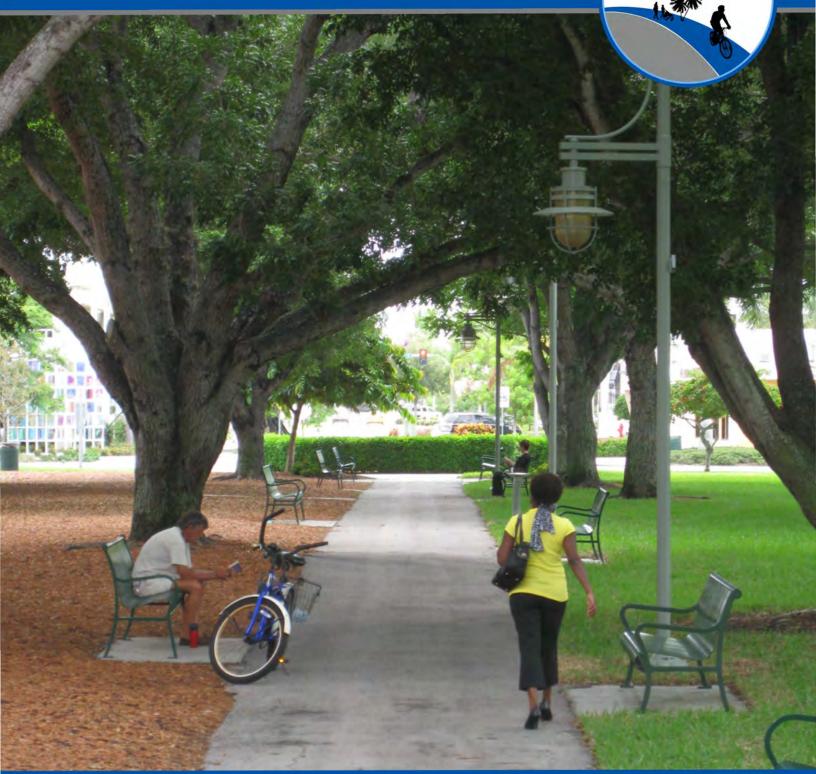
# COLLIER MPO 2012

Comprehensive Pathways Plan

(A Technical Guide)







This Comprehensive Pathways Plan has been financed in part through grants from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the Metropolitan Planning Program, Section 104(f) of title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

This Comprehensive Pathways Plan was made possible by the leadership of the Collier Metropolitan Planning Organization (MPO), the MPO staff, public comment and invaluable input, review, and discussion provided by the 2012 Comprehensive Pathways Plan Stakeholders Working Group.

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This Pathways Plan document was prepared by RWA Inc.:



It is the Collier Metropolitan Planning Organization's (MPO) policy to support and encourage public involvement and to adhere to the principles of Environmental Justice in the planning process relating to transportation systems and facilities. The MPO's public participation policy is designed to ensure opportunities for the public to express its views on transportation and mobility issues and to become active participants in the decision making process.



### **Purpose**

The purpose of this plan is to provide a framework for developing a first-class bicycle and pedestrian network on major roads throughout Collier County. This plan includes prioritized lists of bicycle and pedestrian needs, as well as general policy and program recommendations that are meant to guide the MPO in selecting projects and accommodating bicycle and pedestrian modes within its transportation system.

#### Vision Statement

The following vision statement guided the development of this plan including the evaluation and prioritization of identified facility needs and the recommended policies and programs.

To provide a safe, inviting and convenient bicycle and pedestrian network throughout Collier County that delivers mobility, economic, recreational, and quality of life benefits for all residents and visitors.

#### Goals

Goal 1: Provide a safe, connected, and convenient bicycle and pedestrian network in a strategic and cost-effective manner.

Goal 2: Enhance the safety of bicyclists and pedestrians in Collier County

Goal 3: Promote tourism and economic opportunities

Goal 4: Encourage pedestrian and bicycle modes of transportation and enhance the recreational and leisure activities within Collier County

Goal 5: Create a network of off-road greenways within Collier County.

Goal 6: Increase transportation efficiency and community livability through the development of an integrated multi-modal system

### Plan Components

The 2012 Comprehensive Pathways Plan is divided into the following five sections:

- 1. Introduction
- 2. Existing Conditions
- 3. Identified Issues & Recommendations
- 4. Expanding and Improving the Network
- 5. Immediate Action Steps

#### **Public Involvement Process**

Through a focused and intensive public involvement process, the project team worked with a diverse Stakeholders Working Group, MPO staff and the general public to assess existing conditions, identify issues and concerns, recommend policies and programs, and develop a prioritized needs plan to guide facility development efforts.

#### Identified Issues

- Safety
- Existing Roadway Network High Volume, High Speed
- Access & Transportation Mode Parity
- Connectivity and Continuity
- Link to Transit



- Facility Type & Diversity
- o Facility Design
- Development & Land Planning Practices
- Promoting Livable Communities & Increasing the Number of Bicyclists & Pedestrians

#### Recommendations

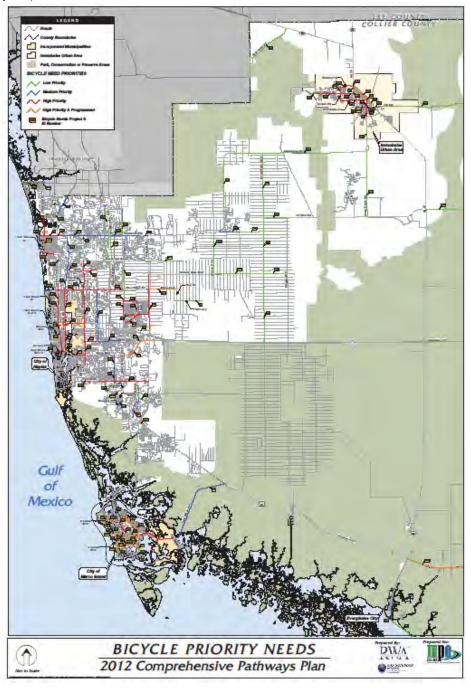
In response to the identified issues, the plan presents a comprehensive set of recommendations to strategically develop a county-wide bicycle and pedestrian network comprised of sidewalks, bike lanes, paved shoulders and shared-use paths. The recommendations include:

- ✓ Construct New Bicycle & Pedestrian Facilities
- ✓ Adopt a Bicycle & Pedestrian Accommodation Policy
- ✓ Encourage Local Jurisdictions to Adopt Complete Streets
  Policies
- ✓ Evaluate Existing Street Design & Safety Enhancement Opportunities
- ✓ Take Advantage of Regularly-Scheduled Maintenance & Resurfacing
- ✓ Consider Strategic "Network Quality" Improvements
- ✓ Encourage Facility Diversity
- ✓ Establish a Greenways & Trail Program
- ✓ Implement Education, Encouragement & Enforcement Strategies, Campaigns & Programs
- ✓ Promote & Facilitate the Design of Livable & Walkable Communities

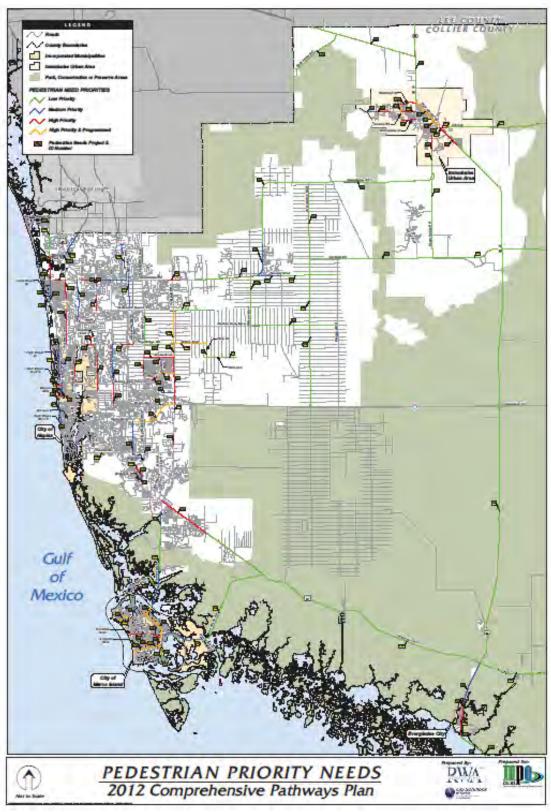


### Prioritized Facility Needs

A crucial component to the Pathways Plan is the Prioritized Needs Plan that identifies current bicycle and pedestrian needs throughout the county, evaluates those needs and categorizes them as Low, Medium or High Priority. The resulting 2012 needs lists and maps form the basis for the Pathways Advisory Committee to identify, evaluate, and select specific facility projects on an annual basis. The following maps depict the Bicycle & Pedestrian Priority Needs for Collier County (larger versions are included in the report).



