



Master Mobility Plan

Final Report Executive Summary

January 2012



In Association with







Robert Cervero, Ph.D.

PURPOSE

Collier County initiated the 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 emissions (GHG) specifically by reducing Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT) while at the same time protecting habitats, environmentally-sensitive lands, and agriculture.

The MMP is funded with an Energy Efficiency and Conservation Block Grant provided by the U.S. Department of Energy. The grant was created as a result of the American Recovery and Reinvestment Act of 2009.

While the primary goal of the MMP is tied to reducing GHG 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 both expensive to construct and to maintain.

Phase One of the MMP was completed in 2010 and focused on data collection and review. Phase Two, which began in January 2011, includes development of the MMP supported by both data analysis and an extensive public involvement program, resulting in future policy recommendations to ultimately be considered as part of Phase Three. The MMP process is described in detail in the MMP Report, most notably Section 1, Section 3, and Appendix A.

It should be expressly noted that it is not the purpose of the MMP or any testing done during this process to justify the addition or deletion of any capital projects in the adopted Collier County Metropolitan Planning Organization (MPO) 2035 Long Range Transportation Plan (LRTP). 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 specifically support LRTP projects. The MPO may consider concepts and strategies outlined in this plan for future policy direction and capital planning.

As such, any depiction of specific projects on exhibits used during the MMP planning process and/or contained within this report or its supporting documentation is meant only to reference adopted plans or programs in effect at the time of the MMP

study. It should be noted that such adopted plans, such as the MPO LRTP, are subject to future updates and amendments and that planned projects may be removed or added during any subsequent amendment process.

In its entirety, the MMP consists of a single, unified plan revolving around the following components:

- Conceptual plans addressing Land Use, Mobility, Environmental, and Infrastructure strategies that achieve the objectives of the MMP through future policy recommendations.
- Dialogue regarding Memorandums of Understanding to set forth conceptual understandings between Collier County Government, primary stakeholders, and/or outside agencies.
- Unprecedented, comprehensive, and completely transparent public involvement process used to gather and incorporate public and stakeholder input.

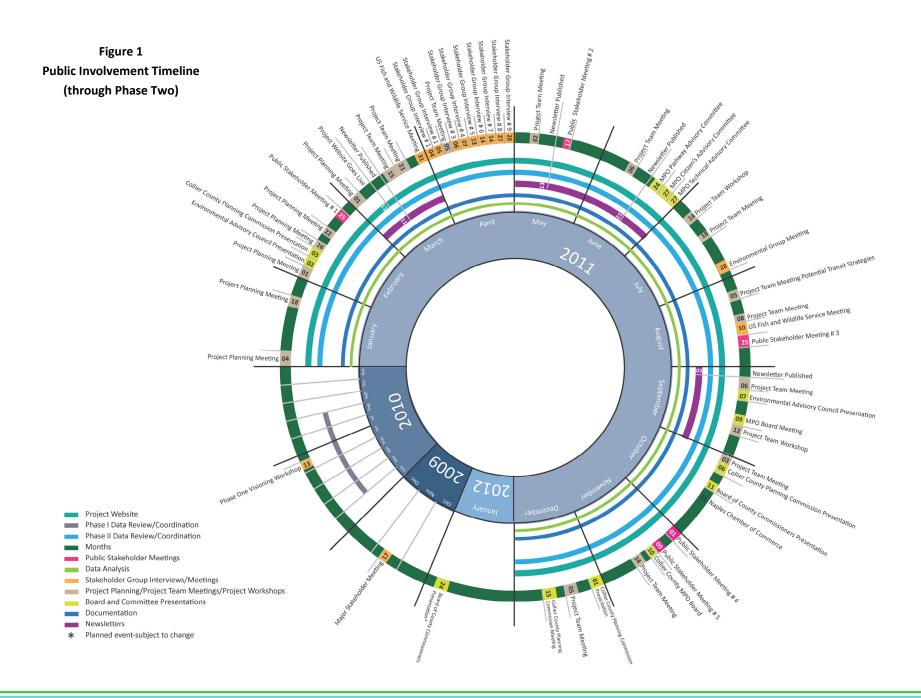
PUBLIC INVOLVEMENT: A COMMUNITY EFFORT

The public involvement process was developed to allow key stakeholder agencies and the general public with opportunities to help shape development of the plan. In the same respect, efforts were made to provide a broad spectrum of information and opportunities for input to meet the needs of the county's diverse population. To maximize transparency, build consensus among stakeholders, and use stakeholder and public input to guide the development of the MMP, a wide array of techniques was used, including public stakeholder meetings/workshops, stakeholder interviews, a project website, newsletters, and press.



