Section 1

Project Introduction and History
SECTION 1.1: PROJECT INTRODUCTION

*Collier County initiated this Master Mobility Plan (MMP) study to develop a long-term vision to aid in planning for the county’s mobility, land use, and infrastructure needs at population build-out. The primary goal of the MMP is to reduce greenhouse gas (GHG) emissions specifically by reducing Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT) while at the same time protecting habitats, environmentally-sensitive lands, and agriculture.*

While the primary goal of the MMP is tied to reducing greenhouse gas emissions, Collier County recognizes that the goals and objectives also support the long-range business plan by reducing the need for a variety of capital infrastructure that is expensive to construct and also maintain.

As part of the Master Mobility Plan process, potential strategies to reduce VMT were evaluated using the Collier County Metropolitan Planning Organization’s (MPO) travel demand model, specifically the 2035 Long-Range Transportation Plan (LRTP) Needs Plan network. The adopted 2035 travel demand model network was used for testing various conceptual land use scenarios and local road and bridge network interconnection concepts. The model was used because of its ability to report out VMT and VHT metrics, allowing the results of each scenario to be compared to the baseline condition. VMT is a measure of how much travel is taking place (a function of the number and length of trips), while VHT is a measure of how much time it takes for VMT, and both are related to GHG emissions.

While the stated goal of the study effort is to identify strategies that have the potential to reduce VMT, other metrics representing travel demand characteristics, such as VHT, are necessary components that deserve to be analyzed during the process. Although generally we hope to see VHT reduced as VMT is reduced, it should be noted that rates of VMT and VHT do not necessarily rise and fall together, and a strategy that is successful at reducing VMT may, in fact, result in an increase in VHT, and decision-makers need to understand that balance. Evaluating VHT is part of the process of measuring and quantifying strategic benefits, especially those strategies that are specifically directed at operational efficiencies (such as intersection improvements, traffic signal improvements, etc.) that are not expected to yield measurable VMT reductions, but do help to reduce congestion and thus reduce the level of GHG emissions.

Early in the MMP planning process, it was agreed the MMP would not be used to identify a long-range transportation network needed to meet the travel demand of build-out, but rather that the MMP would be a “policy-based” plan that would backed by technical analysis demonstrating VMT-reduction where applicable. Although no attempt was made to identify transportation infrastructure needed to accommodate the additional land use growth to reach build-out, the MPO’s adopted 2035 Needs Plan and associated travel demand model network was a logical tool to be used to test a number of potential VMT-reduction strategies because one of the output metrics of the model was VMT. The County’s use of the MPO’s adopted model to test different strategies (none of which involved the addition of major collector/arterial roadways) should not be construed as an attempt to further justify what has already been vetted in the public/public agency realm and formally adopted by the MPO.

It should be expressly noted that it is not the purpose of the MMP to justify the addition or deletion of any capital projects in the adopted 2035 LRTP, nor is it the intent of the MMP to address the additional roadway needs of build-out (45 years beyond the MPO’s Needs Plan horizon). The evaluation of specific projects included in the 2035 plan and those that might be considered in future LRTP updates is a well-defined process involving the testing and evaluating of alternatives to address the transportation needs of a horizon year. Adding or removing
one or more projects from the plan must be done in concert with evaluating other alternatives that serve the same horizon year travel demand. With the exception of furthering previous study recommendations regarding the need for new bridges to connect local roads in Golden Gate Estates, it is not the intent of this document to support specific LRTP projects. The Board of County Commissioners (BCC) may consider concepts and strategies outlined in this plan for future policy direction and capital planning.

Any depiction of specific projects within exhibits used during the MMP planning process and/or contained within this report or its supporting documentation are meant only to reference adopted plans or programs in effect at the time of this study. It should be noted that such adopted plans, such as the MPO’s LRTP, are subject to future updates and amendments and that planned projects may be removed or added during any subsequent amendment process.

Purpose and Goals
The MMP plan sets forth a long-term vision for a strong and dynamic future for Collier County. This plan is intended to be a strategic guide for future policy recommendations, rather than a regulatory document.