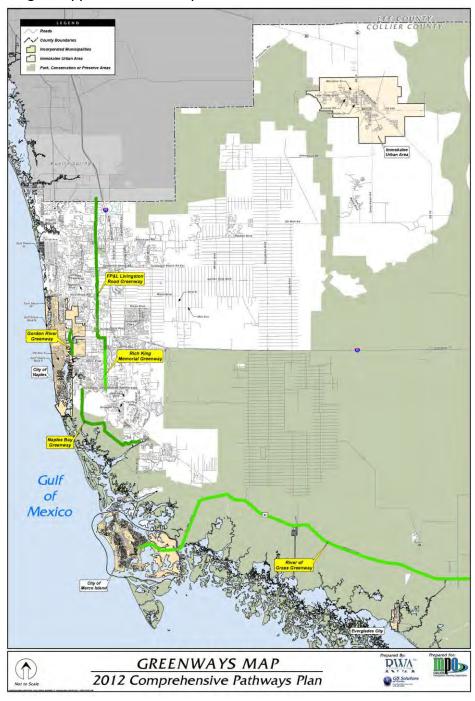




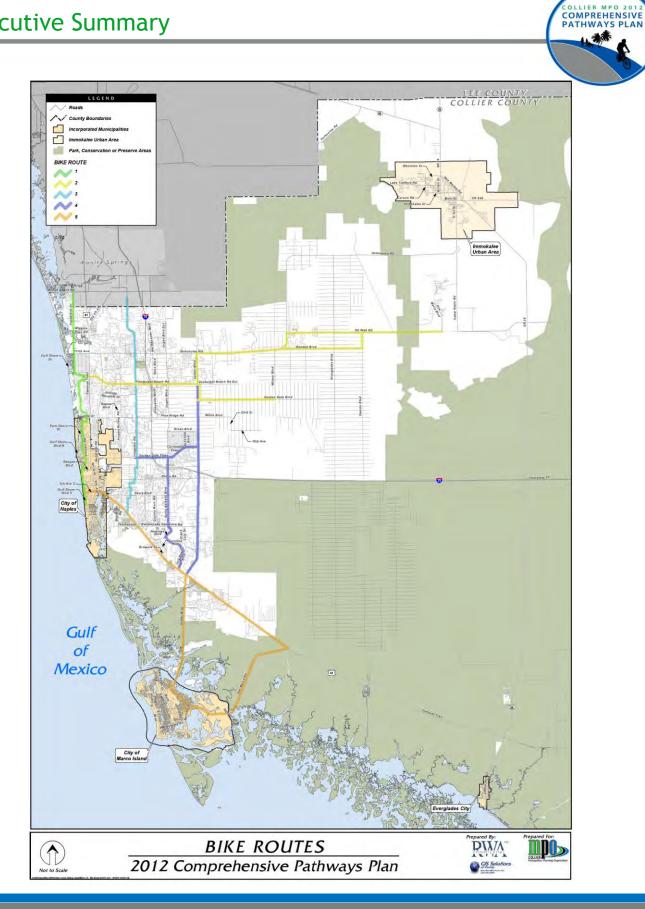


### Greenways & Trails and Bicycle Routes

In addition to the Prioritized Needs Plan which focuses on sidewalks, paved shoulders, bike lanes and shared use paths within the road right-of-way, the Pathways Plan calls for renewed effort to develop Greenways & Trails and Bicycle Routes within Collier County. The plan identifies greenway and bike route needs, and recommends the establishment of new programs to assess these needs and pursue specialized funding to support their development.



# **Executive Summary**



# **Table of Contents**



| 4  |            | 1 11                                       |            |                                               |
|----|------------|--------------------------------------------|------------|-----------------------------------------------|
| 1. | Int        | roduction12                                | <b>●</b> [ | Recommendations                               |
|    | •          | Purpose                                    | 0          | Construct New Bicycle & Pedestrian Facilities |
|    | •          | Background                                 | 0          | Adopt a Bicycle & Pedestrian Accommodation    |
|    | <b>•</b>   | Planning & Public Involvement Process      |            | Policy                                        |
|    |            | Planning Process                           | 0          | Encourage Local Jurisdictions to Adopt        |
|    | <b>(a)</b> | Vision Statement                           |            | Complete Street Policies                      |
|    | •          | Goals                                      | 0          | Evaluate Existing Street design & Safety      |
|    |            |                                            |            | Enhancement Opportunities                     |
| 2  | Ev         | isting Conditions 20                       | 0          | Take advantage of Regularly-Scheduled         |
| ۷. |            | isting Conditions 20                       |            | Maintenance                                   |
|    |            | The MPO's Role & Responsibilities          | 0          | Consider Strategic Network Quality            |
|    |            | Relationship to Other Plans                |            | Improvements                                  |
|    | <b>(4)</b> | Community Profile                          | 0          | Encourage Facility Diversity                  |
|    | •          | Overview of the Existing Bicycle &         | 0          | Establish a Greenways & Trail Program         |
|    |            | Pedestrian Network                         | 0          | Implement Education, Encouragement &          |
|    | <b>(4)</b> | Facility Types                             |            | Enforcement Strategies, Campaigns &           |
|    | <b>•</b>   | Existing Network                           |            | Programs                                      |
|    |            |                                            | 0          | Promote & Facilitate the Design of Livable &  |
| 3  | Ide        | entified Issues &                          |            | Walkable Communities                          |
| ٦. |            |                                            |            |                                               |
|    | ке         | commendations29                            | 4. Exr     | panding and Improving the                     |
|    |            | Issues                                     | _          |                                               |
|    | 0          | Safety                                     | •          | twork47                                       |
|    | 0          | Existing Roadway Network - High Volume,    |            | Prioritized Needs Plan                        |
|    |            | High Speed                                 | <b>●</b>   | Project Selection Process                     |
|    | 0          | Access & Transportation Mode Parity        | • (        | Greenways & Trails                            |
|    | 0          | Connectivity and Continuity                | <b>●</b> I | Bicycle Routes                                |
|    | 0          | Link to Transit                            |            |                                               |
|    | 0          | Facility Type & Diversity                  | 5 Imr      | nediate Action Steps 83                       |
|    | 0          | Facility Design                            | J          |                                               |
|    | 0          | Development & Land Planning Practices      |            |                                               |
|    | 0          | Promoting Livable Communities & Increasing |            |                                               |
|    |            | the Number of Bicyclists & Pedestrians     |            |                                               |

# **Table of Contents**



#### List of Exhibits

| 1.  | Collier County Quick Facts                         | 21 |
|-----|----------------------------------------------------|----|
| 2.  | Existing Bicycle & Pedestrian Network Statistics   | 24 |
| 3.  | Major Roads Network Map                            |    |
| 4.  | Existing Bicycle Facilities Map                    | 26 |
| 5.  | Existing Pedestrian Facilities Map                 | 27 |
| 6.  | Collier County Injuries and Fatalities: 2006-2010  |    |
| 7.  | Bicycle Facility Needs                             | 49 |
| 8.  | Pedestrian Facility Needs                          | 50 |
| 9.  | Need Evaluation Criteria                           | 51 |
| 10. | . Safety Enhancement Need Map                      | 53 |
|     | . Proximity to Schools Map                         |    |
| 12. | . Population Density by Census Block Map           | 55 |
|     | . Proximity to Transit Map                         |    |
|     | . Proximity to Health Care & Public Facilities Map |    |
|     | . Bicycle & Pedestrian Connectivity Map            |    |
|     | . Proximity to Activity Center Map                 |    |
|     | . Continuous Bike Rotes Map                        |    |
|     | . Significant Corridors Map                        |    |
| 19. | . High Transit Reliance Area Map                   | 62 |
| 20. | . Prioritized Bicycle Needs Summary Table          | 64 |
| 21. | . Prioritized Pedestrian Needs Summary Table       | 64 |
| 22. | . Prioritized Bicycle Needs List                   | 65 |
| 23. | . Prioritized Pedestrian Needs List                | 70 |
| 24. | . Prioritized Bicycle Needs Map                    | 74 |
|     | . Prioritized Pedestrian Needs Map                 |    |
|     | . Greenways Map                                    | 70 |
| 27. | . Continuous Bike Routes Map                       | 81 |

# **Appendices**

Appendix A: Public Involvement Documentation

Appendix B: Needs Evaluation Criteria Description and Ranking & Weighting Table

Appendix C: Detailed Needs Lists
Appendix D: Facility Costs Documents





## **Purpose**

The 2012 Comprehensive Pathways Plan (Pathways Plan) represents a major update to the current Collier Metropolitan Planning Organization's (MPO) Pathways Plan. The purpose of this plan is to provide a framework for developing a first-class bicycle and pedestrian network throughout Collier County. This plan includes prioritized lists of bicycle and pedestrian needs, as well as general policy and program recommendations that are meant to guide the MPO in selecting projects and accommodating bicycle and pedestrian modes of transportation within its transportation system. While this plan is a stand-alone document, it was developed concurrent to the MPO's Long Range Transportation Plan (LRTP), and should be used as a companion document.

This Pathways Plan is comprehensive in nature and examines bicycle and pedestrian needs at a county-wide level. It adopts a long-term planning horizon and identifies extensive bicycle and pedestrian facility needs that will be addressed incrementally over many years. The Pathways Plan is meant to provide general guidance to the MPO, its member jurisdictions, and the various advisory committees in their efforts to select projects, define priorities and establish programs and initiative that will make Collier County a more walkable and bikeable community.

This plan is not intended to supersede, duplicate or conflict with existing local plans or ongoing bicycle and pedestrian efforts, but rather, it is meant to unify planning efforts, and influence facility improvement priorities at the county level.

In keeping with the mandate of developing a county-wide plan, the Pathways Plan focuses on Collier County Major Roads (arterials and collectors) eligible for federal funding along with a few local roads identified by the

community as having significant bicycle and pedestrian needs.