Break-out groups held during the initial public stakeholder meeting (held on February 25, 2011) were designed to maximize participation and input received during the MMP public involvement process.

Figure 1 provides a comprehensive timeline of pubic involvement activities for the MMP.



In addition to the broad range of engagement options described above, based on requests from the public, Collier County opened all MMP meetings, activities, and events to the public. As the MMP has progressed, members of the public have been encouraged to participate in all activities, notice of which are posted on the project website as well as through usual public notice systems.

MASTER MOBILITY PLAN SUB-AREAS

Early in the MMP process, the need to identify and consider sub-areas for purposes of developing VMT-reducing recommendations emerged. Six planning sub-areas were identified based on distinctive resources and characteristics, (re)development potential, and future infrastructure and service needs. Public input confirmed the need for special consideration of socio-economic conditions and localized identity.

The six sub-areas presented in Figure 2 include:

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

DATA, TRENDS, AND FORECASTS

Previous planning efforts in Collier County have produced a set of build-out demographic data that includes population, dwelling units, and employees by Traffic Analysis Zone (TAZ). As part of the MMP, the Project Team evaluated the build-out data set for reasonableness based upon adopted policies. The baseline build-out data were then applied to the Collier County Metropolitan Planning Organization's (MPO) adopted 2035 Travel Demand Model. The MPO's adopted 2035 Needs Plan network is the most long-term network adopted by Collier County, and so it served as the build-out test network for this effort.

For the purpose of the MMP, the ultimate build-out population or build-out date serves only as a reference point and test data set. Variations to the build-out date

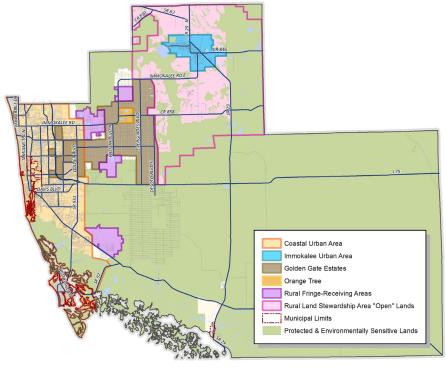


Figure 2
Master Mobility Plan Sub-Areas

and permanent population would not have a material impact on the outcome of this planning study.

As part of the Conceptual Land Use and Mobility plans, the demographic data within specific TAZs were adjusted to create specific scenarios to test land use and mobility concepts within several of the MMP sub-areas as well as countywide. The Travel Demand Model results for each scenario was compared to the baseline scenario to quantify the effects on both VMT and VHT.

In addition to projected population and employment growth, other demographic characteristics provide an understanding of the county's history, current status, and forecast conditions. Variables such as income, age distribution, tax base, and travel

behavior aid in identifying Collier County's relative strengths and weaknesses. This understanding helps form the basis for the Conceptual Mobility and Infrastructure plans, which help guide recommendations for policies that both reduce VMT and provide other cost and energy saving measures for Collier County.

CONCEPTUAL PLANS

The MMP is intended to provide strategic guidance for future policy recommendations that reduce VMT and VHT; protect habitat, environmentally-sensitive land, and agriculture; and identify infrastructure planning guidelines. To achieve these goals, four conceptual plans have been developed, each of which will provide the basis for the policy recommendations developed for the MMP (which are provided at the end of this Executive Summary):

- A Conceptual Land Use Plan, the purpose of which is to identify area-wide land use and urban design strategies that influence travel demand patterns with the goal of reducing VMT. The Conceptual Land Use Plan compares the existing conditions of the county to build-out projections and identifies various land use concepts that could be applied to reduce VMT and VHT. As part of this effort, the influence of land use concepts on travel demand patterns was examined, including Urban Design Principles, Area-Wide Land Use Strategies, and Location and Sequence of Development. To help measure the influence of area-wide land use strategies on VMT and VHT, conceptual land use scenarios were developed based largely on input received from the public, and the results of the scenarios were compared against the baseline model run to quantify potential reductions in VMT or VHT.
- A Conceptual Mobility Plan, the purpose of which is to incorporate multi-modal transportation alternatives with the goal of reducing VMT. The Conceptual Mobility Plan discusses the cornerstone principals that serve to create a cohesive, integrated, and efficient mobility system, thereby enhancing the provision of multi-modal choice (e.g., transit), including connectivity within and between modes, circulation and access, transportation demand management (TDM) strategies, and operational efficiencies.

