
MAP 4: Future Conditions – Charter Schools – Five Year Plan



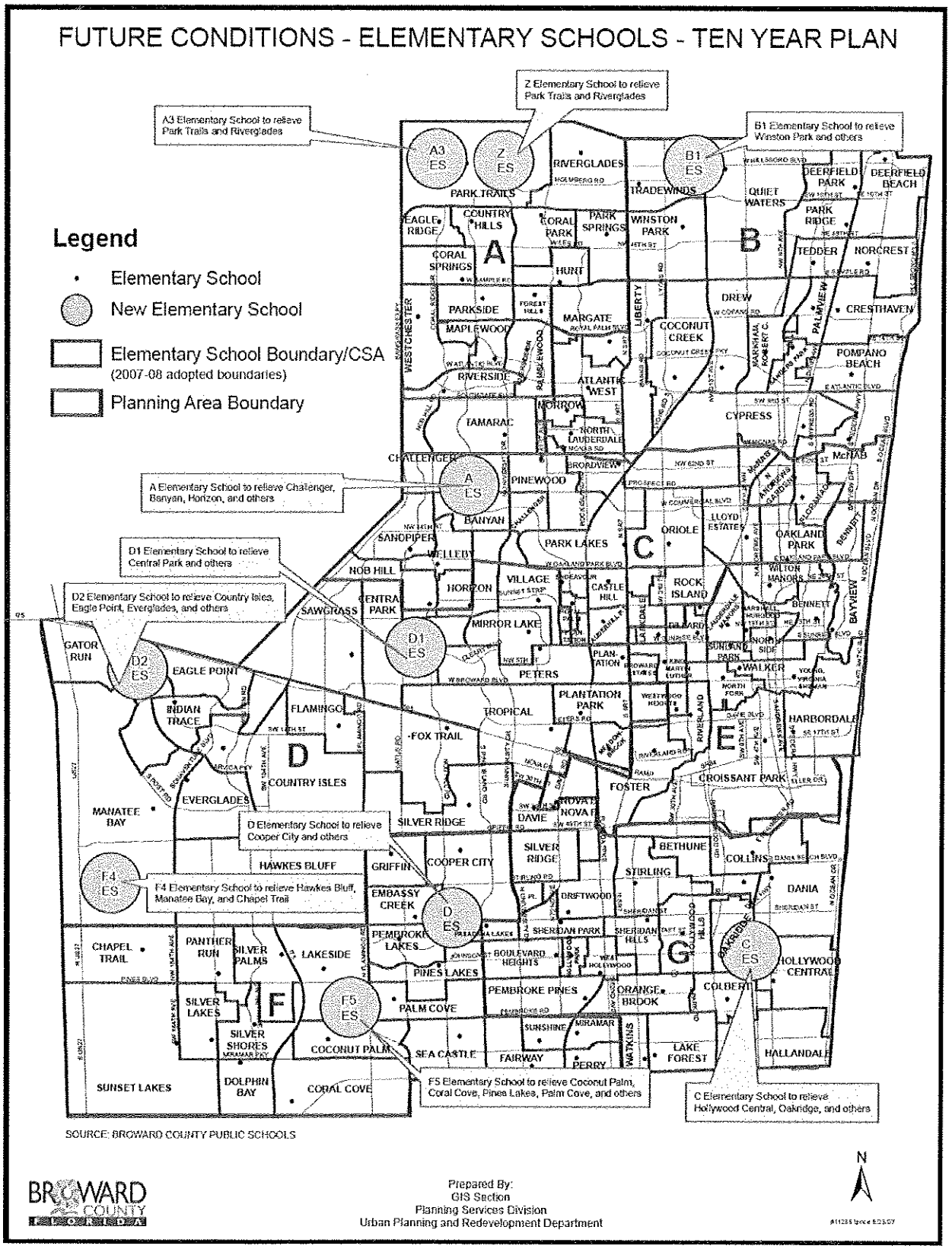
MAP 5: Future Conditions – Special Schools – Five Year Plan