Understanding that there are limited funds but seemingly limitless needs, concentrating on Major Roads will allow the MPO to focus its attention, energy, and limited resources on developing an interconnected county-wide network. This approach will allow the MPO to strategically develop a backbone network that will support the entire Collier County bicycle and pedestrian system. Local jurisdictions are encouraged to support and augment this network through their local plans. Over time, the Pathways Plan will be amended and updated to reflect changing needs and conditions.

Local roads, which play an important role in developing an effective bicycle and pedestrian system, may be added to this Plan over time. While facility needs on local roads, for the most part, are not included within this plan, it should not be inferred that they are not eligible for MPO consideration and funding. Eligible needs identified as part of municipal bicycle and pedestrian plans and the Walkable Community Studies developed by the MPO can be added to the prioritized needs list presented in Section 4 at the discretion of the MPO staff. and the PAC. However, it should be noted that local roads are primarily the responsibility of local municipalities and unincorporated Collier County. Each municipality has a different set of conditions and circumstances which may call for individual and distinct approaches to providing bicycle and pedestrian facilities within their community.

Planning for bicycle and pedestrian facilities is similar to all planning initiatives in that it is an incremental and iterative process. It should be understood that the Pathways Plan is an evolving document that has been previously updated and will continue to need periodic updates similar to other transportation plans.



## **Background**

The Collier MPO developed its first Pathways Plan in 1994. That plan was an important step in recognizing the importance of bicycle and pedestrian modes of transportation within Collier County and became a significant tool in accommodating all transportation modes in the MPO's transportation planning efforts. Prior to that plan, the MPO utilized basic project lists that were updated on an annual basis. The first Pathways Plan established the basis for an organized and strategic approach to developing a bicycle and pedestrian system in Collier County.

In 2006, the MPO conducted a major update to their existing plan. The 2006 Plan presented a much broader scope than the previous plan, addressed best practices and introduced a standard needs evaluation methodology. The 2006 Pathways Plan outlined goals and policies, design guidelines, an analysis of existing conditions, a detailed Needs Plan, and implementation recommendations. The Needs Plan was developed using a Level of Service (LOS) methodology which utilizes a complex statistical analysis of multiple variables.

As the MPO staff and the Pathways Advisory Committee (PAC) began working with the Needs Plan, they had to examine certain priorities and address how projects were scored and ranked. Due to the complex statistical nature of the LOS methodology, it was challenging for staff and the PAC to manipulate the model and make adjustments to reflect certain circumstances and preferences.

As a result, the PAC requested that the ranking methodology be revised in order to make the needs assessment and ranking process simpler, more intuitive, and flexible. In 2010, the MPO staff worked with the PAC to develop a Geographic Information Systems (GIS) or

spatially based methodology to replace the existing formula based model.

As described on page 6 of the Addendum to the 2006 Comprehensive Pathways Plan:

"The purpose of the update was to use the newly developed criteria in a new process to create the needs list, to define the selection process for pathways projects, and also to define the recommendation process the PAC uses for project prioritizations. The ultimate goal of the plan update is to provide the framework and methodology in which the MPO Board approves prioritizations of pathways projects."

The addendum was also identified as an interim update with the recognition that a full update would be required in 2012.

The Collier MPO and all its member jurisdictions have long recognized the benefits of walking and bicycling. A prime example is Collier County's Master Mobility study which makes a compelling case for non-motorized modes of Transportation. Some of the many benefits of promoting walking and bicycling include:

- ✓ Improved health and wellness
- ✓ Reduced traffic congestion
- ✓ Reduced Green House Gas emissions
- ✓ Reduced energy consumption
- ✓ Improved community wellness and quality of life
- ✓ Lower infrastructure and maintenance costs
- ✓ Improved transportation options and access to community resources for all
- ✓ Benefits to local economy & businesses
- ✓ Improved livability



#### **Public Involvement Process**

This plan was developed as a collaborative effort between MPO staff, a diverse Stakeholders Working Group specially assembled for this project, and the consulting team. The planning process began in February 2012, and a Stakeholders Working Group was immediately assembled to represent a wide cross-section of stakeholder groups.



In order to ensure participation from all jurisdictions and be inclusive of the existing network of bicycle and pedestrian advocates in Collier County, the project team invited over 20 stakeholders to join the Stakeholders Working Group. The intent was to have representation from each jurisdiction in the county - unincorporated Collier County, City of Naples, City of Marco Island, and Everglades City. The project team invited both staff members with technical expertise and citizen advocates. To ensure diversity the team also invited representatives from the County's two Community Redevelopment Agencies, the School Board, the Health Department, Environmental Groups, and the MPO's existing Pathways Advisory Committee (PAC), Community Advisory Committee (CAC), Technical Advisory Committee (TAC).

In the end, 13 individuals committed to be part of the Stakeholders Working Group which became the primary avenue for soliciting public input. The Stakeholders Working Group met every month over an eight month period to discuss bicycle and pedestrian issues, and to assist the project team in developing the plan. Each meeting was duly advertised and open to the public.

The Stakeholders Working Group brought a wealth of knowledge and experience to the table, and provided direction and invaluable input in the development of this plan.

In addition to the Stakeholders Working Group, several other public involvement tools were used over the duration of the project: regular **updates on the MPO's website**, an on-line survey, several one-on one meetings with individual stakeholders, two public workshops, and presentation before the PAC, CAC, TAC and MPO Board.

The **online survey** addressed user preferences, and allowed respondents to identify trouble spots and issues of concern. This information was then tabulated, presented to the Stakeholders Working Group, and used to inform the project team in the development of this plan





The two public workshops were held in conjunction with the MPO's Long Range Transportation Plan (LRTP) workshops. The first workshop focused on providing general information about the bicycle and pedestrian process and solicited input from the public with regards to issues of concern and identification of facility needs throughout the County. The second workshop presented the draft Priority Needs for bicycle and pedestrian facilities and asked the public to comment on the needs lists and associated maps.

### **Planning Process**

At the onset of the project, the project team developed a project schedule which identified the major steps in the planning process and estimated timelines. Those steps included:

- Development of the Public Involvement Plan (Appendix A)
- 2. Review of existing planning documents, including the 2006 Pathways Plan and the 2010 Update, plans from Marco Island and Naples, the Collier County Master Mobility Plan, the local Walkable Community Plans, as well as local policy documents. Development of the plan vision and goals (Section 1).
- 3. Development of Vision Statement and Goals (Section 1).
- 4. Assessment of Existing Conditions (Section 2) inventoried and assessed existing bicycle and pedestrian facilities throughout Collier County, updated and organized the GIS database and map conditions. Also looked at the regulatory framework and existing transportation and land use characteristics.
- 5. Issues Identification (Section 3) worked with the Stakeholders Working Group,

- public and staff to identify issues of concern and examine potential remedies.
- 6. Development of Prioritized Needs Plan (Section 4) - in collaboration with the Stakeholders Working Group and building upon the 2010 Pathways Plan update, the project team developed an intuitive GIS methodology for evaluating and prioritizing all bicycle and pedestrian facility needs within the County. The process for selecting projects was also addressed, as well as proposed greenways and bicycle routes.
- 7. Development of final plan and report production of this final plan which includes the various components identified above, as well as recommended programs and policies to implement the plan and address the identified issues of concern

#### Vision Statement

Based upon the existing plan, direction from the MPO staff, identified conditions and concerns, and input from the Stakeholders Working Group the following vision was developed

To provide a safe, inviting and convenient bicycle and pedestrian network throughout Collier County that delivers mobility, economic, recreational, and quality of life benefits for all residents and visitors.

The vision statement summarizes what the MPO and Collier County communities want to accomplish in developing a comprehensive bicycle and pedestrian network, and



incorporates key components that reflect the communities' values and priorities.

#### Goals

The goals expand upon specific components of the vision statement and provide further detail about how to accomplish the stated vision. The vision and goals were used to guide this Pathways Plan and to develop the methodology used to evaluate and prioritize facility needs.

Goal 1: Provide a safe, connected, and convenient bicycle and pedestrian network in a strategic and cost-effective manner

A primary goal of this plan is to invest public dollars wisely in developing an efficient and safe bicycle and pedestrian network. This entails adopting a strategic approach to create continuous routes and convenient connections between facilities, communities, places of employment, parks, schools, medical facilities, public facilities, shopping, recreational opportunities and transit. The most effective and immediate way to improve bicycle and pedestrian safety is to provide adequate dedicated facilities. The Needs Plan presented

in Section 4 of this report was developed with this goal in mind.

# Goal 2: Enhance the safety of bicyclists and pedestrians in Collier County

As mentioned above, providing dedicated facilities is the most effective and immediate way to improve safety; however safety or perceived safety entails numerous issues beyond facilities. Roadway speed and design, the built environment, lighting, education, and awareness are also all important factors that are discussed in Section 3 of this report.

# Goal 3: Promote tourism and economic opportunities

This plan can encourage increased economic opportunity by making Collier County a bicycle/pedestrian friendly community. This will bolster tourism, and make it a more attractive place for people and businesses to relocate. Additionally, improving access and connectivity to local businesses can help the local economic activity. Lastly, a bicycle/pedestrian friendly community reaps numerous secondary economic benefits





associated with a more efficient transportation system such as: reduced infrastructure costs, reduced environmental impacts and improved community health conditions.