In its entirety, the MMP consists of three phases:

- Phase One: data review and collection (completed 2010)
- Phase Two: data analysis, MMP development, and policy recommendations
- Phase Three: refinement of policy recommendations into language for Growth Management Plan (GMP) and Land Development Code (LDC) amendments (anticipated to be completed in 2012). This phase will further refine and vet recommendations through specific committees, stakeholders, and the public before coming back to the Collier County Planning Commission (CCPC) and BCC.

This report documents all activities completed in the development of Phase Two, providing a single unified plan revolving around the following:

- Conceptual Plans addressing Land Use, Mobility, Environmental, and Infrastructure strategies that achieve the objectives of the MMP through policy recommendations.
- Dialogue regarding Memorandums of Understanding (MOU) to set forth conceptual understandings between Collier County Government, primary stakeholders, and/or outside agencies.
- An unprecedented, comprehensive, completely transparent public involvement process used to gather input from the public and stakeholders throughout the entire MMP process.

The public involvement process brought forth several comments regarding how sea level rise would be addressed in the MMP. While this is a concern to all Florida coastal counties, it should be the subject of a separate detailed study. In response to comments received, the MMP now clearly indicates that no density increase is recommended for the Coastal High Hazard Area identified on the Future Land Use Map (FLUM).

Overview of Report Sections
This report is organized in the following manner:

Section 1 introduces the project purpose and goals, planning and development history of Collier County, existing development characteristics, and six planning sub-areas developed through this process.
**Section 2** discusses demographic, financial, land use, and development trends and forecasts in Collier County. In addition, it illustrates existing and planned land use, infrastructure, and environmental protection concepts based on current policy.

**Section 3** presents an overview of the public involvement process conducted as part of the MMP, including a summary of all public involvement activities conducted, as well as the major themes and outcomes resulting from these efforts.

**Section 4** presents the four conceptual plans developed for the MMP, addressing Land Use, Mobility, Infrastructure, and Wildlife Crossings and Habitat. In addition, it documents measurable outcomes resulting from the four conceptual plans, including quantified VMT reduction and other potential benefits.

**Section 5** documents the policy recommendations for consideration moving into Phase Three of this project.

**Section 6** provides a summary of the U.S. Department of Energy (DOE) grant requirements along with demonstration that all requirements have been satisfied.

**A Community Effort**
Throughout all phases of the MMP, the public and stakeholders have been involved in a critical partnership designed to elicit feedback and support of the MMP. Representatives from various public agencies, non-governmental organizations, non-profit organizations, the local development community, and the general public committed valuable time and resources by participating in this process, which allowed continual discussion and debate of various issues, fostering a cooperative process with all parties.

**SECTION 1.2: PLANNING AND DEVELOPMENT HISTORY**
Collier County’s movement towards creating a sustainable and livable community is the product of planning efforts that began 17 years ago and is now culminating in the development of the MMP. To better understand the context of the MMP, it is important to understand the historical framework in which this project is established.

In 1994, the **Urban Area Build-Out Study** was prepared to assist in the development of a long range “vision” of the Coastal Urban Area, with a specific focus on the infrastructure improvements needed to accommodate the urban area's potential growth based on the Future Land Use Map. Phase I, when completed, provided a comprehensive review of the urban area population, while Phase II was an analysis of infrastructure needed to accommodate that population.

In 2001, the **Community Character Plan** entitled “Toward Better Places” was accepted by the BCC. The Community Character Plan, prepared by Dover Kohl and Associates, in part recommended the following: 1) connecting neighborhoods; 2) enhancing the major road network by improving its network of principal arterial roads while simultaneously creating a secondary network of smaller roads that link neighborhoods; 3) designing great streets, through a “palette” of street types that could be used (or improved upon) during the road design process; and 4) balancing character with congestion by establishing “transportation concurrency management areas” to mold concurrency to its character-enhancing plans.