MAP 6: Future Conditions – Ancillary Facilities – Five Year Plan

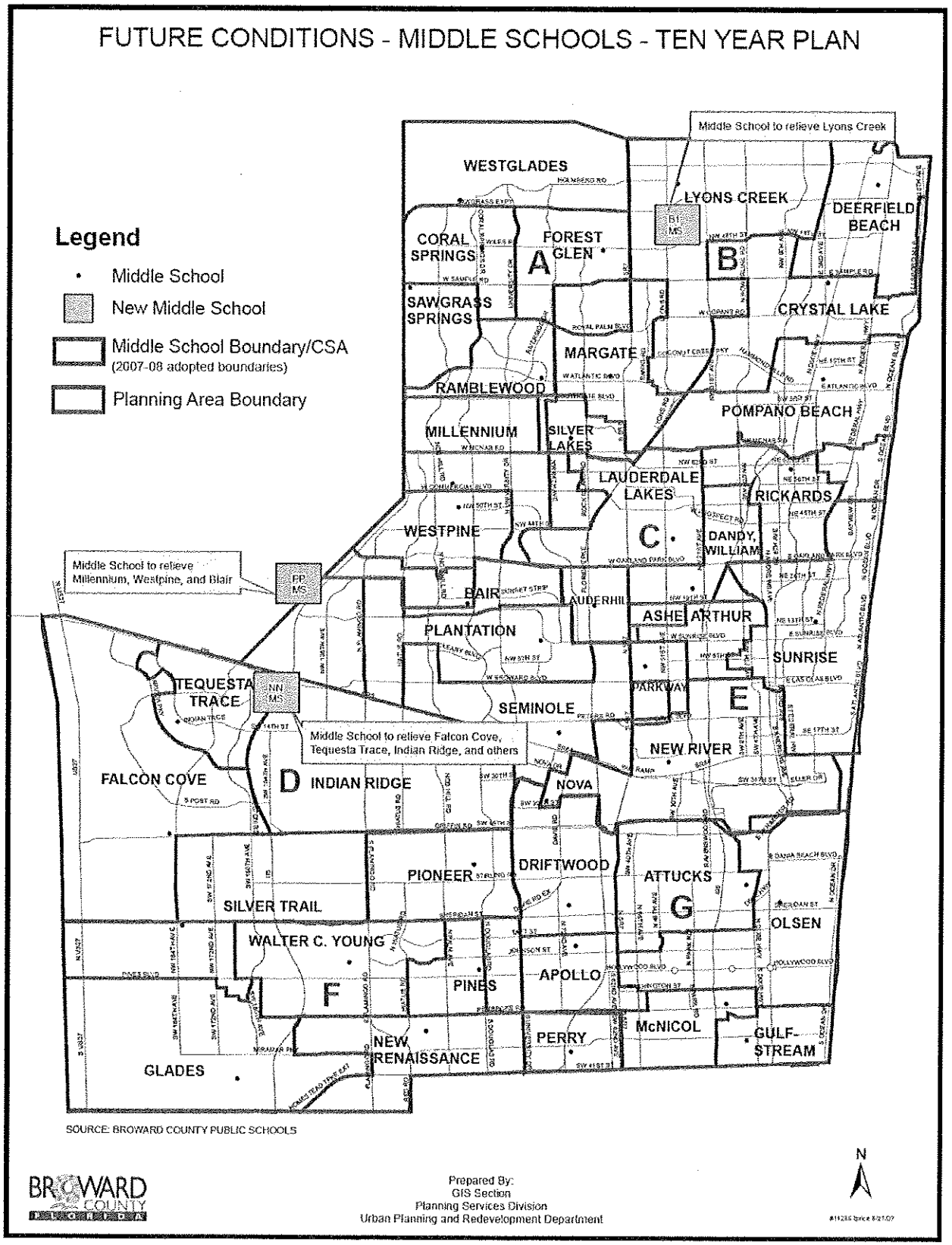


MAP 7: Future Conditions – Elementary Schools – Ten Year Plan

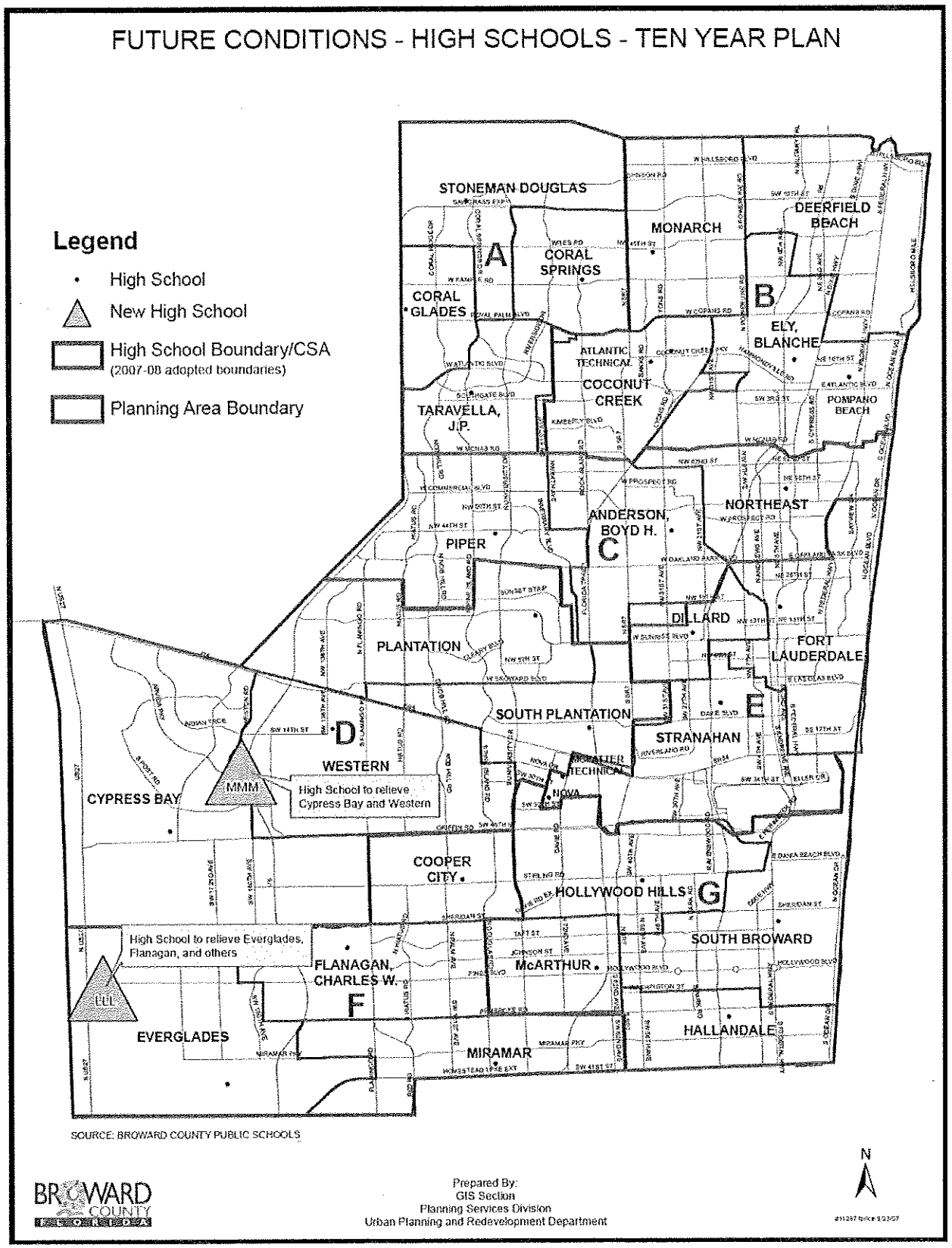


SOURCE: BROWARD COUNTY PUBLIC SCHOOLS

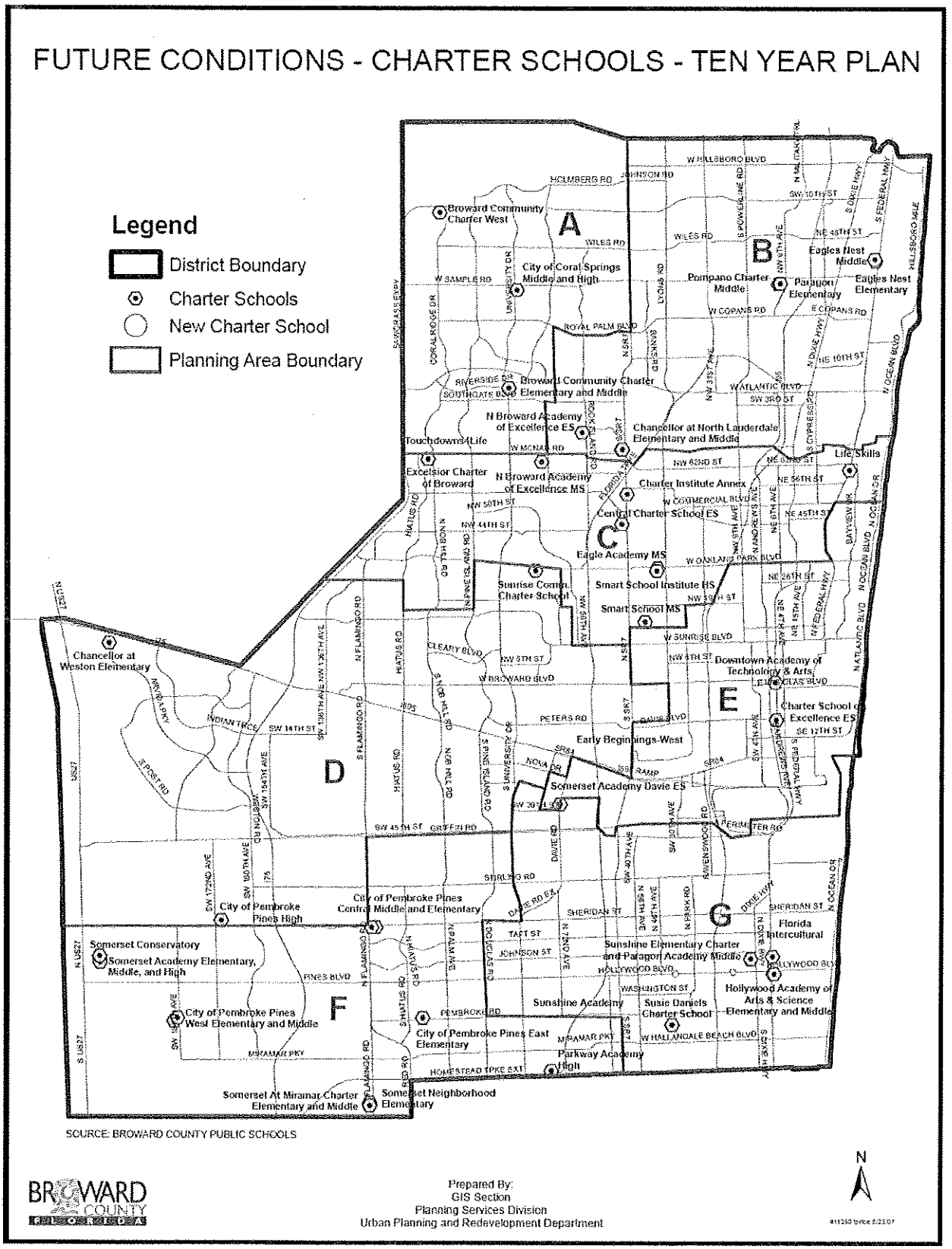
MAP 8: Future Conditions – Middle Schools – 10 Year Plan



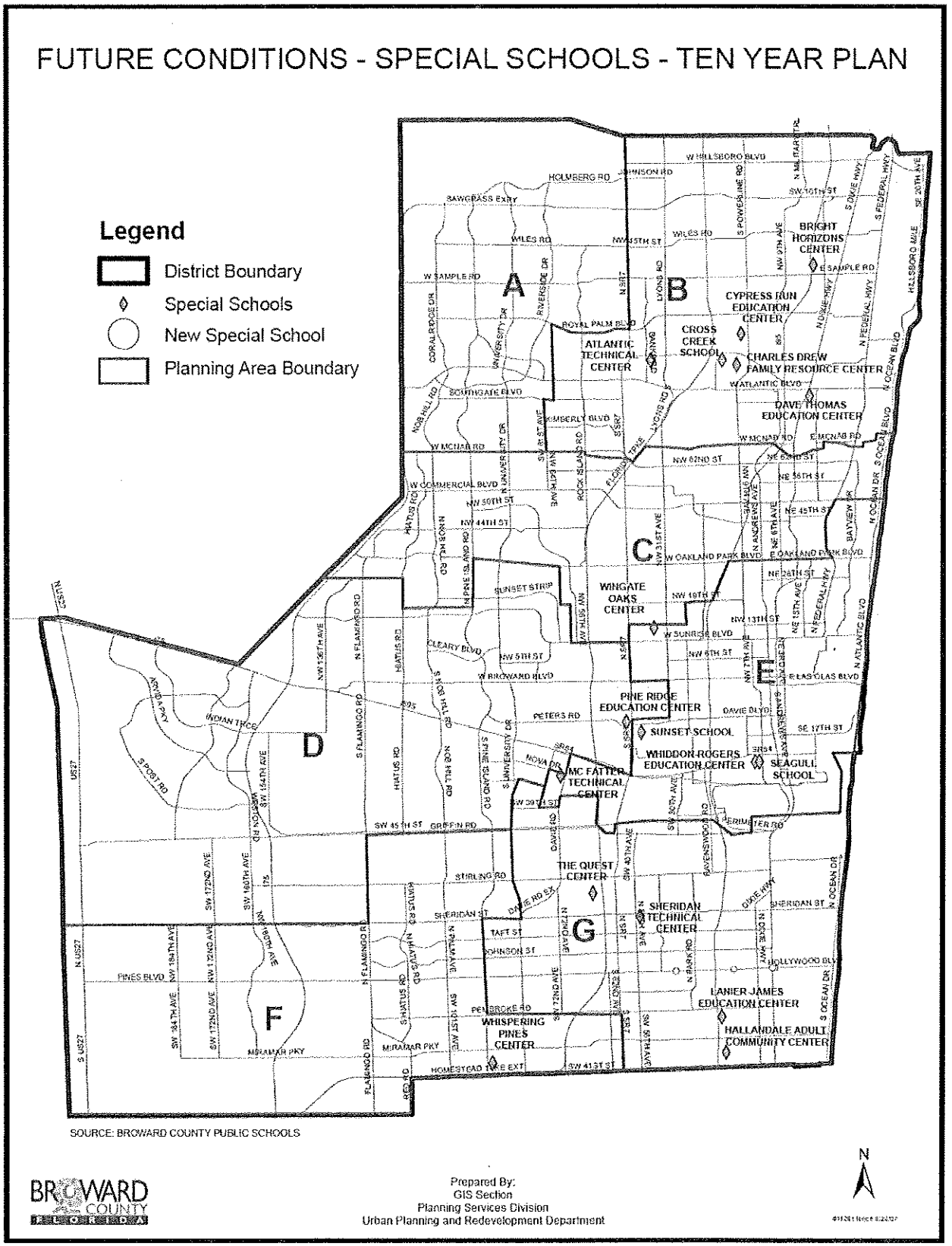
MAP 9: Future Conditions – High Schools – 10 Year Plan



