

Section 1
Introduction



Introduction

The Local Road Master Plan (or the Master Plan) project is initiated by Town of Davie to address the transportation concerns raised in the past studies, the Town's Comprehensive Plan and by the citizens. The Master Plan is also addresses the specific transportation issues raised in the 2005 Evaluation and Appraisal Report (EAR) of the Comprehensive Plan, and fulfills Town's commitment as part of the Florida Statue 163.3191 *Evaluation and Appraisals of Comprehensive Plan*.

The Master Plan analyzes the current roadway conditions, identifies major issues of the Town and proposes a draft project list to address the issues. The majority of the concerns are focused on inadequate east-west connection, lack of roadway connectivity, traffic congestion at certain location and vehicle speed. To address these issues, the Local Road Master Plan conducted the analysis according to the tasks described in the Master Plan Development Process section below.

2005 EVALUATION AND APPRAISAL REPORT (EAR)

The 2005 EAR was prepared by the Planning and Zoning Division of the Town of Davie with the assistance of Calvin, Giordano & Associates and URS Corporation. The EAR evaluates the performance of the Town in complying with the adopted Comprehensive Plan. Based on the evaluation, the Town is in the process of amending the Comprehensive Plan and undertaking steps to comply with the amended Comprehensive Plan. This Local Road Master Plan is conducted to comply with the recommendation of the 2005 EAR and adopt the amended Comprehensive Plan.

The Transportation Element of the EAR reported six major issues, of which, two issues pertain to the Local Road Master Plan. These issues are discussed below.

Issue 5 of EAR: Building an Adequate Local Road Network

The EAR reviewed the existing condition of the local road network. It primarily concluded that the Town has adequate north-south connection but lacked adequate east-west connectivity. This is in contrast with the existing Comprehensive Plan policies that discourage straight connections that would result in cut-through traffic. As part of the policy, several public right-of-ways have been vacated where constructing the east-west connection is physically feasible. The Local Road Master Plan attempts to balance the need for the east-west connection while continuing to discourage cut-through traffic.

The EAR also identifies roadways that do not meet the Level-of-Service (LOS) D standard. These roadways are listed in Technical Memorandum 1 of the Master Plan and were included as the study roadway.

The EAR also lists major traffic generators inside and outside Town boundary that may have influence on the Town roadways. The EAR specifically highlights the existing Industrial District and the lack of internal grid systems of streets and anticipated growth of Nova Southeastern University. It also analyzes the existing transit service, the transit oriented land use pattern, trails and its network, accident frequency and traffic calming measures. In summary, the EAR recommends:



- Continue coordination with the State of Florida and Broward County transportation agencies through existing mechanisms to ensure continued traffic safety and level of service.
- The Town should provide network continuity for north-south and east-west circulation, meaning that there are no gaps in the network.
- The Town shall continue to improve the level of service on the regional roadways.
- The Town shall implement policies to encourage transit and other multi-modal forms of transportation throughout the Town.
- Streets should be designed to decrease accident frequency.
- The Town should adopt a Transit Concurrency Management System due to the recent adoption of Transit Concurrency by Broward County.
- Retain a consultant to create a public right-of-way base Master Plan for the local roadways of the Town.

Issue 6 of EAR: Evaluation and Impact of the Proposed Increase in Density of the Regional Activity Center (RAC)

The EAR acknowledges the development impact of the Regional Activity Center (RAC) in the Town which has resulted in cut-through traffic, longer commutes and lack of pedestrian safety on local roads. The EAR identifies following deficiencies in the RAC;

- Long discontinuous streets make pedestrian travel difficult;
- Lack of street grid pattern,
- Higher auto speeds; and
- Over dependence of single-occupancy vehicles.

Technical Memorandum 1 identifies the Goals and Objectives of the Transportation Element that is not met at the time of the EAR evaluation. It highlights the deficiencies of the local, County and State roadway network. Listed below are the Goals of the Transportation Element of the Comprehensive Plan and the Objectives that specifically calls for the need for a Local Road Master Plan. Other objectives are either identified as being met or does not pertain to the Master Plan.