Goal 4: Encourage pedestrian and bicycle modes of transportation and enhance the recreational and leisure activities within Collier County

This goal acknowledges that Collier County presents ideal conditions for year-round bicycle and pedestrian activity. Excellent weather conditions, the flat terrain, and the extensive number of seasonal residents, retirees, and tourists should make cycling and walking prominent activities and significant modes of transportation within the County. For this to occur, walking and bicycling have to be a more attractive option than driving, and we must provide facilities that provide and support recreational and leisure activities.

# Goal 5: Create a network of off-road greenways within Collier County

This goal has long been part of the MPO's Pathways Plan, but little attention and resources have been dedicated to it. This plan outlines economic, social, health and environmental benefits that are associated with bicycling and walking, and makes a case for renewed effort and investment in creating a greenway network in Collier County.

Goal 6: Increase transportation efficiency and community livability through the development of an integrated multi-modal system

It has become widely accepted that all communities should strive to provide equitable and cost efficient transportation facilities that include all modes of transportation (bicycles, pedestrians, transit riders, and automobiles).

As outlined in USDOT's "Policy Statement on Bicycle and Pedestrian Accommodations & Recommendations" issued on March 15, 2010:

"The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life – transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes."

Additionally, more and more evidence points to the fact that that walking and bicycling foster safer, more livable, family-friendly, humanscaled, and aesthetically pleasing communities.

# The Metropolitan Planning Organization's Role & Responsibilities

The Collier Metropolitan Planning Organization (MPO) was established in 1982 following the Federal Highway Act that requires urbanized areas with populations over 50,000 to develop transportation plans, policies, and priorities that guide local decision making on transportation issues as a condition to receive federal capital or operating assistance.

The Collier MPO provides a continuing, cooperative and comprehensive transportation planning process that results in plans and programs for highways, mass transit, bicycle/pedestrian modes, rail systems, air transportation and other intermodal facilities. The MPO is responsible for prioritizing state

### Introduction



and federal capital improvements to address the county's travel needs as defined in the Transportation Improvement Program (TIP) and Long Range Transportation Plan (LRTP).

The Collier MPO is currently governed by the Collier MPO Board made up of nine voting members including five members from Collier County, two from the City of Naples, one from Everglades City, and one from the City of Marco Island. All MPO members are elected officials from the individual jurisdictions. The Collier MPO Board has a number of advisory committees whose members are appointed and approved by the governing Board. Each MPO Committee serves in a different advisory function. One of the MPO advisory committees is the Pathways Advisory Committee (PAC). The PAC consists of nine voting members that are appointed by the MPO Board. Each member serves for a fixed-term of two years. PAC Members may be reappointed at the end of their term.

The function of the PAC is to provide citizen input into the process of government, to work on pathway related issues within the community, to activate other volunteers, to make priority recommendations for pathway plans and program implementation, and to provide vision and recommendations to the work of the pathway program. One of the purposes stated in the PAC Bylaws is to develop a Comprehensive Pathways Plan, which is responsive to the non-motorized transportation needs of the community.

The Collier MPO is currently in the process of updating the Long Range Transportation Plan (LRTP) for the year 2035. The LRTP is federally mandated to be updated every five years. The most recently adopted Comprehensive Pathways Plan will be incorporated into the LRTP (at the time of adoption, by reference, as part of the 2035 update).





The project team examined existing bicycle and pedestrian planning initiatives within Collier County and inventoried and catalogued existing facilities in a GIS database. The following Section presents relevant findings, and illustrates the existing facilities in a series of maps and tables.

### Relationship to Other Plans

The project team reviewed numerous reports, documents, plans, codes and policies to ensure that the Comprehensive Pathway Plan is generally consistent with and complementary to local initiatives. Some of the documents reviewed included:

- Collier MPO's 2006 Comprehensive Pathways Plan
- Collier MPO's Addendum to the 2006
   Comprehensive Pathways Plan
- City of Naples Pedestrian and Bicycle Master Plan
- Marco Island Bicycle Pathway Master Plan
- Collier County Master Mobility Plan
- Transit Development Plan
- Road Safety Audits
- MPO Walkable Community Studies
- Local government Comprehensive Plans, Land Development Codes, Codes of Ordinances and Design Guidelines

As described in the Introduction, the Comprehensive Pathways Plan is meant to be a blueprint that provides general policy guidance and recommended approaches to assist the MPO and local jurisdictions with making decisions regarding project selection, funding and construction. It is also meant to assist in the development of policies and programs that are consistent with the stated vision. This plan does not supersede local plans, policies and programs. It is understood that each jurisdiction will have a different set of

circumstances, preferences, and approaches related to bicycle and pedestrian modes of transportation. However, all the documents reviewed, acknowledge the importance of non-motorized modes of transportation and many include policies and recommendations that are consistent with and fully support this Plan.

# Collier MPO's 2006 Comprehensive Pathways Plan

The MPO's Comprehensive Pathways Plan was last updated in 2006 and again in 2010 at the request of the Pac in order to revise the prioritized needs plan, to adopt a different methodology for evaluating and prioritizing needs, and to incorporate the local pathways plans from City of Marco Island and the City of Naples.

#### Local Jurisdiction Pathway Plans

The City of Marco Island and the City of Naples both worked through their own public involvement processes to develop local pathways plans and project needs lists subsequent to the adoption of the 2006 Comprehensive Pathways Plan. The PAC recognized the need to incorporate these local plans in the update to the 2006 Comprehensive Pathways Plan. It was determined that the best way to do so was to include the local plans and their adopted needs lists by referencing them in the 2010 Addendum.

The 2012 Comprehensive Plan further extends the inclusion of the needs lists from Marco Island and Naples and attaches those as Appendix B.

It is important to note however, that the Prioritized Needs Plan presented in Section 4 aims at developing a strategic, county-wide bicycle and pedestrian network. As such, it focuses on Major Roads as classified by Collier County. These Major Roads include state, county, and local collectors and arterials



eligible for federal funding. Major Roads within Marco Island, Naples, and Everglades City, were evaluated and the identified needs are included in the Prioritized Needs Plan.

This plan also recognizes that the PAC and MPO coordinate a variety of funding, and evaluate, select, and fund bicycle and pedestrian projects on local roads. As such, this plan allows needs on local roads to be included in the Prioritized Needs list at the discretion of the PAC.

#### MPO Walkable Community Studies

The MPO is developing Walkable Community Studies for several communities in the County. To date, studies have been completed for Naples Manor, Immokalee, and the Bayshore Gateway Triangle redevelopment area. These studies assess walking conditions on all roads within neighborhoods. Identified needs on Major Roads have been included within the Prioritized Needs Plan, and similar to the local pathway plans, other needs can also be considered by the PAC and included in the Prioritized Needs Plan at the PAC's discretion.

# Community Profile

Collier County is located in southwest Florida along the Gulf of Mexico. At 2,025 square miles, it is the largest county in Florida. It is home to the cities of Marco Island, Naples, and Everglades City. Immokalee, which is part of unincorporated Collier County, is also a significant urban area located 35 miles from the coast.

Collier County's landscape includes a variety of urban, suburban and rural areas; however, the vast majority of the county is federally protected or designated as state park or conservation land.

Collier County, is home to 321,520 permanent residents, and has a significant seasonal population which inflates the total peak population to 387,183 during the winter months. Its outstanding sub-tropical climate geographic diversity, and laid back culture has made it a popular destination for tourists and a wonderful home for retirees and full time residents.

| Exhibit 1                        |                      |  |  |  |  |
|----------------------------------|----------------------|--|--|--|--|
| Collier County Quick Facts       |                      |  |  |  |  |
| Land Area:                       | 2,025.5 Square Miles |  |  |  |  |
| Median Household Income *        | \$58,106             |  |  |  |  |
| Permanent Population*            |                      |  |  |  |  |
| Unincorporated Collier County    | 285,170              |  |  |  |  |
| City of Naples                   | 19,537               |  |  |  |  |
| City of Marco Island             | 16,413               |  |  |  |  |
| Everglades City                  | 400                  |  |  |  |  |
| Collier County Total             | 321,520              |  |  |  |  |
| Peak Season Population**         |                      |  |  |  |  |
| Collier County                   | 387,183              |  |  |  |  |
| Unincorporated Collier County    | 343,593              |  |  |  |  |
| 2034 Projected Permanent         | 465,783              |  |  |  |  |
| Population - Collier County**    |                      |  |  |  |  |
| 2034 Projected Peak Population - | 558,939              |  |  |  |  |
| Collier County**                 |                      |  |  |  |  |

<sup>\*2010</sup> Census

# Overview of Existing Bicycle & Pedestrian Network

Collier County has approximately 442 linear miles of Major Roads that were evaluated as part of this Comprehensive Pathways Plan. It is estimated that approximately 65% of those contain bicycle facilities in the form of bike lanes, paved shoulders or shared use paths; and that 51% contain pedestrian facilities in the form of sidewalks.

Collier County's existing bicycle and pedestrian network is a reflection of its roadway network and land development patterns. Collier County has experienced significant growth in the last

<sup>\*\*</sup> Collier County Staff Estimates Source: Collier County Website

# **Existing Conditions**



30 years, and much of the new development has occurred in large gated Planned Unit Developments or within Golden Gate Estates, which is an expansive pre-platted subdivision in a suburban/rural setting. In order to keep up with growth and land use practices, the County developed a roadway network characterized by the predominance of high volume, high speed arterials, and a "super block" configuration closely associated with suburban development patterns as opposed to the much smaller traditional city block. The existing roadway system was designed to rapidly and efficiently move motor vehicle traffic from one end of the county to the other.