The **Rural Fringe Mixed-Use District** (RFMUD) and **Rural Lands Stewardship Area** (RLSA) programs were developed between 1999 and 2002. Collectively, these two programs created a long range plan for more than 300,000 acres of rural land, including vast habitat areas and significant agricultural operations. These programs identified lands of high ecological value and, as such, the primary targets for preservation
as well as where development should occur. In 2005, the RLSA Plan received the 2005 Better Community Award from 1000 Friends of Florida.

Subsequently, the Horizon Study Phase One, initiated in 2004, sought to determine if the County could afford the infrastructure and services necessitated by future growth. In 2005, a Build-Out Study was completed, consisting of a straight-line population projection derived from past growth trends that estimated the future build-out population and the necessary infrastructure to service that projected growth. This effort established the basis that projected cost for infrastructure and service improvements would surpass estimated revenue. The Horizon Study highlighted the need for land use modeling to better determine the location of future population and the infrastructure to service that population.

The Horizon Study Phase Two, initiated by the BCC in May 2006, sought input from the study area’s residents, property owners, and other stakeholders as to their expectations of services for the study area, weighed against the cost to provide those services identified during Phase One. This phase developed a land use modeling tool, the Collier Interactive Growth Model (CIGM), which spatially projects population based upon the Growth Management Plan’s regulatory environment and historical comparisons.

The Rural Land Stewardship Area Five-Year Review, completed between November 2007 and June 2009, consisted of nearly 30 public meetings to evaluate the success of the RLSA Overlay adopted five years earlier. This sub-district is anticipated to account for the greatest population and employment growth east of CR 951.

The Long Range Transportation Plan (LRTP) 2035 Update, adopted in December 2010, is a multi-modal plan addressing different types of travel needs through 2035, including automobile, transit, bicycle, and pedestrian modes. The networks developed during this effort will provide a baseline for the travel demand modeling efforts within the MMP.

In 2009, Phase One of the Master Mobility Plan was initiated to build upon the previous efforts through a refined approach and specificity not provided in previous planning efforts. The design of the program is to develop a clear and concise long-term vision that not only incorporates measures to increase the efficiency of transportation system within the county and lower carbon emissions, but further identifies:

- public infrastructure efficiencies
- possible transit and multi-modal policy changes to lower VMT
- possible land use policy changes to lower VMT
- opportunities to consider environmentally-sensitive areas and wildlife in mobility planning

During Phase One of the MMP, an inventory of the data, plans, and documents available for the data analysis phase was completed. This document, entitled “Collier County Master Mobility Plan Data Plans Review Technical Memorandum” (August 2010), provides a review of previous plans and documents in preparation for Phase Two, including documentation of key concepts, data, and resources available to support the development of the MMP.

SECTION 1.3: EXISTING DEVELOPMENT CHARACTERISTICS

Collier County is located in southwest Florida along the Gulf of Mexico. It’s inhabited history spans hundreds of years; however, significant population growth has occurred only over the past 50 years. The county was incorporated by the Florida Legislature in 1923 from portions of Lee and Monroe counties and was primarily accessible by water from the late 1800s through the early 1960s, thereby resulting in slower
population growth than experienced in other areas of the state. There are three municipalities within the county: Everglades City, Marco Island, and Naples. Per the 2010 Census, Collier County currently is ranked the 14th most populous county in Florida, with 1.7 percent of the state’s total population.

Collier County is the second largest county in Florida, with approximately 2,025 total square miles; however, a significant portion of this area is designated as either federal or state park land or as conservation land. It is rich in geographic diversity, from the beaches to the Big Cypress National Preserve and Everglades National Park. Its beaches, tropical climate, and geographic and biological diversity make it one of the premier tourism and retirement destinations in the United States.

From the late 1800s through the 1920s, wealthy Northern and Midwestern settlers came to the region to enjoy the white sand beaches and the excellent fishing and hunting found within Collier County. Even before the turn of the last century, pioneer settlers inhabited the eastern scrub lands on cattle ranches. Others fished, farmed, and hunted the throughout the Ten Thousand Islands. During this time, Immokalee was established as a rural agricultural community.