MAP 10: Future Conditions – Charter Schools – Ten Year Plan



MAP 11: Future Conditions – Special Schools – Ten Year Plan

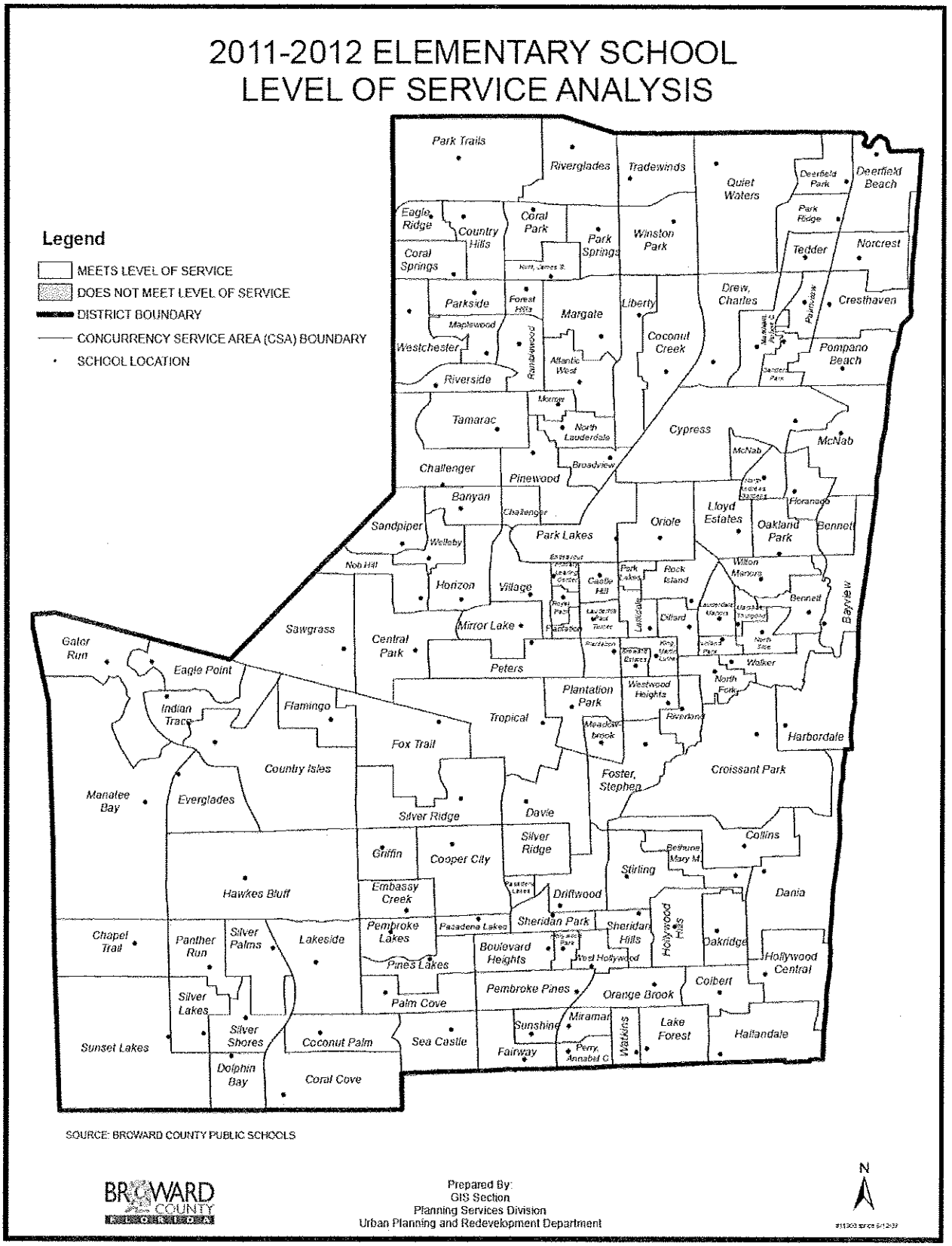


SOURCE: BROWARD COUNTY PUBLIC SCHOOLS

BROWARD COUNTY FLORIDA

Prepared By:
GIS Section
Planning Services Division
Urban Planning and Redevelopment Department