- A Conceptual Wildlife Crossings and Habitat Preservation Plan, the purpose of which is to ensure that the protection and interconnectivity of proposed environmentally-sensitive lands is considered in the development of the MMP. Of the nearly 1.3 million acres in Collier County, more than 1 million acres have previously been identified as environmentally-sensitive. As ecologically valuable as these natural resource and habitat lands in Collier County are, the interconnectivity of many of these lands is vital to maintaining the integrity of the overall system. The Conceptual Wildlife Crossings and Habitat Preservation Plan discusses how efforts to maintain water and/or wildlife connections through the landscape must be considered as part of future planning for roadway improvements or new mobility corridors.
- A Conceptual Infrastructure Plan, the purpose of which is to provide guidelines
 on infrastructure, reducing redundancies and increasing synergy with the goal of
 reducing VMT. Recent planning efforts undertaken in Collier County have demonstrated that, as the county continues to grow, current infrastructure planning
 levels are unsustainable without significant changes. The Conceptual Infrastructure Plan identifies strategies to reduce VMT and promote efficient and
 consolidated infrastructure planning, therefore reducing the cost burden to the
 citizens of Collier County.

MASTER MOBILITY PLAN RECOMMENDATIONS

The County's growth history, current development pattern, and projected build-out; the extensive public involvement process conducted as part of this project; research on VMT-reducing concepts and strategies; and the results of the travel demand model tests and scenarios provided the building blocks for developing the following policy recommendations for consideration by the Collier County Board of County Commissioners (BCC) as the MMP progresses into Phase Three.

For many of these policy recommendations, descriptions and/or examples of potential strategies that could be used to support the recommendation are provided in Section 5 of the MMP Report.

RECOMMENDATION 1 – Use impact/mobility fee incentives based on calculated reductions generated by providing optimal employment to population ratios and a full range of housing types and affordability that result in reduced commuter-related trips, both within specific mixed-use developments and within larger sub-areas.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 2 – Recommend that the BCC appoint an advisory board or task force to be comprised only of residents or property owners within Golden Gate Estates to evaluate all viable tools and programs to reduce density in North Golden Gate Estates. As part of such evaluation, it is recommended that the advisory board or task force consider, at a minimum, the following:

- Financial feasibility and cost, both to individual private property owners and Collier County government
- Incentives that may be employed to promote the use of such tools and programs
- Balancing private property rights and public policy objectives
- Collateral benefits (in addition to density reduction and lower VMTs), including but not limited to, public safety, including wildfire and flood protection; hydrologic restoration and aquifer recharge; mitigation; and habitat preservation

It is recommended that the committee be tasked with making final recommendations for implementation, including any recommended GMP and/or LDC amendments, for consideration by the EAC, CCPC and ultimately for action by the BCC within 18 months of approval of this MMP recommendation by the BCC.

CCPC approved the above recommendation 6-1 as written

Staff recommends the composition be designated at the time the advisory board or task force is established by the BCC.

RECOMMENDATION 3 – Incentivize approved neighborhood-serving retail and service uses in Golden Gate Estates, Rural Fringe Mixed-Use District Receiving Areas, and Orange Tree to reduce trip lengths for neighborhood serving uses.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 4 – Review and revisit requirements that already exist for self-sustaining Towns and Villages within the RLSA/RFMUD Receiving Areas to provide for internal capture and use of alternative modes.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 5 – Revisit policies within the Urban Areas to encourage: A) and further incentivize infill and redevelopment; B) internal capture; and C) Use of alternative modes within localized mixed-use developments.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 6 – Coordinate county multi-modal planning efforts with land use strategies identified under Recommendations 1-5.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 7 — Plan for the provision of multi-modal infrastructure through land development and roadway standards (e.g., complete streets) within large-scale planned developments and the county road network.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 8 – Implement enhanced bicycle, pedestrian, and safety improvements.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 9 – Enhance localized connectivity to reduce VMT and increase travel efficiency as well as optimize transit, emergency vehicle, and school transportation operations.

ccpc approved the above recommendation 7-0 as written ccpc also requested Example B provided to support the recommendation state: "Consider constructing bridge connections previously identified in the East of C.R. 951 Bridge Study in Golden Gate Estates."