Goal 1 of the Transportation Element: 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.*

Goal 2 of the Transportation Element: The Town will coordinate with FDOT and the County, to exceed, by 2004, the regional level of service (LOS) goal of overall 10 percent reduction in



the lane miles of the Regional Roadway Network within Davie currently operating below level of service "D".

- **Objective 2.1.2:** *Unless exempt under other policies, the concurrency management system shall establish the "following roadway" peak-hour LOS standards for the purpose of issuing development orders and permits: Several roadway links within the Town have a LOS F. Hence, a (local) Road Master Plan is recommended.*
- **Objective 2.1.4 and 2.1.5:** *The Town establishes a minimum peak hour LOS D (Objective 2.1.4) and LOS C (Objective 2.1.5) for locally maintained collector and all other roadways, respectively. Hence a (local) Road Master Plan is recommended.*
- **Objective 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 vehicles miles traveled per capita with the Town and region. A (local) Road Master Plan is recommended to assist in implementation of the program.*
- **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. A local road concurrency is recommended.*

Goal 3 of the Transportation Element: The Town will actively promote the provision of a safe, convenient and efficient transportation system for motorized and non-motorized modes of travel

- **Objective 3.1.1:** *By 2001, the Town will modify, if necessary, existing Land Development Regulation 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.*

Goal 4 of the Transportation Element: 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 in the Future Land Use Map. The Local Road Master Plan is anticipated to assist the Town on fulfilling the objective.*

Goal 5 of the Transportation Element: 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 encourage alternatives to single-occupancy and other automobile travel to minimize negative environmental impacts* The Local Road Master Plan is anticipated to assist the Town on fulfilling the objective.

Goal 6 of the Transportation Element: Continue developing a high level of transit service which provides safe, economical, efficient, and convenient travel for the citizens of the Town of Davie

Goal 7 of the Transportation Element: 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.

Goal 8 of the Transportation Element: Retain and expand transit services for the elderly, handicapped and other transportation disadvantaged groups, with both regular and specialized service.

Goal 9 of the Transportation Element: Coordinate local land use and traffic circulation planning with regional efforts to provide a convenient, safe and adequate aviation system.

Goal 10 of the Transportation Element: 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.

MASTER PLAN DEVELOPMENT PROCESS

The Local Road Master Plan project was conducted in several tasks. The tasks were performed in sequence that addressed the scope of the project. At the end of each task a technical memorandum was prepared summarizing the activities conducted under the task and the resulting outcome. The technical memorandums were reviewed by the Town staff and provided comments. These comments are included in the final version of the memorandum. This Local Road Master Plan provides a summary of the tasks.

Task 1: Background Review and Define Study Area

Kittelton & Associates, Inc. (KAI) reviewed all the reference documents provided by the Town of Davie staff, the traffic volumes on major roadways and intersections, and identify up to 15 study intersections and up to 10 local study roadways for further study. These intersections and roadways were identified based on the assessment of functional classification, crashes, roadway and intersection congestion and roadway connectivity deficiencies. The final study roadways and intersections were approved by the Town staff before proceeding. Technical Memorandum 1 summarized the tasks and the results.



Task 2: Existing Condition Assessment

KAI visited the study roadways and intersections to collect various transportation characteristics data and conducted weekday a.m. and p.m. peak hour analysis of the study intersections and AADT analysis of the study roadways by taking into consideration the existing traffic volume, roadway/traffic signal characteristics, and the geometry. The tasks also analyzed the roadway connectivity issue around the Town. Figures with information showing existing functional classification, jurisdictional responsibility, existing lane configurations, level-of-service and volume-to-capacity (v/c) ratio and crash rate were prepared. Technical Memorandum 2 summarizes the task and the results of the operational analysis.