As a result, the majority of the existing bicycle and pedestrian network is located on arterial and collector roadways, and in order to develop a county-wide interconnected pathways network, much of the new facilities will be planned for construction along these roadways. It should be noted however, that more mature and urbanized areas of the county such as Marco Island, Naples, and Immokalee retain a more traditional development pattern and roadway system that provides more facility options and design opportunities than the rest of the County.





# **Facility Types**

The MPO maintains an existing database of bicycle and pedestrian facilities. These facilities are broken down into four facility types: shared-use paths, paved shoulders bike lanes, and sidewalks are described below.



#### **Shared Use Paths**

"A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers and other non-motorized users." - AASHTO, Guide for the Development of Bicycle Facilities, 1999.

#### **Recommended Width**

10 ft. recommended minimum - FDOT, Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways, 2007.



#### **Paved Shoulders**

"The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use and for lateral support of sub-base, base and surface courses." - AASHTO, Guide for the Development of Bicycle Facilities, 1999.

#### **Recommended Width**

10 ft. preferred for all conditions; 8 ft. min. for roadways with heavy volume or significant truck volume; 6 ft. min. for all conditions - FDOT, Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways, 2007. AASHTO recommends a min. of 4 ft. in all conditions.



#### Bike Lanes

"A portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists." - AASHTO, Guide for the Development of Bicycle Facilities, 1999.

#### **Recommended Width**

4 ft. for roads with no curbs or gutters; 5 ft. for roads with curbs, parking or guardrails- FDOT, Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways, 2007.





#### **Sidewalks**

"The portion of a street or highway right-of-way designed for preferential or exclusive use by pedestrians." - AASHTO, Guide for the Development of Bicycle Facilities, 1999.

#### Recommended Width

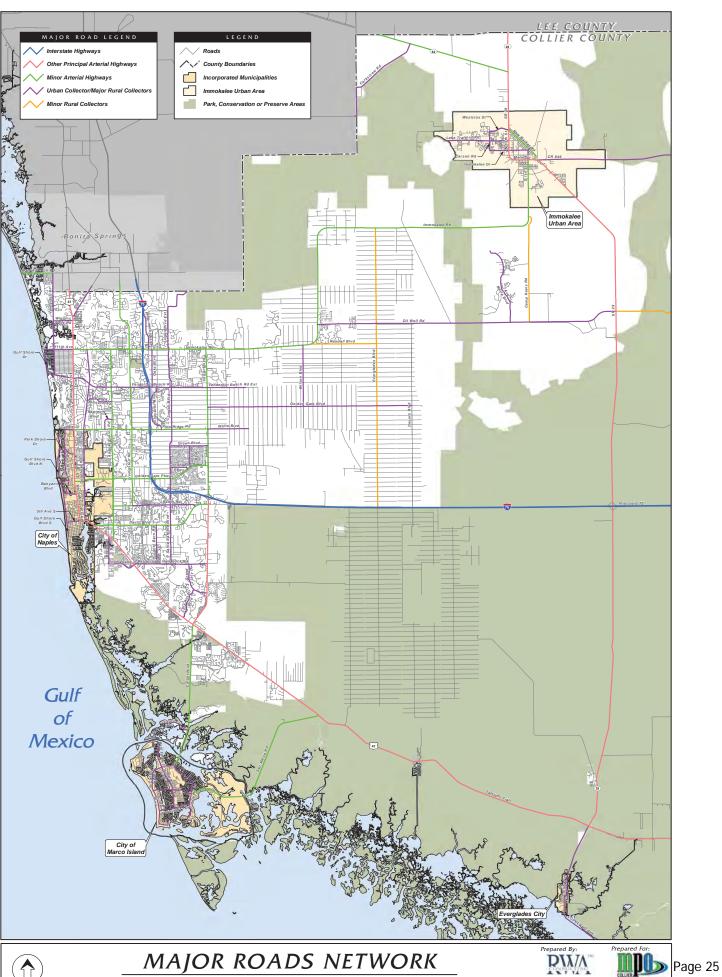
4 ft. recommended minimum; 6 ft. recommended where sidewalk is adjacent to curb - FDOT, Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways, 2007.

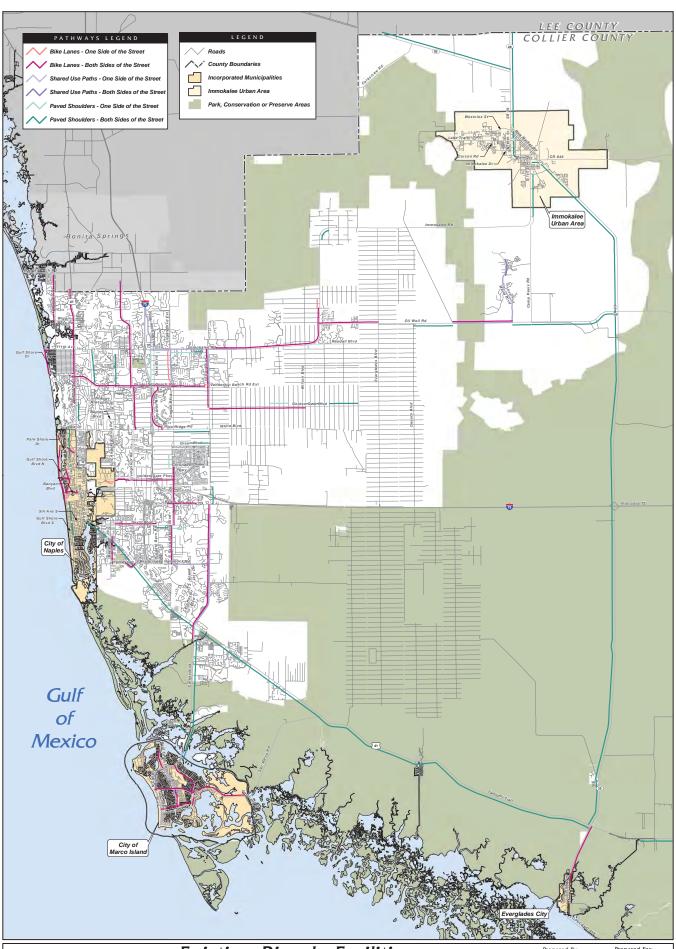
### **Existing Network**

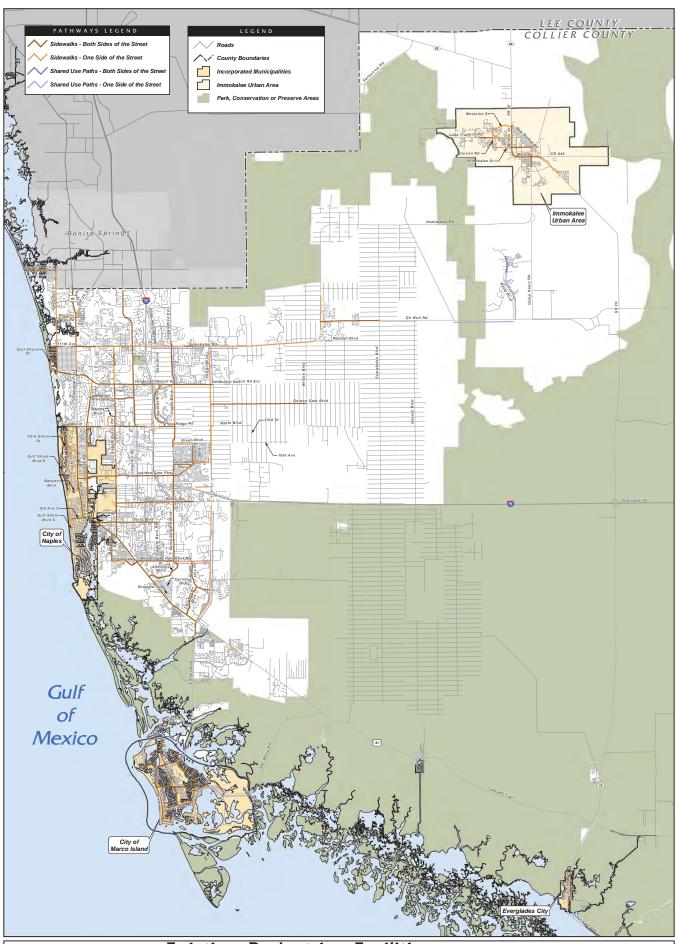
As part this update to the Comprehensive Pathways Plan, the project team worked with the MPO staff and representatives from the Stakeholders Working Group to update the existing bicycle and pedestrian database to reflect facility improvements that have been constructed since 2006. Exhibit 2 below provides a summary of existing facilities in a tabular format, while the following maps depict the Major Road network in Collier County (Exhibit 3) and the bicycle and pedestrian facilities (Exhibits 4 & 5) that are currently on the ground. It should be noted that shared use paths are identified on both the bicycle facilities map and the pedestrian facilities map since they service both user groups.