Staff recommends "Promote constructing bridge connections..."

RECOMMENDATION 10 – Evaluate the transition from a roads-based impact fee to a mobility fee to provide capital funding for multi-modal infrastructure, including buses, stop/station area infrastructure, Bus Rapid Transit (BRT) infrastructure (e.g., signal priority, queue jump lanes, etc.) and transit supporting bicycle features (e.g., bicycle racks, lockers, etc.).

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 11 – Continue to improve traffic operations by maintaining appropriate signal timing plans (including pedestrian movements) and through the use of Intelligent Transportation System (ITS) and Advanced Traffic Management System (ATMS) technologies.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 12 – Coordinate with the Florida Department of Transportation (FDOT), Collier County Alternative Transportation Modes, and Collier County Land Development Services regarding the implementation of commuter-based services and/or infrastructure to reduce delay for vehicles carrying multiple persons during peak travel demand and emergency vehicles.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 13 – Plan for the incorporation of alternative modes or connection to nearby multi-modal infrastructure or facilities (e.g., trails, park-and-ride lots, etc.) during the design of new or expanded roadways/corridors.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 14 – Incentivize employer-based transportation demand management (TDM) programs to encourage a change in travel behavior by shifting trips away from peak travel times and/or eliminating work-related vehicle trips.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 15 – Through regular and ongoing communication and coordination between Collier County and regulatory agencies and stakeholders, identify opportunities and implement strategies to enhance efficiency and reduce costs of the permitting process. This objective should be accomplished while balancing the protection of water, wildlife, other natural resources and private property rights, and with consideration for a particular sub-area's socio-economic characteristics.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 16 – Use the mitigation cost component of the County's current roadway impact fee or future mobility fee to fund specifically identified mitigation strategies.

CCPC approved the above recommendation 7-0 as written, but with the deletion of examples

Staff recommends the BCC consider keeping the following two examples:

- A. Explore a countywide Habitat Conservation Plan (HCP) that specifies impact fees towards a regional mitigation program.
- B. Consider tying wetland mitigation to the basin or impact area where the project is located.

RECOMMENDATION 17 – Recommend further research on and evaluation of cost-effective methods to address wildlife/vehicle collisions.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 18 – Identify short- and long-term opportunities to increase efficiency of and access to County services and infrastructure.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 19 – Enhance e-government (Internet-based) services to reduce vehicle miles of travel and capital and operating costs.

CCPC approved the above recommendation 7-0 as written

RECOMMENDATION 20 – Review MMP outcomes/measures as part of the Evaluation and Appraisal Report process and, as necessary, update the LDC/GMP or other regulatory instruments.

CCPC approved the above recommendation 7-0 as written



Acknowledgements

This material is based upon work supported by the Department of Energy [Golden Field Office] under Award Number DE-EE0000783.

Disclaimer

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The view and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

Project Team

Collier County

Tindale-Oliver & Associates, Inc.

WilsonMiller Stantec

Mulhere & Associates, LLC

AIM Engineering & Surveying, Inc.

White & Smith, LLC

Dr. Robert Cervero, PhD

In participation with members of the general public and stakeholder agencies/ organizations including, but not limited to:

Barron Collier Companies

Big Corkscrew Island Fire Control & Rescue District

Collier County Airport Authority

Collier County Audubon Society

Collier County Metropolitan Planning Organization

Collier Enterprises

Conservancy of Southwest Florida

Consolidated Citrus/ King Ranch Incorporated

Defenders of Wildlife

District School Board of Collier County

Florida Department of Transportation - District 1

Florida Division of Forestry

Florida Fish and Wildlife Conservation Commission

Florida Wildlife Federation

Golden Gate Area Civic Association

Golden Gate Estates Area Civic Association

Golden Gate Fire Control & Rescue District

Greater Naples Chamber of Commerce

Smart Growth Coalition

South Florida Water Management District—Big Cypress Basin

Southwest Florida Regional Planning Council

Star Development

Urban Land Institute

U.S. Department of Environmental Protection—South District

U.S. Fish and Wildlife Service