MAP 5: Elementary School LOS - 2011-2012

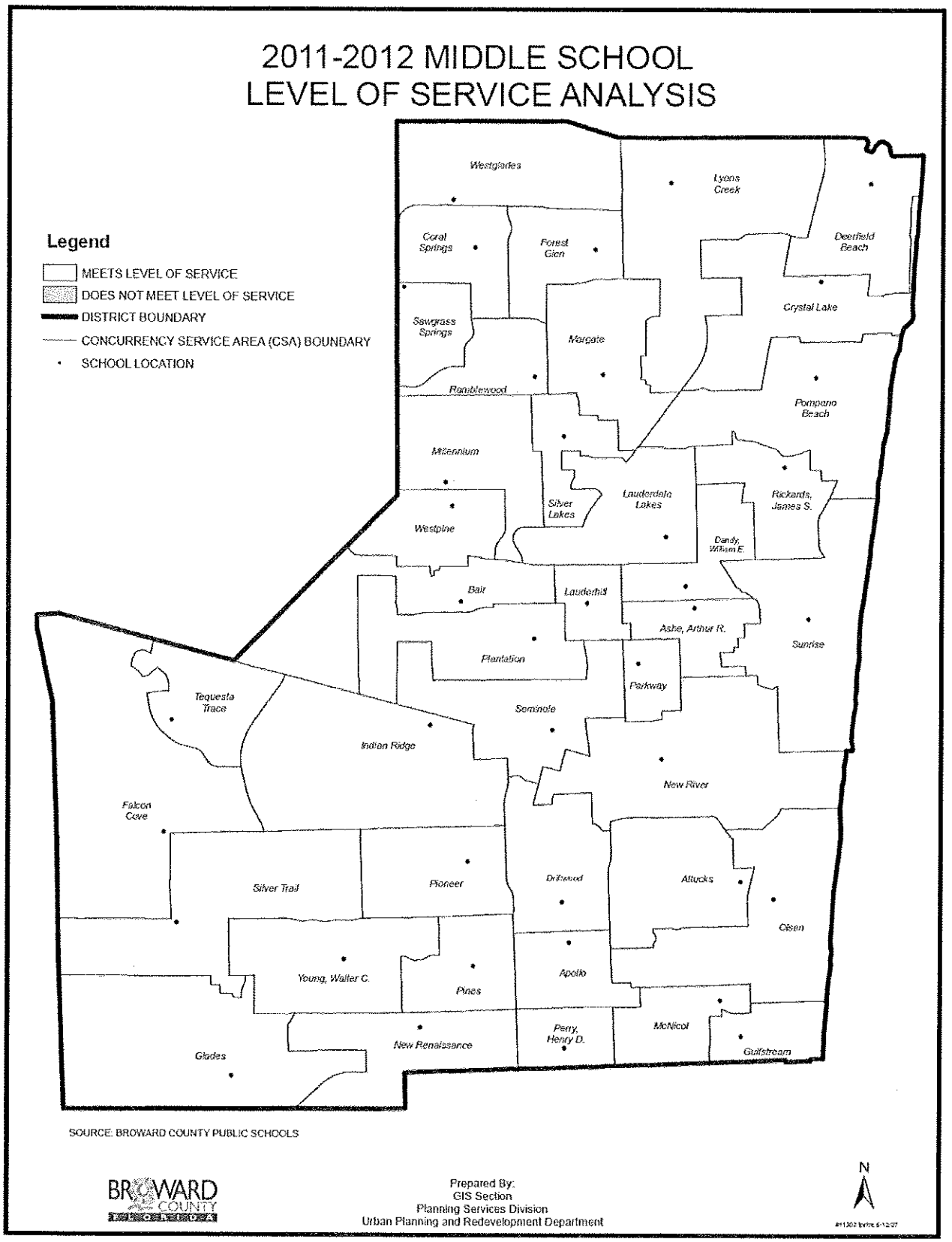


SOURCE: BROWARD COUNTY PUBLIC SCHOOLS

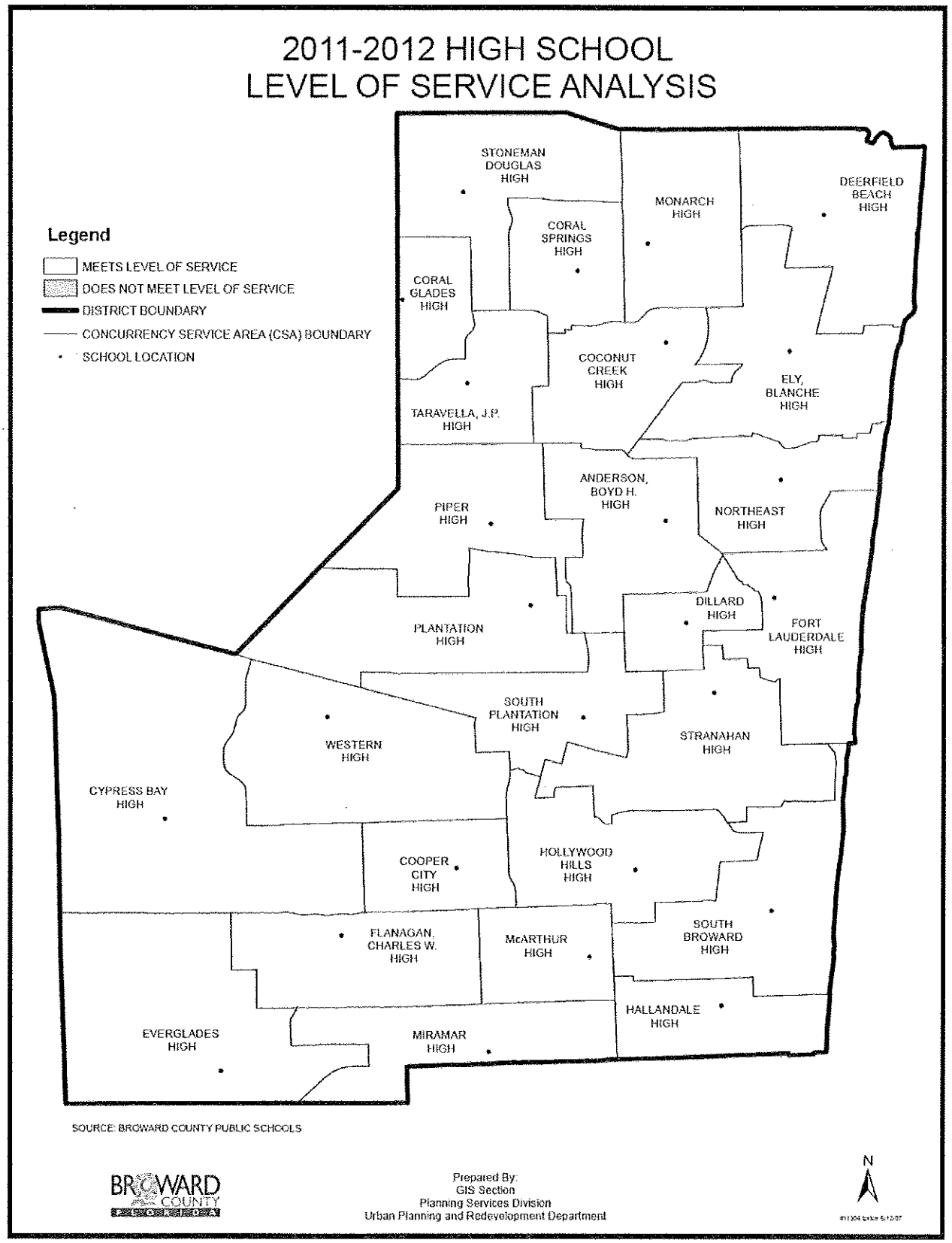
BROWARD COUNTY

Prepared By:
GIS Section
Planning Services Division
Urban Planning and Redevelopment Department