| Exhibit 2            |                                   |                            |                       |                                |                   |                                |                                               |                                           |
|----------------------|-----------------------------------|----------------------------|-----------------------|--------------------------------|-------------------|--------------------------------|-----------------------------------------------|-------------------------------------------|
|                      |                                   | Bicycle Facilities         |                       | Pedestrian<br>Facilities       |                   |                                |                                               |                                           |
| Jurisdiction         | Major<br>Road<br>Network<br>Miles | Paved<br>Shoulder<br>Miles | Bike<br>Lane<br>Miles | Shared<br>Use<br>Path<br>Miles | Sidewalk<br>Miles | Shared<br>Use<br>Path<br>Miles | % of Major<br>Roads w/<br>Bike<br>Facilities* | % of Major<br>Roads w/ Ped<br>Facilities* |
| Unincorp.<br>Collier | 396.09                            | 152.38                     | 76.56                 | 24.87                          | 154.14            | 24.87                          | 64.08%                                        | 38.91%                                    |
| Naples               | 24.02                             | 3.94                       | 6.65                  | 0.00                           | 21.39             | 0.00                           | 44.09%                                        | 89.05%                                    |
| Marco Island         | 19.16                             | 0.21                       | 11.00                 | 6.78                           | 16.22             | 6.78                           | 93.89%                                        | 84.66%                                    |
| Everglades           |                                   |                            |                       |                                |                   |                                | ·                                             |                                           |
| City                 | 2.25                              | 0.00                       | 0.39                  | 0.00                           | 0.91              | 0.00                           | 17.33%                                        | 40.44%                                    |
| Total Collier        | 441.52                            | 156.53                     | 94.6                  | 31.65                          | 192.66            | 31.65                          | 64.05%                                        | 43.64%                                    |

<sup>\*</sup> to avoid double counting and overinflating percentage figures, Shared Use Paths have only been counted as bicycle facilities











The following section examines the most significant bicycle and pedestrian issues identified by the public, the Stakeholders Working Group and the project team. Each issue is described followed by the recommended approaches or strategies to address them.

### Safety

By far, the number one concern voiced during the development of this plan was safety. Florida has the dubious distinction of being the most dangerous state for bicyclists and pedestrians in the country according to the National Highway Traffic Safety Administration's National Center for Statistics and Analysis. However, the picture is not so bleak for Collier County. According to Transportation for America, which publishes the annual Dangerous by Design reports, Florida has a pedestrian fatality rate of 3.0 deaths per 100,000 residents while Collier County has a fatality rate of 1.8.1 This rate places Collier County in the lower third of Florida counties for fatality rates.

#### **Bicycle and Pedestrian Safety Facts:**

- Minorities and the elderly are disproportion victims of pedestrian fatalities<sup>2</sup>
- 60% of fatalities occur on roads with speed limits of 40 mph or greater<sup>3</sup>
- While California's population is approximately twice that of Florida's, in 2008 Florida had more fatal bicycle crashes
- Nationwide, 52% of pedestrian fatalities occurred on collector and arterials

Exhibit 6: Collier County Injuries and Fatalities: 2006-2010

| Year  | Reported<br>Pedestrian<br>Crashes | Pedestrian<br>Injuries | Pedestrian<br>Fatalities |  |
|-------|-----------------------------------|------------------------|--------------------------|--|
| 2006  | 106                               | 100                    | 6                        |  |
| 2007  | 120                               | 113                    | 7                        |  |
| 2008  | 115                               | 101                    | 4                        |  |
| 2009  | 92                                | 87                     | 5                        |  |
| 2010  | 82                                | 76                     | 6                        |  |
| 2006- | 515                               | 477                    | 28                       |  |
| 2010  | 313                               | 4//                    | 20                       |  |

| Year  | Reported Bicyclist<br>Crashes | Bicyclist<br>Injuries | Bicyclist<br>Fatalities |  |
|-------|-------------------------------|-----------------------|-------------------------|--|
| 2006  | 76                            | 73                    | 3                       |  |
| 2007  | 120                           | 117                   | 3                       |  |
| 2008  | 95                            | 91                    | 4                       |  |
| 2009  | 73                            | 72                    | 1                       |  |
| 2010  | 91                            | 90                    | 1                       |  |
| 2006- | 455                           | 443                   | 12                      |  |
| 2010  | 433                           | 443                   | 12                      |  |

| Year  | Reported Bicyclist<br>& Pedestrian<br>Crashes | Bicyclist &<br>Pedestrian<br>Injuries | Bicyclist<br>Pedestrian<br>Fatalities |  |
|-------|-----------------------------------------------|---------------------------------------|---------------------------------------|--|
| 2006  | 182                                           | 173                                   | 9                                     |  |
| 2007  | 240                                           | 230                                   | 10                                    |  |
| 2008  | 210                                           | 192                                   | 8                                     |  |
| 2009  | 165                                           | 159                                   | 6                                     |  |
| 2010  | 173                                           | 166                                   | 7                                     |  |
| 2006- | 970                                           | 920                                   | 40                                    |  |
| 2010  | 570                                           | 320                                   |                                       |  |

<sup>&</sup>lt;sup>1</sup> Dangerous by Design 2011; Florida

<sup>&</sup>lt;sup>2</sup> Florida Safety Facts 2010; Florida Highway safety and Motor Vehicles

<sup>&</sup>lt;sup>3</sup> Dangerous by Design 2011



# Existing Roadway Network - High Volume, High Speed

In assessing safety issues in Collier County it is important to analyze the crash and fatality data; examine roadway and intersection design and conditions; and evaluate user behavior and perceptions. Unlike many other communities, the recent crash data for Collier County, does not point to distinct high injury/fatality clusters or corridors. One exception to this is Main Street (SR 29) going through downtown Immokalee. As such, it is important to assess county-wide conditions and recognize that expressed safety concerns are also a function of a user's comfort level and perceived safety.

As described previously most of the streets within Collier County were developed to support suburban development patterns with the majority of trips being made on the arterial system. Those roads are designed to allow vehicles to move quickly, with little delay, and at fast travel speeds.

Four and six-lane cross-sections combined with multiple dedicated turn lanes create very large intersections where pedestrians and bicyclists are not comfortable crossing.

Access management is an important treatment to reduce the potential for conflicting movements, and can enhance vehicle safety. The down side is that highly controlled access also allows drivers to feel more comfortable driving faster due to the reduced points of vehicle access to the corridor.

These high speed roads create an uncomfortable and less safe environment for bicyclists and pedestrians. The net result is that people will not walk unless they have no other choice, and if bicyclists

are present, they often utilize the sidewalks due to a lack of bike lanes or discomfort with the high speeds on the roadway.

# Access & Transportation Mode Parity

Every trip begins and ends with a pedestrian. Therefore, walking (and bicycling to a lesser extent) forms the basis to our entire transportation system. However, walking and bicycling modes are often afterthoughts in transportation planning and funding. Striving for mode parity and providing appropriate pedestrian and bicycle modes should be primary goals of the MPO and local governments. A transportation system is only as successful as one's ability to access the system whether by foot, bicycle, or wheelchair. It only takes one missing ramp to make the connection inaccessible to people with disabilities, or one missing sidewalk to prevent an elderly person from reaching the nearest transit stop. Providing a bicycle and pedestrian network that is accessible to all users and all communities within Collier County is essential. An important component of an effective network is linking population centers and providing bicycle and pedestrian access to public transit.

# Connectivity & Continuity

An effective bicycle and pedestrian network should interconnect communities, shopping centers, employment hubs, parks, recreational areas, schools, hospitals, civic centers, government building, and major entertainment areas.

Unfortunately, the existing development pattern and inherited roadway network, leaves a significant portion of Collier



County with significant gaps in the bicycle and pedestrian network and substantial challenges and barriers to retrofitting those conditions.

While there are significant pedestrian and bicycle facilities throughout Collier County, the overall network remains fragmented, and inconsistent. Facility gaps often discourage individuals from biking or walking. These gaps create unsafe conditions and conflicts with motorists. In addition to actual gaps in a network, the perception of gaps can be a significant deterrent for many individuals considering biking or walking to a given destination.

#### Link to Transit

Providing pedestrian and bicycle access to transit is essential. Simply put, providing inadequate facilities to the bus will either discourage people from using transit or force them to get into dangerous situations to get to the bus. Currently, Collier County has several major arterials with bus routes where bus stops are located on both sides of the road, but a sidewalk is only provided on one side. Additionally, some bus stops are located midblock without a crosswalk to allow users to safely get from one side to the other.



### Facility Type and Diversity

There are numerous types of bicyclist and pedestrian users with varying preferences and levels of ability including, commuters, school children, recreational users, and avid cyclist. A comprehensive and effective bicycle and pedestrian network should provide a variety of facility options. It is also widely accepted that providing a variety of facility types can also influence the number of people who choose to walk or bike. Providing a diversity of facilities is a way to be responsive to a variety of user groups and increase their walking and cycling comfort and perceived safety.

For example many recreational users prefer riding on multi-use pathways; however, commuters and fitness riders prefer riding on the road. These riders are experienced cyclists and are comfortable sharing the road with motor vehicles. For them, designated bike lanes and paved shoulders are ideal. Likewise, right-of-way, engineering, and financial constraints may warrant different facilities in different circumstances.

Consequently, an effective network should provide numerous options so that the most appropriate facility type can be selected for the given situation.