Task 3: Future Condition Assessment

As part of task 3, KAI reviewed the growth forecast, estimated the future year 2030 traffic volumes for the study roadways and intersections, and conducted weekday a.m. and p.m. peak hour analysis of the study intersections and AADT analysis of the study roadways. Potential needed mitigations were identified to accommodate future traffic volume forecast to meet adopted level-of-service standards, roadway connectivity, vehicular speed and projects identified in past studies. TY Lin International estimated the cost of the proposed projects based on latest cost information. The projects were categorized into short-term (0-5 years), mid-term (5-10 years) and long-term (10-20 year) capital improvement project list.

Task 4: Draft Master Plan Preparation

Based on all the comments received from the public open house and Town staff, KAI prepared this draft Local Road Master Plan. The plan summarized all the previous findings, existing and future conditions, roadway connectivity issue, vehicular speed issue and the proposed mitigation list into a concise report.

Task 5: Public Outreach/Workshop

In an effort to solicit feed back from the public, three public open houses were held at the Davie Police Department on Nob Hill Road. The dates of the public open houses were February 7, 2008, March 20, 2008 and April 24, 2008. See the public outreach section below for more detail.

Task 6: Finalize Master Plan

The draft Master Plan was updated to the final Local Road Master Plan based on the final comments received from the public, the Town staff and during the workshop with the Town Council. The draft Local Road Master Plan was tabled at the July 2, 2008, Town Council Meeting to allow for final revisions to the document. The Master Plan is anticipated to be adopted by the Town Council at the August Town Council meeting. As a result of the Local Road Master Plan, the Town may need to amend the Town's planning and zoning ordinance, roadway engineering standards, development review process, transportation concurrency requirements etc. It is recommended that appropriate steps be taken to implement the recommendation of the Local Road Master Plan.



Task 7: Town Council Workshop/Hearing

KAI and TY Lin prepared and conducted a workshop with the Town Council to explain the project process, its outcomes and the resulting project list. A detailed discussion on the proposed project list was discussed during the July 2, 2008 Town Council Meeting. Based on the discussion, the project list has been finalized and the Town Council is anticipated to adopt the final Local Road Master Plan.

PUBLIC OUTREACH

The Local Road Master Plan project was presented to the public in three public open houses. At all the public open house, the tasks completed to date on the project were presented. The residents that were present at the open houses were given comment sheets to provide written comments. A summary of the comments received from the residents and project team's response is provided in Technical Memorandum 4. The discussion on the open houses is provided below.

Public Open House 1: February 7, 2008

The open house was conducted by Town staff and KAI project team. Town staff welcomed the people in attendance and introduced the staff and the project team. KAI gave a short presentation to introduce the project, describe the goals and present the findings of tasks 1 and 2 of the project. The figures that summarized the results in the Technical Memorandum 1 and 2 were presented to the public. They showed the characteristics of the roadways and the existing traffic conditions. The attendance sheet records 15 names but the overall attendance was approximately 25 people. Written comments were received from the residents in attendance. KAI engineers and Town staff discussed with the residents to identify additional issues thanks to the residents' knowledge of the area. Multiple comments from the residents related to transportation issues around their area and general comments on overall issues were received. Technical Memorandum 4 provides the comments and project team's responses.

Public Open House 2: March 20, 2008

Public Open House 2 focused on the future traffic conditions and the potential list of improvement projects. It presented the results of task 3 of the project and the figure of Technical Memorandum 3. The attendance sheet records 20 names but the overall attendance averaged approximately 25 persons. Various comments from the residents related to future transportation concerns around the Town were received. Technical Memorandum 4 provides the comments and project team's responses.

Public Open House 3: April 24, 2008

Public Open House 3 focused on presenting the draft project list, proposed functional classification map and roadway cross-section. It presented the results of the draft Local Road Master Plan. The attendance sheet records 19 names but the overall attendance averaged approximately 30 persons.



Several comments were received from the public. Technical Memorandum 4 provides the comments and project team's responses.