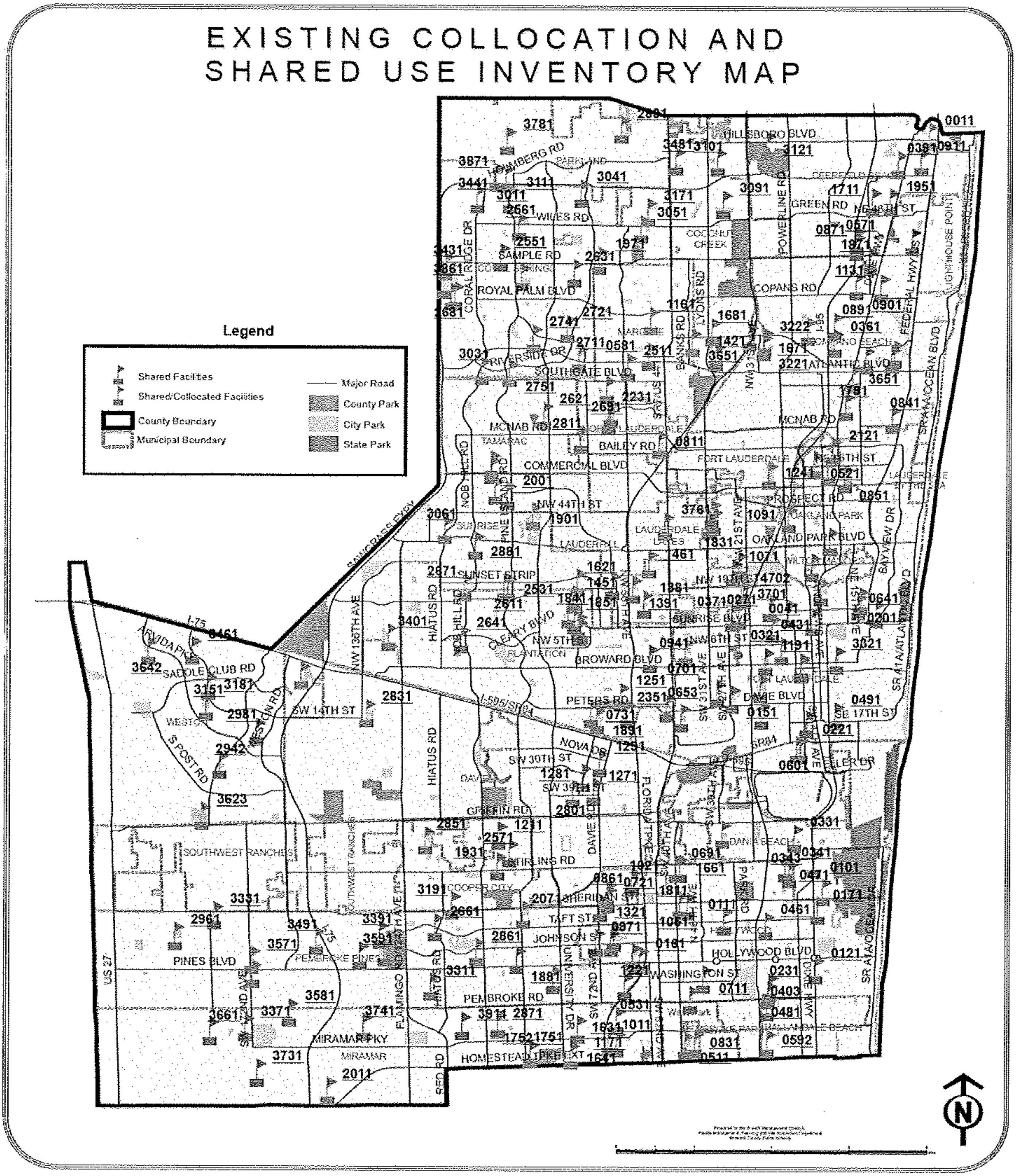
MAP 6: Middle School LOS – 2011 - 2012



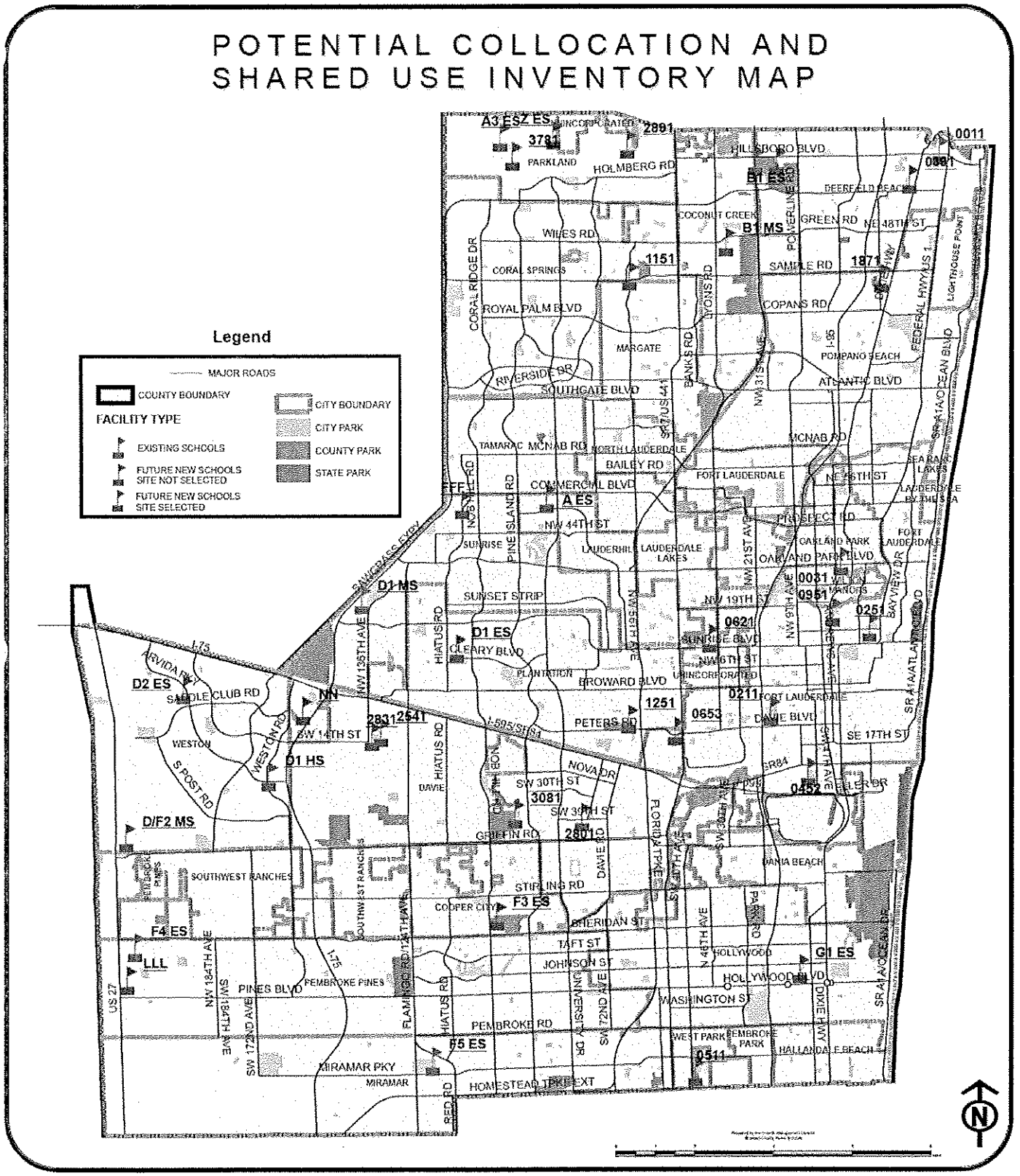
MAP 7: High School LOS – 2011- 2012



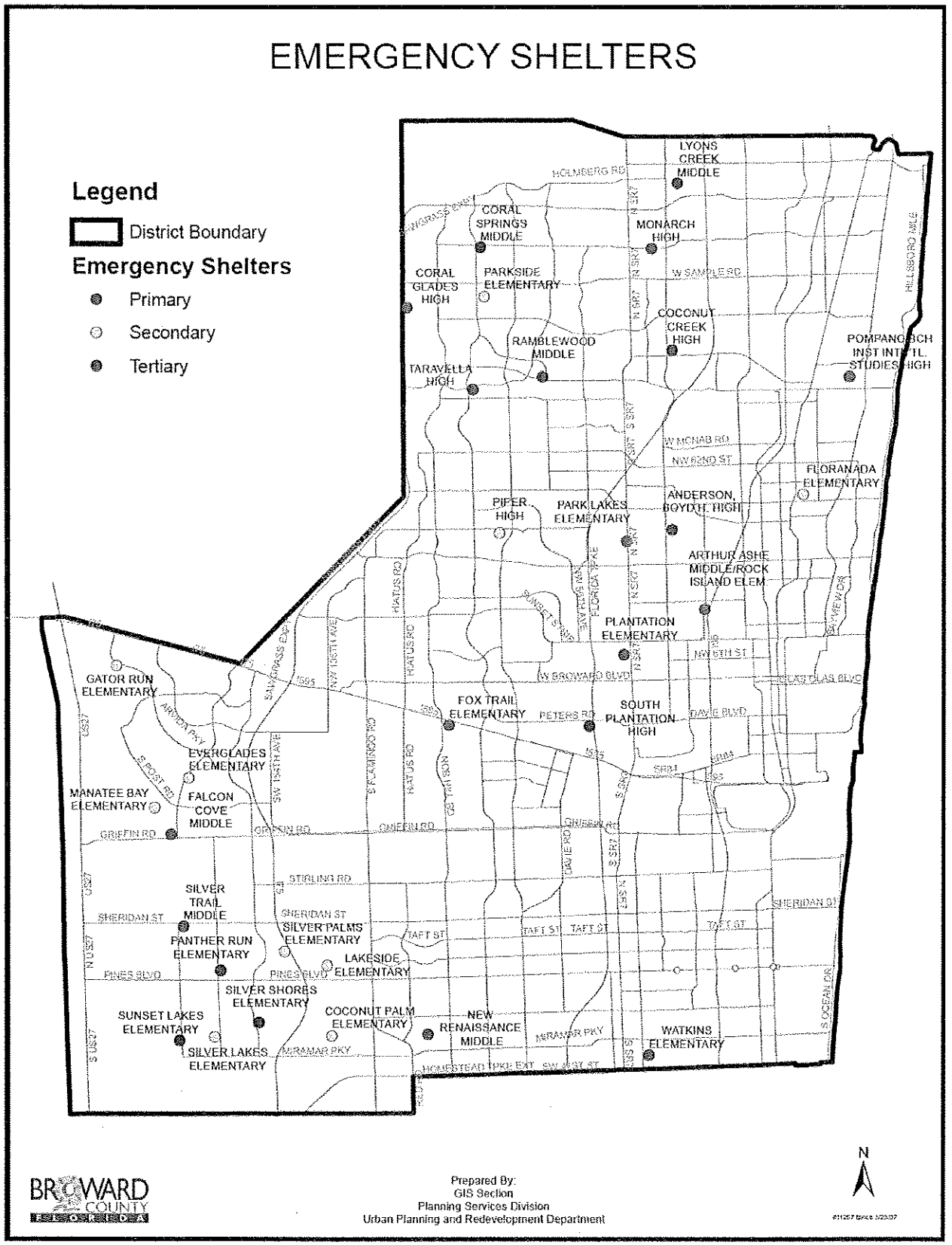
MAP 8: Existing Collocation and Shared Use Inventory