# Facility Design

Many of the comments received about safety were associated with specific intersections and the design of existing bicycle and pedestrian facilities. Existing facilities in Collier County are not always consistently designed and constructed. Design standards vary from community to community and some of the standards currently utilized may not be consistent



with today's best practices. Additionally, many existing facilities may not meet Americans with Disabilities Act (ADA) standards.

It also important to note that most facilities are 'bare-bones' in that they do not provide ancillary amenities such as dedicated lighting, shade structures, benches, rest areas, bicycle parking, signage and wayfinding. High quality facilities that provide excellent amenities will significantly improve a user's experience and will encourage greater use of those facilities.



# Development & Land Planning Practices

The project team, as well as many individuals from the public, recognizes that historical development patterns and planning practices in Collier County have shaped the existing bicycle and pedestrian network and pose challenges in developing an interconnected network and promoting walkable and bikeable communities.

Very large gated developments restrict access and do not provide any crossthrough public right-of-way for motor vehicles, pedestrians or bicyclist. This epitomizes the challenging land development practices in Collier County.

As a result of these practices, in most of the county, we are left with "superblocks" served by an extensive arterial system that interconnects at approximately 2 mile intervals. This often dissuades people from walking or bicycling and leads to most children being driven to school and adults relying on the automobile even for basic errands.

# Promoting Livable Communities & Increasing the Number of Bicyclists and Pedestrians

A general comment heard over and over is the need to make Collier County a more "livable community" and a friendlier place to walk and bike. This sentiment is also echoed in numerous local planning documents such as Collier County's recently completed Master Mobility Plan.

While tackling this issue will require significant changes to existing conditions and current planning and transportation practices, Collier County has two communities - Naples and Marco Island - that provide excellent examples of what is needed to promote walking and biking and enhance livability.





Walkability guru, Dan Burden, has identified downtown Naples with its traditional development patterns as one the County's most walkable communities. Marco Island is a great example of a predominantly suburban community that promotes slower vehicle speeds and provides extensive bicycle and pedestrian facilities. This has led to significant bicycle and pedestrian activity throughout this island community, greater social interaction and enhanced livability.





#### Recommendations

The following approaches, strategies programs and initiatives provide ways to address the identified bicycle and pedestrian issues and concern. Some of these recommendations can be implemented immediately while others are presented as "best practices" and provide options to consider should funding be available and conditions feasible.

# Construct New Bicycle and Pedestrian Facilities

The most efficient and immediate way to improve bicycle and pedestrian safety and promote modal shifts is to build more facilities. While Collier County currently has a significant amount of sidewalks, bike lanes, paved shoulders and shared use paths, there are significant gaps in the network and serious retrofit challenges.

Providing basic facilities on the identified network should be the number one priority. Strategically improving the bicycle and pedestrian network can improve access, connectivity and continuity, improve safety, support transit, and provide more options for users.

Section 4 of this report outlines a detailed Needs Plan for Collier County, and proposes facility priorities. The proposed needs plan is a continuation of ongoing efforts by the MPO and its member communities to identify, evaluate, select, and fund feasible bicycle and pedestrian projects.

# Adopt a Bicycle and Pedestrian Accommodation Policy

The MPO has a well-established process for selecting, funding and building bicycle and pedestrian facilities. This process is effective and has been carefully fine-tuned by staff, the PAC, and the MPO Board over the years.

The MPO's bicycle and pedestrian program is predominantly focused on facility projects; however, there are significant opportunities in developing policies and programs to support and further the goals of this plan.

In order to develop a true multi-modal transportation system that fully accommodates walking and bicycling, the MPO and local member jurisdiction should provide clear policy direction that recognizes the importance and benefits of non-motorized modes of travel, and directs their staffs to put all modes on equal footing.

It is recommended that the MPO adopt policies for the accommodation of bicycle, pedestrian, and transit facilities when planning and designing roadway projects during new road construction, reconstruction, resurfacing, and traffic operations/intersection improvements.



These policies should be consistent with USDOT's "Policy Statement on Bicycle and Pedestrian Accommodations & Recommendations," and should make sure that all new road projects consider the needs of all those who use the transportation system.

Support from local policy makers is essential in changing how local roads are planned, designed, and funded. The MPO Board and local elected officials are the ones that ultimately decide if regulations, programs, and funding for bicycle and pedestrian facilities will change or remain the same.

Many of the recommendations found below will require policy support to move beyond planning and into implementation.

# Encourage Local Jurisdictions to Adopt Complete Streets Policies

Complete Streets are designed with consideration to all users; not just vehicular travel. It is understood that the application might differ from jurisdiction to jurisdiction and even from project to project, but having established complete streets policies will ensure that all modes are considered in the design process.

# Evaluate Existing Street Design and Safety Enhancement Opportunities

Improving safety cannot be solely addressed by providing new facilities. Bicycle and pedestrian crashes, conflicts, and unsafe conditions occur on existing facilities and can be caused by a number of reasons including poor facility design, bad

surface conditions, dirt and debris, insufficient lighting, inadequate signage and signalization, or lack of medians or refuge islands.

Some of these problems are localized and can be addressed with relatively low costs or effort. Sometimes simple re-striping, maintenance, sweeping, or minor physical retrofits can address the issue. Other issues, such as roadway design, are much more problematic, and require a concerted study and significant expense to remedy the problem.

As such, it is recommended that the MPO and local jurisdictions evaluate current roadway designs and consider opportunities for implementing certain safety enhancements.

Solutions such as medians, mid-block crosswalks, reduction of access points and turning movements, and refuge islands could be applied.

#### Crossings

Crossings have the greatest potential for hazards, for they are where pedestrians, cyclists, and vehicles have ownership of the same space.

All crossings should be provided with ADA accessible slopes, ramp widths and tactile surface treatments so visually impaired pedestrians are directed properly. Tactile or contrasting pavement also signals to the driver that they should slow down and be aware of pedestrian activity.



#### Medians and Refuge Islands

Medians provide refuge for pedestrian and cyclist, control vehicular movements and help make the overall roadway feel smaller. When trees are planted in the median to provide a canopy over the roadway, the visual quality of the corridor is significantly increased and the "sense of enclosure" provided to the motorist can help slow travel speeds. They are an important source of refuge for pedestrians (between opposing travel lanes) and for vehicles waiting to turn left. They have been proven to significantly reduce crashes when compared with undivided four or more lane roadways.

They can also add civic character and beauty to a community by providing places for trees, landscaping, and hardscape treatments, such as art work or statues. The medians provide three functions: calm traffic; beautify and shade the street; and provide drainage.

#### **Textured Crosswalks**

Textured crosswalks are beneficial in a number of ways. In addition to visually reminding a driver to slow down, a slight rumble and vibration also occurs. Textured crosswalks can be made of brick/concrete pavers, or pigmented concrete/asphalt and patterned to beautify the street.



#### Signalization

Crossing of major intersections are facilitated by signals. Signals are important to allow the sharing of the limited time each intersection has to move vehicles and pedestrians through it while avoiding conflict between movements. It is important that signal timing be managed to avoid unnecessary delays since cyclists and pedestrians will often cross outside of the proper phase if they feel they are waiting too long. Bicycle-activated detection measures are one solution that could be considered.

#### **Traffic Calming**

Traffic calming includes an array of engineering techniques to physically alter road design with the purpose of slowing down traffic and improving safety conditions. Some of these techniques include bulb-outs, elevated cross-walks, chicanes, and traffic circles.



#### **Road Diets**

This transportation planning technique involves the reduction of lanes or effective width of a roadway to slow down traffic. This technique is often paired with adding on-road parking to the roadway.



### Take Advantage of Regularly-Scheduled Maintenance

The conversion of paved shoulders into bike lanes, the restriping of wide curb lanes to provide a shoulder or bike lane, and re-striping bike lanes at intersections to address "key hole" issues are some of the improvements that can be addressed through any road improvement project, including the regular resurfacing of roadways. Resurfacing occurs according to a planned schedule, which provides jurisdictions with the ability and opportunity to assess and implement bicycle and pedestrian enhancements as part of this process. The MPO and local governments should adopt procedures or mechanism such as simple checklists to ensure that streets scheduled for resurfacing are reviewed to determine if other improvements, such as bicycle pedestrian improvements, ADA improvements, and safety enhancements can also be incorporated.

## Consider Strategic Network Quality Improvements

It is understood that building facilities and developing a county-wide bicycle and pedestrian network is the number one priority but strategically improving network quality should also be a considered when making funding decisions.

Network quality is related to "user experience," which is nebulous and can be challenging to define. Part of the challenge is that there are numerous types of bicycle and pedestrian users with varying levels of abilities and needs. However, best practices around the country, demonstrate that improving the user experience will increase bicycle and pedestrian activity.

The MPO should consider developing strategic demonstration projects that incorporate certain enhanced design features described below.



#### **Amenities**

Amenities such as seating, rest areas pedestrian-scaled lighting and bike parking can significantly affect a person walking and cycling experience. These features can encourage and support walking and biking as well as provide community, economic and quality of life benefits. Given the importance of tourism to this area, and an expressed desire to protect and enhance the quality of life, creating well-amenitized facilities can enhance recreational activities, enhance entertainment centers and strengthen Collier County's image as an outstanding place to visit and live.