Increased interest in Collier County as a tourist and retirement destination are tied to the construction to two significant road projects that facilitated travel to Collier from both the north and the south, as well as beyond Florida. The construction of the Tamiami Trail by Barron Gift Collier in the 1920s as part of the agreement to create Collier County provided a link to Tampa and parts north of Collier County and on to Miami. Later, in the 1960s, the construction of Alligator Alley (now I-75) provided a direct link from the Midwest to Florida and Collier County.

Staring in the late 1960s and continuing until 2006, Collier County experienced significant population growth. This initially occurred along the coastal area, but as areas along the coastline became more developed, available land became scarce and land values increased significantly. Growth and development have steadily moved eastward, but have generally been limited to the County’s Coastal Urban Area (CUA) (generally defined by the Lee County boundary to the north, Collier Boulevard to the east and the Gulf of Mexico to the west), the Immokalee Urban Area, and Golden Gate Estates (GGE).

Golden Gate Estates is a large pre-platted area containing approximately 175 square miles that were originally platted in the early 1960s by Gulf American Corporation (GAC). GAC dug canals to drain the wetlands and carved the property into 1.25-acre lots. There was no provision for central sewer and water, and there was a vast network of unpaved limestone roads. GAC promoted GGE worldwide as a premier vacation and retirement community. Most of the lots were sold sight unseen with little money down. In 1974, when the area was less than 10 percent developed, it became apparent to County officials that the project, with limestone roads and no centralized water and sewer system, could not support the number of platted lots. Further issues identified included a lack of road connectivity, as the road pattern was not a complete grid and bridges were not installed, and no significant commercial or employment services were incorporated within this area. The County decreased zoning density and required a minimum of 2.25 acres to build a single-family residence. Over a more than 20-year period, the State of Florida acquired the vast majority of lots in GGE south of I-75 (known as the South Blocks), and a plan to restore this area to its natural condition is under way. North GGE, either due to affordability or lifestyle choice (semi-rural), or both, developed rapidly from the 1990s through 2006, creating impacts to traffic and other public services within this area.
It should be noted that for many years, Collier County has had various GMP designations and policies which, to some degree, promote mixed-use development. For example, within the CUA, the County’s FLUM identifies 19 Mixed-Use Activity Centers located at the intersections of various major roadways. Mixed Use Activity Centers, when first created, were generally 160 acres in size, with 40 acres located in each quadrant of a respective intersection. Over time and for various reasons, the size of the Activity Centers has been revised on the FLUM to reflect actual development conditions. That is, some are larger or smaller than 160 total acres, or some quadrants are larger or smaller than 40 acres. As implied by the nomenclature, these Activity Centers were intended to be mixed-use in nature. To incentivize that concept, within certain Mixed-Use Activity Centers, higher residential density is authorized under the GMP (currently up to 16 units per acre). Many Mixed-Use Activity Centers have developed with a mixture of commercial and residential development; however, the mixtures of development types have not necessarily been at optimal levels or ratios and, for the most part, attention to mobility and interconnectivity between uses has been the exception rather than the rule.

**MMP Planning Sub-Areas**

In consideration of the historic development patterns and existing conditions, coupled with Collier County’s expansive geographic area and its distinctive resources and characteristics, (re)development potential and future infrastructure and service needs have led to the identification of six planning sub-areas. These planning sub-areas are a major theme of this project developed through the public involvement process and will be referenced throughout this document. The six planning areas, presented in Figure 1-1, are discussed in more detail in later sections and include:

- Coastal Urban Area (CUA)
- Golden Gate Estates (GGE)
- Rural Fringe Mixed-Use District (RFMUD) Receiving Areas
- Orange Tree
- Immokalee Urban Area (IUA)
- Rural Land Stewardship Area (RLSA)

Section 2 provides a detailed description of each MMP planning sub-area.
Figure 1-1
MMP Planning Sub-Areas