MAP 9: Potential Collocation and Shared Use Inventory



MAP 10: Emergency Shelters



MAP 12: Future Conditions – Ancillary Plant Locations – Ten Year Plan

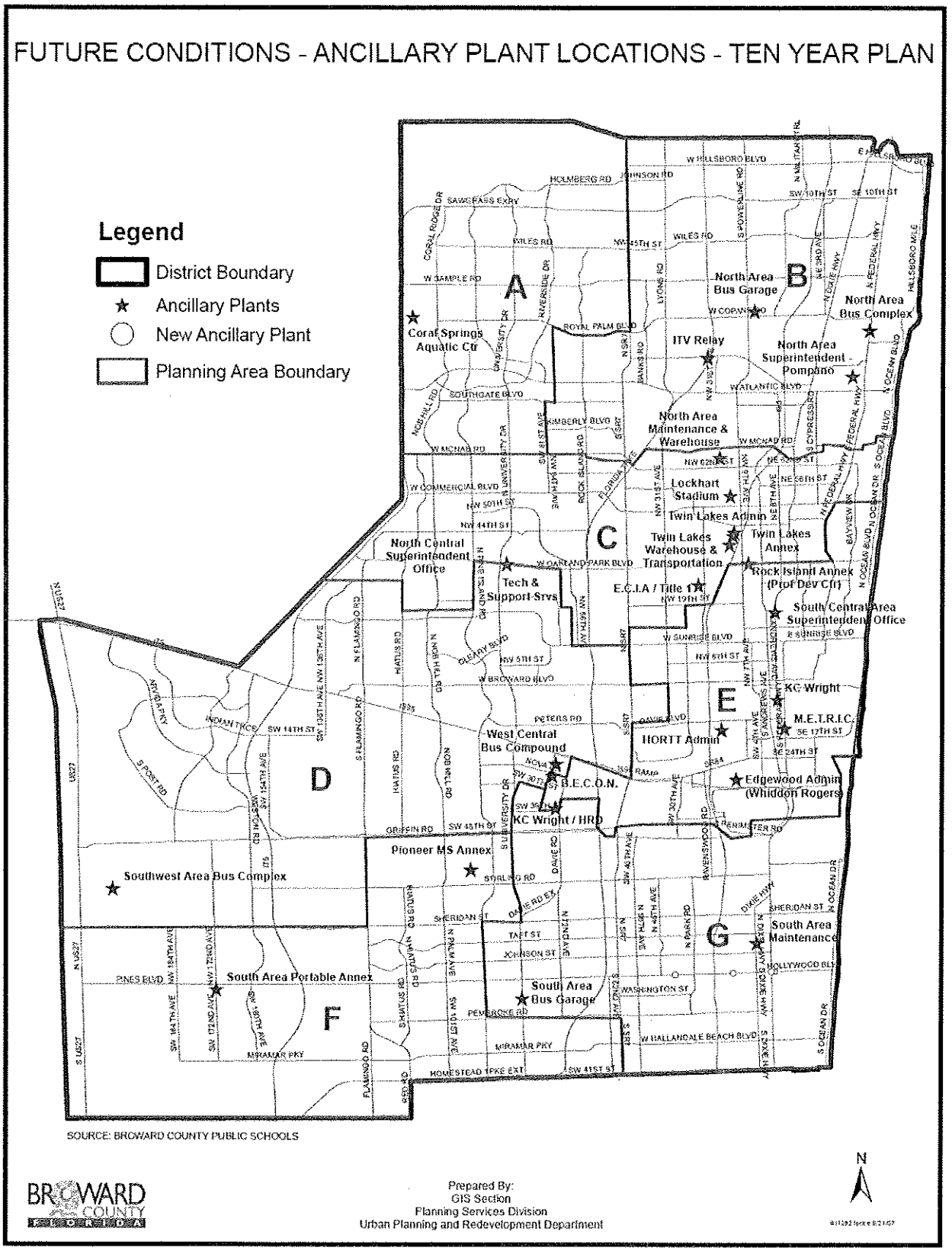
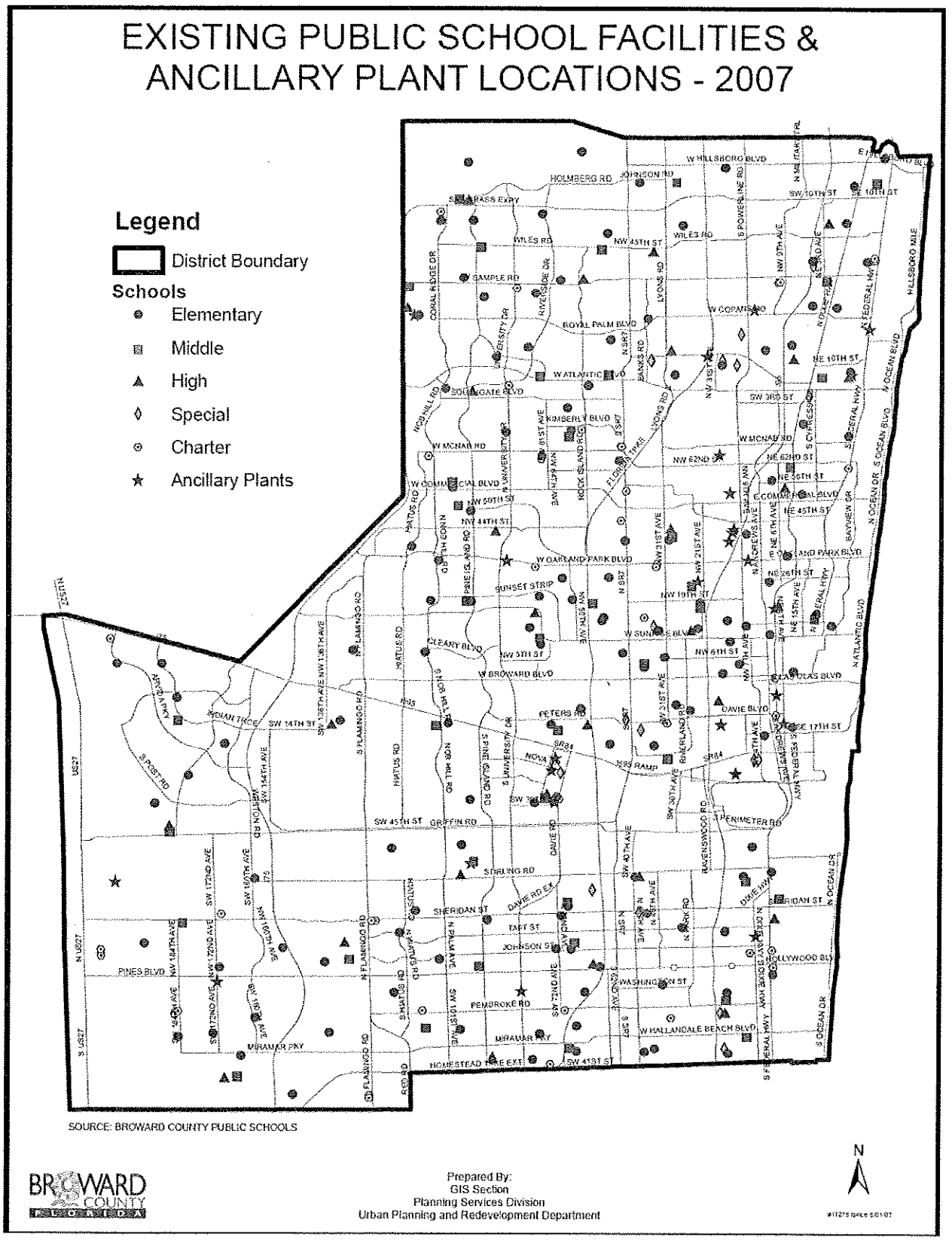
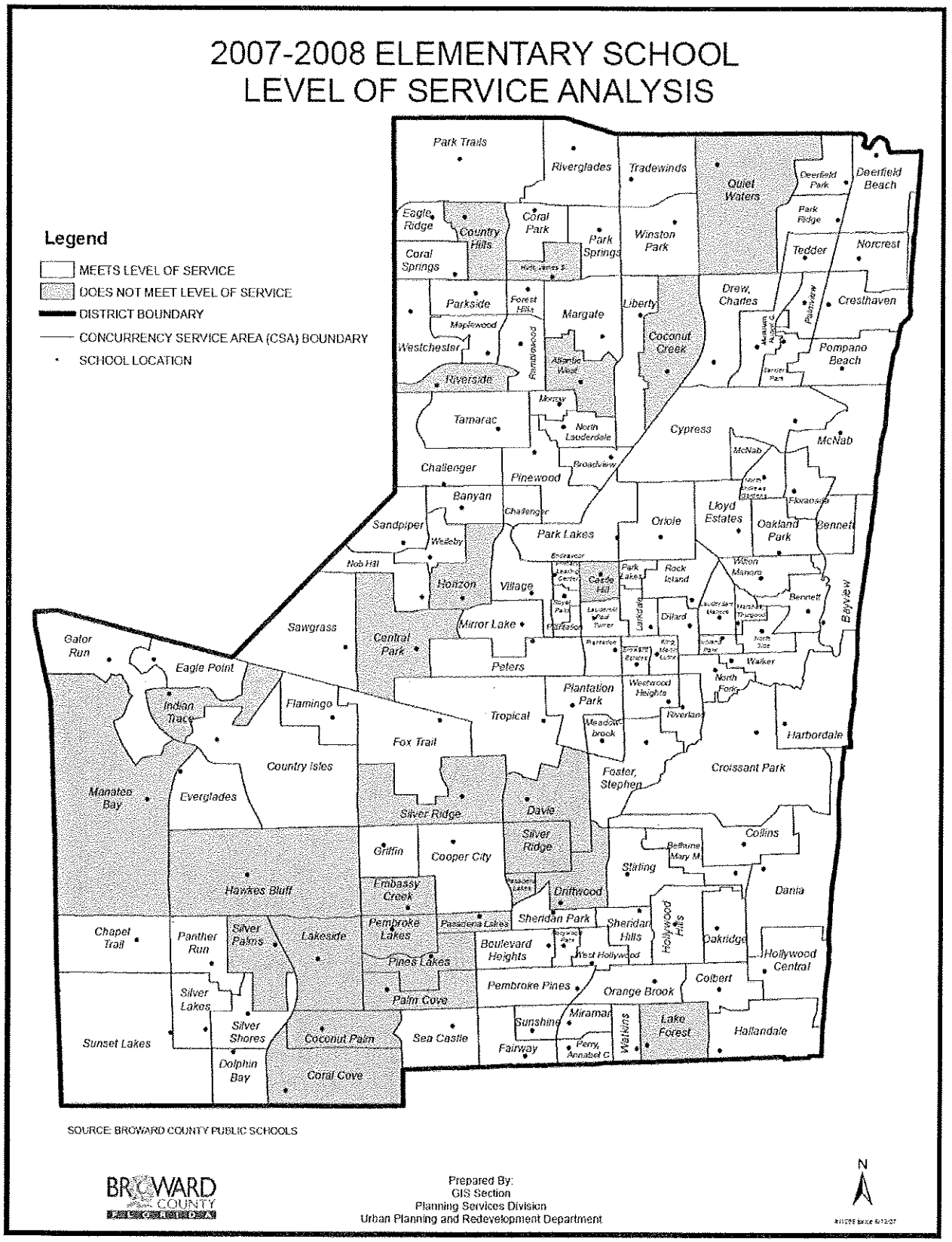


Exhibit "D"9. - Support Document Maps

MAP 1: Existing Public Schools & Ancillary Facilities – 2007



MAP 2: Elementary School LOS – 2007-2008

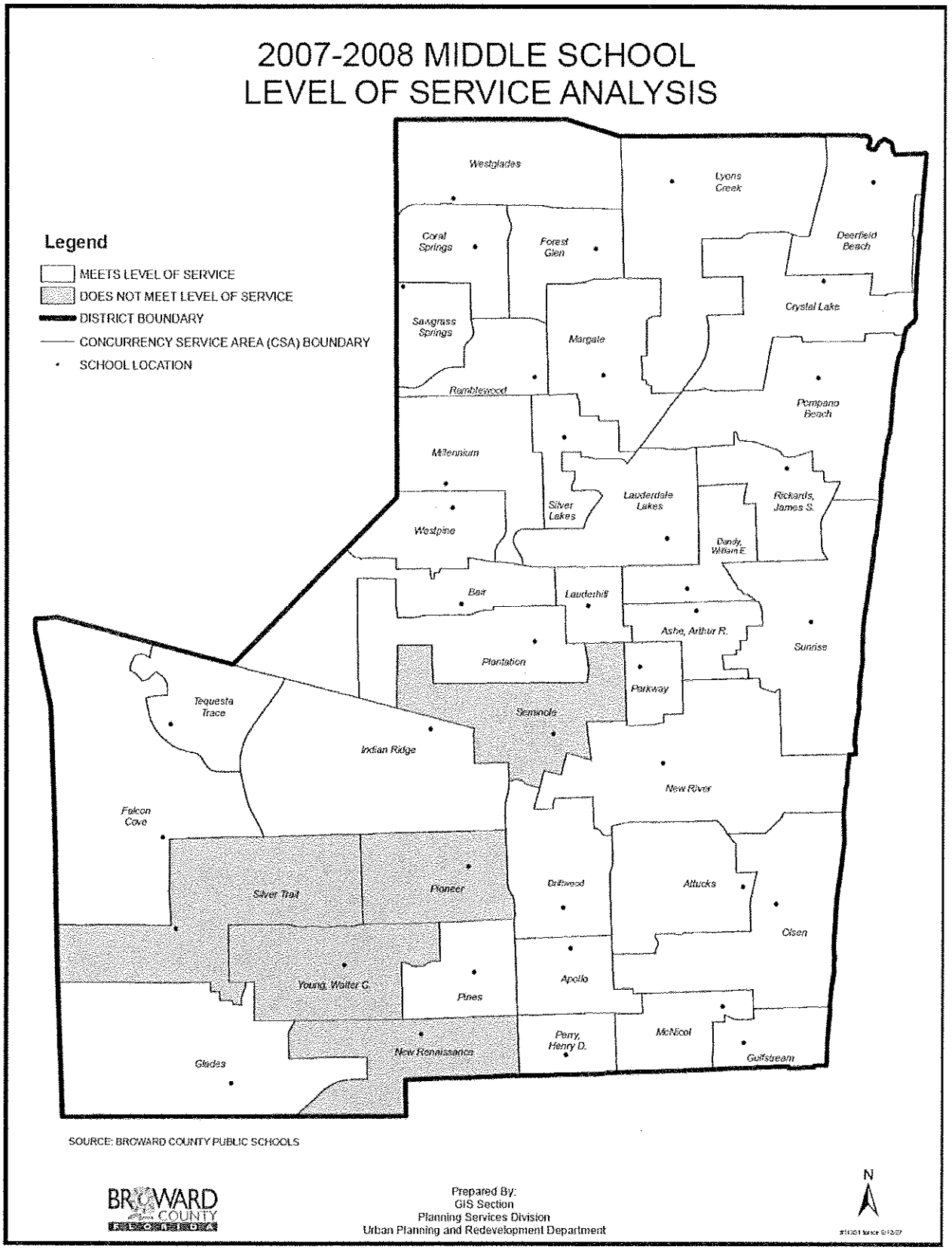


SOURCE: BROWARD COUNTY PUBLIC SCHOOLS

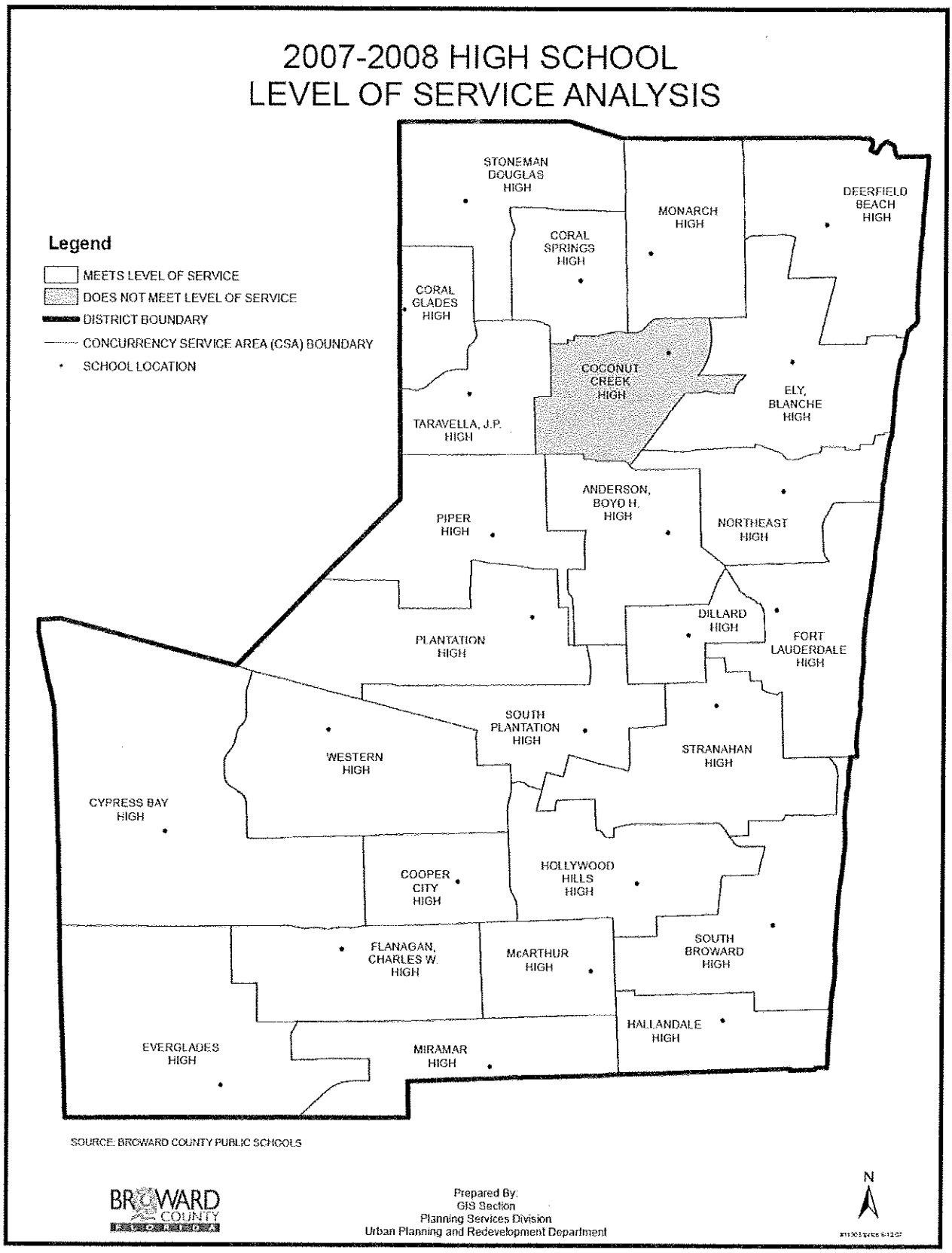
BROWARD COUNTY PUBLIC SCHOOLS

Prepared By:
GIS Section
Planning Services Division
Urban Planning and Redevelopment Department

MAP 3: Middle School LOS – 2007- 2008



MAP 4: High School LOS – 2007- 2008



GOAL 1: PUBLIC SCHOOL CONCURRENCY

The Broward County Board of County Commissioners (Broward County) in collaboration with the School Board of Broward County (School Board) and Broward County municipalities (municipalities) shall ensure that public school facilities will be available for current and future students consistent with available financial resources and adopted level of service standards (LOS). This will be accomplished recognizing the School Board's statutory and constitutional responsibility to provide a uniform system of adequate public school facilities and the authority of Broward County and the municipalities for development permitting and comprehensive planning.

Objective 1.1: FINANCIALLY FEASIBLE DISTRICT EDUCATIONAL FACILITIES PLAN

The School Board, pursuant to Chapters 163.3177 and 163.3180 F.S. and the Interlocal Agreement for Public School Facility Planning (ILA), shall prepare and annually update and adopt the Five-Year District Educational Facilities Plan (DEFP) which shall contain a five-year financially feasible schedule of capital improvements to address existing deficiencies and achieve and maintain the adopted level of service in all concurrency service areas (CSAs). The School Board shall also ensure that school facilities are planned to meet the long-term planning period of the Public School Facility Element (PSFE) of the Broward County Comprehensive Plan.

Policy 1.1-1: The DEFP shall include a financially feasible schedule of capacity additions to existing schools and construction of new schools to eliminate existing level of service deficiencies and meet the needs of projected growth for the five-year planning period. This financially feasible schedule shall be annually adopted into the Broward County Comprehensive Plan Capital Improvements Element (CIE) and the capital improvement elements of the municipalities. This adoption may either be by reference or by restatement of the relevant portions of the adopted DEFP, but in no event shall the County or municipality attempt to modify the adopted DEFP.

Policy 1.1-2: The DEFP shall provide year-by-year projections of the capacity needed to achieve and maintain the adopted LOS within the CSA for each school for the five- year planning period. These projections are included in the supporting documents of the PSFE.

Policy 1.1-3: The DEFP's five-year financially feasible schedule shall provide for the remodeling/renovation of existing schools to meet the identified needs of aging schools and replace worn facilities.

Policy 1.1-4: The DEFP shall be amended on an annual basis to: 1) add a new fifth year; 2) reflect changes in estimated capital revenues, planned capital appropriations costs, planned capital facilities projects, CSAs and school usage; and, 3) ensure the DEFP continues to be financially feasible for the five-year planning period.

Policy 1.1-5: Annually adopted updates to the DEFP and CSA maps shall be coordinated with annual plan amendments to the CIE of the Broward County Comprehensive Plan and comprehensive plans of the municipalities. The annual plan amendments shall ensure that the schedule of capital improvements within the CIE continues to be financially feasible and the

LOS will be achieved and maintained.

Objective 1.2: CONCURRENCY MANAGEMENT SYSTEM
Broward County shall adopt a county-wide public school facilities concurrency management system for implementation of public school concurrency to ensure that public school facilities are available at the adopted level of service standard concurrent with the impact of proposed residential development.

Policy 1.2-1: Broward County and the municipalities, in collaboration with the School Board shall implement concurrency management systems consistent with the policies included in the Broward County and municipal public school facility elements, procedures and requirements included within the ILA and Broward County and municipal land development regulations (LDRs).

Policy 1.2-2: The CSAs shall be the annually adopted school attendance boundaries for each elementary, middle and high school. The maps of the CSAs are maintained in the data and analysis section of the PSFE.

Policy 1.2-3: The Level of Service standard shall be 110% of the permanent Florida Inventory of School Housing (FISH) capacity for each public elementary, middle and high school.

Policy 1.2-4: If adequate capacity is not available in a CSA for a proposed residential development, but capacity exists in one or more contiguous CSAs, the development may proceed consistent with the provisions and procedures in the ILA and County and municipal LDRs.

Policy 1.2-5: If adequate capacity is not currently available in a CSA or contiguous CSA, for a proposed residential development, but capacity is scheduled in the DEFP to be available within 3 years after the issuance of final subdivision or site plan approval, (or functional equivalent), development of the project may proceed in accordance with the provisions and procedures in the ILA and County and municipal LDRs.

Policy 1.2-6: Broward County and the municipalities shall not approve a residential plat or site plan (or functional equivalent) until the School Board has reported that the school concurrency requirement has been satisfied consistent with the provisions and procedures in the ILA and County and municipal LDRs.

Policy 1.2-7: The CSAs shall be established and subsequently modified to maximize available school capacity and make efficient use of new and existing public schools in accordance with the level of service standards and the permanent capacity, taking into account special considerations such as, core capacity, special programs, transportation costs, geographic impediments, diversity programs, and class size reduction requirements to prevent disparate enrollment levels between schools of the same type (elementary, middle, high) and provide an equitable distribution of student enrollment district-wide.

Policy 1.2-8: The projected student impact of a proposed residential development shall be

determined using the student generation rates approved by the School Board and adopted within the Broward County Land Development Code. The student generation rates shall be reviewed and updated at least every 3 years.

Policy 1.2-9: The public school concurrency approval for residential plats shall expire if development within the plat does not commence within 5 years following the date of County Commission approval.

Objective 1.3: PROPORTIONATE SHARE MITIGATION

The School Board, pursuant to Chapter 163.3180 F.S. and the ILA, shall adopt proportionate share mitigation alternatives which provide an option for residential developments unable to meet the public school concurrency requirement. Upon approval of a proportionate share mitigation alternative by the School Board and completion of necessary binding agreements, a development will be deemed to have met the public school concurrency requirement and may proceed.

Policy 1.3-1: A residential development's proportionate share mitigation value shall be determined by multiplying the number of additional student stations needed to mitigate the impact of the proposed development on schools within the affected CSA(s) not meeting the adopted LOS standards by the State cost per student station for each school type plus a land impact cost share, if any. Pursuant to Section 163.3180(13)(e)(2), F.S., the applicant's proportionate share mitigation obligation shall be credited toward any other impact or exaction fee imposed by local ordinance for the same need, on a dollar-for dollar basis, at fair market value.

Policy 1.3-2: Proportionate share mitigation shall enhance the capacity of the schools (or provide for the construction of new schools) serving the proposed residential development. The mitigation shall equate to at least one permanent classroom, which may be funded by one or more residential developments, or other identified funding sources. Mitigation that results in the need for school site(s) shall primarily be the dedication of land. Proportionate share mitigation shall include the following options, as further defined and subject to, procedures and requirements in the ILA;

1. Purchase or dedication of needed elementary, middle or high school sites.

2. Construction of capacity improvements identified in years four (4) or five (5) of the DEFP including advancement of such improvements into the first three years of the DEFP.

3. Construction of previously unplanned schools, classroom additions, modular classrooms or similar facilities. Such facility capacity shall be included in the first three years of the DEFP through an amendment approved by the School Board.

4. Construction of the needed capacity at one or more charter schools.

5. Other mitigation options approved by the School Board on a case by case basis

contingent upon a School Board finding that the option mitigates the impact of the proposed development.

Policy 1.3-3: Mitigation shall be assured by a legally binding agreement between the School Board, the applicant and the County or municipality (as applicable), which shall be executed prior to the issuance of the final subdivision plat or the final site plan approval (or functional equivalent). If the School Board agrees to the mitigation, the School Board must commit in the agreement to placing the improvement required for mitigation in the first three years of the DEFP.

GOAL 2: COLLABORATE AND COORDINATE TO MAXIMIZE QUALITY EDUCATION

Maximize collaboration and coordination between Broward County, the School Board and the municipalities, to effectively plan for public elementary and secondary school facilities to meet the current and future needs of Broward County's public school population. Pursuant to Chapter 163.3177 F.S., Broward County and all non-exempt municipalities within the County, shall coordinate and cooperate to ensure the adopted public school facilities elements are consistent with each other.

Objective 2.1: LAND USE CONSISTENCY, COMPATIBILITY & ADEQUATE INFRASTRUCTURE

Broward County, the School Board and the municipalities shall establish coordination mechanisms to ensure that the locations of existing and proposed school sites are compatible with and proximate to the existing and planned land uses they serve. Such coordination shall also ensure there is adequate public infrastructure available to serve existing and planned school sites including infrastructure which provides safe access to schools.

Policy 2.1-1: Broward County, the School Board, and the municipalities will coordinate through the procedures established in the ILA and the Broward County and municipal land use planning process to ensure that existing and proposed public school facility sites are consistent and compatible with the land use categories, future land use maps and policies of the County and municipal comprehensive plans and enable a close integration between existing and planned schools and surrounding land uses.

Policy 2.1-2: Broward County, the School Board and the municipalities shall coordinate to prepare projections of future development and public school enrollment growth and to ensure such projections are consistent with the Broward County and municipal future land use maps and the School Board's Long Range Public School Facilities Map consistent with the procedures and requirements identified in the ILA.

Policy 2.1-3: Consistent with Section 163.3177 (12) (g), F.S., the Broward County PSFE shall include future conditions maps showing existing and anticipated school facilities for the short-term (5 year) and long-term (10 year) planning time frames. Maps 1 through 12 depict the short and long term existing and anticipated public school facilities and ancillary plants.

Policy 2.1-4: Consistent with provisions and procedures in the ILA, the School Board will

advise Broward County and the municipalities of inconsistencies in comprehensive plans and plan amendments with the DEFP and Long-Range School Facilities Plan.

Policy 2.1-5: The School Board shall monitor and participate in the Broward County and/or local government plat review and site plan review processes, the Development of Regional Impact (DRI) process, the land use plan amendment process and other development order/permit processes that may have an impact on current or planned public educational facilities in Broward County.

Policy 2.1-6: Broward County, the School Board and the municipalities shall utilize the procedures identified within the ILA, including the Staff Working Group and Oversight Committee established by the ILA, to coordinate the annual review of school enrollment projections in addition to the preparation and annual reviews of public school facilities elements and ensure that the elements are consistent with each other.

Policy 2.1-7: The School Board shall annually update and adopt the DEFP and transmit it, including any supplemental amendments, to Broward County and the municipalities, which then shall amend their CIEs to incorporate the updated DEFP consistent with the provisions and procedures of the ILA.

Policy 2.1-8: Broward County, the School Board and the municipalities shall share and coordinate information through the plat, site plan and school siting processes and procedures identified in the ILA to ensure the location, phasing, and development of public school facilities, including additions to existing facilities, is coordinated with the provision of necessary public infrastructure including water and sewer, roads, drainage, sidewalks, mass transit and other infrastructure required to support the public school facilities.

Policy 2.1-9: Broward County shall coordinate with the School Board and the municipalities through the school siting process identified in the ILA and Broward County and municipal platting and site plan approval processes to implement strategies, consistent with Florida's Safe Ways to School Program, which reduce hazardous conditions and provide direct, unobstructed and safe access for pedestrian travel (including sidewalks, bicycle paths, signage and signalization) to existing and new school facilities.

Objective 2.2: SCHOOL FACILITY SITING, COLLOCATION & DESIGN
Broward County, the School Board and the municipalities, pursuant to the ILA, shall coordinate the location of public school facilities relative to the location of other public facilities such as parks, libraries and community centers and promote schools to be focal points within the community.

Policy 2.2-1: In the planning, siting, land acquisition, permitting and development of a new school facility or significant renovation or expansion, the School Board shall coordinate with Broward County and the municipalities on the availability of public facilities, services and grounds (especially for the purposes of collocating parks, libraries, ball fields, community centers, public safety facilities, parking facilities, drainage facilities and other appropriate facilities).

Policy 2.2-2: Broward County, the School Board and the municipalities shall pursue shared-use and co-location of school sites with County and municipal facilities having similar facility needs, such as libraries, parks, ball fields, other recreation facilities. At a minimum, per the ILA, Broward County will look for opportunities to collocate and share use of County facilities when preparing updates to the Schedule of Capital Improvements within the Comprehensive Plan and planning and designing new or renovated facilities.

Policy 2.2-3: Through the design of school facilities, establishment of school siting standards and pursuit of collocation opportunities, the School Board shall encourage school facilities to serve as community focal points.

Policy 2.2-4: Broward County will coordinate with the School Board and the municipalities on efforts to build new school facilities, which are designed to serve as emergency shelters as required by Section 1013.372, F.S., Broward County will also collaborate and coordinate with the School Board and the municipalities on emergency preparedness issues through the County's Emergency Operating Center.