Source: pedbikeimages.org

#### Wayfinding & Signage

Wayfinding and signage are effective ways to improve user experience, but can also help brand a bicycle and pedestrian network, and entice economic activity along routes. Wayfinding and directional signs provide information and direction to guide cyclists and pedestrian safely and efficiently along routes. Wayfinding signs, such as a pedestrian directory, can provide landmark names and directional arrows that indicate the direction of travel to particular point of interest.

#### Landscaping

If properly planned and provided, street trees can serve three purposes: beautification, protection, and shelter. Trees between a sidewalk/share use path and the roadway help protect pedestrian and cyclists from passing cars. Using this technique, users will not feel as vulnerable to speeding vehicles and large trucks. On narrower roads, the trees will naturally slow down drivers. The trees create a feeling of enclosure, and drivers become

more alert of pedestrians and cyclists and what occurs on the sides of the street.

Shade trees, such as the live oak, offer ample shade where used properly. In some areas, shade trees are provided but are planted too far from the sidewalk to offer any shading. Shade trees should be placed so that a tree's canopy covers the sidewalk. Trees may be used on both sides of the sidewalk or multi-use path in appropriate areas such as residential areas and at non-retail frontages.

Care needs to be taken in the planting of shade trees so as to not diminish the visibility of the sidewalk/multi-use path from natural surveillance. Additionally, Crime Prevention Through Environmental Design (CPTED) principles would be utilized when developing landscaping plans to ensure security.



Source: pedbikeimages.org

### **Encourage Facility Diversity**

The Needs Plan presented in Section 4 of this document, focuses on the provision of sidewalks, bike lanes, paved shoulders, and shared-use paths. However, there are many other types of facilities that could be used within different areas of the County.



For example, this plan does recommend the use of Share the Road signs and "sharrows" on Fifth Avenue in Naples. The plan also calls for the development of bike routes which would utilize existing facilities and rely on signage and wayfinding.

Urban areas such as Naples, with greater densities and intensities, and established roadway grids, lend themselves to a greater variety of facilities. It is highly recommended that local communities consider all facility types when planning and building bicycle and pedestrian facilities within their jurisdictions. Also, as the successful implementation of this Pathways Plan occurs, this plan can be revised to include more types of facilities within the network.

Innovative bicycle and pedestrian facilities such as pedestrian malls, bicycle boulevards, and buffered bike lanes are some of the many options available. Given the predominance of high speed, high volume roads in the county, buffered or physically separated bike lanes might be a good way to improve user comfort and perceived safety.

Facility types are diverse and serve different functions and set of circumstances. There are numerous sources that describe and define these facilities in detail. Some of the best resources include:

- AASHTO guidelines (Guide for the development of Bicycle Facilities & Policy on Geometric Design of Highways and Streets
- The Manual on Uniform Traffic Control Devices (MUTCD),

CASE STUDY: INNOVATIVE BIKE FACILITY
Bayshore Drive Painted Bike Lanes
Naples, Florida



A recent improvement project funded by the Bayshore Beautification Municipal Service Taxing Unit (MSTU) provided green painted bike lanes on a 1.4 mile stretch of Bayshore Drive in East Naples from U.S. 41 East to Thomasson Drive. With the completion of this project, the Bayshore Community joins a select few cities in Florida in providing colorful bike lanes to improve safety for cyclists and pedestrians. An estimated 120 cyclists travel along Bayshore Drive daily, including employees who commute to work, children who cycle to school and others who cycle for recreational purposes. Adding the green colored lanes will improve cyclists' visibility for motorists.

Many local jurisdictions will be monitoring the Bayshore project and its effect on safety for potential use elsewhere in the future. The MSTU paid \$90,000 for the project with local taxes set aside for beautification improvements, which includes bicycle and pedestrian improvements.

<sup>&</sup>lt;sup>4</sup> Sharrows are shared-lane marking placed in the center of a travel lane to indicate that a bicyclist may use the full lane.



 FDOT's Greenbook, including the Florida Bicycle Facilities Planning and design Handbook and the Florida Pedestrian Facilities Planning and

Design Handbook.

- www.walkinginfo.org
- www.pedbikeinfo.org
- www.saferoutesinfo.org

## Establish a Greenways and Trails Program

Perceived safety concerns and user comfort are significant issues associated with the existing bicycle and pedestrian network in Collier County. Providing select off-road facilities would be an excellent way to address this expressed concern and provide greater facility diversity.

According to FDOT's Conserve by Bicycle Program Study, about 75% of bicycle trips in Florida are recreational. Additionally, this study explains that shared use paths in a separate right-of-way (greenways) are perceived to be the safest and most comfortable facilities and will encourage greater bicycle trips than any other facility.



The Comprehensive Pathways Plan has always included a greenways component, but given the significant needs and limit resources, these facilities have not received much attention.

The MPO and local jurisdictions should explore the establishment of a separate program for greenways and trails. This program would provide focused attention to those facilities and be responsible for identifying specialized funding. This program should also be closely linked to Parks and Recreation departments, and existing public and private efforts to develop greenways such as the River of Grass Greenway.

### Implement Education, Encouragement & Enforcement Strategies, Campaigns & Programs

A reoccurring theme to most safety comments by the public was the need to educate drivers and bicyclists alike. Many believe that bicycle and pedestrian safety education programs and campaigns are greatly needed in Collier County.

Education, encouragement and enforcement programs not only improve safety but can also be key to increasing mode share for walking and bicycling, and build support for bicycle and pedestrian continued investment. Such programs require the involvement of local governments and agencies, law enforcement, private entities, non-profit organizations and a strong volunteer base.



#### Education

Education has to occur on several levels.

- Educating cyclists, pedestrians, motorists and law enforcement personnel about, laws and regulations, as well as best practices associated with responsibly sharing the road.
- Educating the public about the benefits of walking and cycling, including health, traffic, environmental, social, economic and livability benefits.
- Educating government and agency staff about ongoing efforts, existing programs and resources available.

Education efforts should cast a wide net and utilize a wide variety of mediums and forums to target different audiences. Examples include: public presentations, training classes, safety campaigns in the media, curriculum content within schools and driver education classes, and dissemination of information through websites, public access television, and printed documents.



Bicycle and Pedestrian Safety and Education Program Tucson. AZ



Bus shelter safety signs and HAWK pedestrian crossing lights

This project was developed to improve safety for pedestrians and bicyclists. The Federal Highway Administration (FHWA) estimates that less than \$1.00 per year per student is currently spent teaching children safe traffic skills, and virtually no federal funds are spent on adult pedestrian and bicycle safety classes.

The goals of the Pima County-Tucson Bicycle and Pedestrian Safety and Education Program are to reduce roadway crashes and injuries among pedestrians and bicyclists, increase awareness of the responsibilities of pedestrians, bicyclists and motorists, and promote tolerance among all roadway users.

The two largest components of this program were public outreach and safety training.

The program incorporated many tools including:

- Radio and television Public Service Announcements promoting pedestrian and bicyclist safety
- Educational videos
- Student safety classes
- Traffic safety guides and maps
- Free cycling safety classes for the public\
- Bicycle light kits and helmets

The main message of the various promotions was to promote an overall "share the road" ethic within the community.

The program was funded through a \$454, 000 federal transportation enhancement grant, \$105,000 in Pima County funds, and \$29,000 in City of Tucson funds. The Pima County DOT secured funding to extend the program and plans to seek further funding to continue the program.

In Collier innovation crossings are being utilized on Marco Island, Immokalee and along Bayshore Drive.

Source: Pedestrian and Bicycle Information Center http://www.pedbikeinfo.org/



#### Encouragement

Encouraging people to bike and walk is about creating mode shifts and promoting healthier and more sustainable lifestyles. Education is a significant aspect of encouraging bicycle and pedestrian activity, but encouragement goes beyond education by establishing programs, events, campaigns, and regulations that enable or promote biking and walking.

#### Encouragement is about:

- Providing adequate infrastructure and an enjoyable user experience to encourage greater use
- Developing a variety of programs that encourage biking and walking, including programs that encourage:
  - o the use of transit
  - bicycling and walking through organized events, and
  - children to walk and bike to school
- Developing policies and programs that promote walking and biking through:
  - facility, roadway, and urban design
  - guidelines regarding where to locate schools and how to design school campuses
  - directives regarding the acquisition and design of parks, recreation areas, and conservations land
  - land development regulations promoting Complete Streets, and livable communities
- Marketing and promotion of existing facilities, plans and programs

#### Enforcement

Motorist and cyclist must share the road and must obey a set of rules and regulations. Using enforcement as an education tool and as a means to correct dangerous behavior can significantly improve safety conditions on roadways.

Unfortunately, many people, including police officers are not fully aware of the laws that govern bicyclists and pedestrians. Therefore, the priority should be on partnering with law enforcement entities to develop bicycle and pedestrian programs focused on education and awareness building.



# Promote & Facilitate the Design of Livable & Walkable Communities

Land use and transportation are inexorably linked. Trying to improve bicycle and pedestrian conditions in isolation is a challenging endeavor. A key component to making communities more livable is to plan and design communities that are human-scaled and walkable. This means designing roads for all users including bicyclists and pedestrians and also children and the



elderly. Local governments should examine their current policies, land development regulations and design guidelines to remove impediments and promote the following concepts.

## Encourage Mixed Use Developments and Urban Design Elements

Through the proper mix of uses; the design and orientation of buildings to the street; and design of streets and pathways, more people tend to be "out and about" during all times of the day. The mix of uses allows for shorter trip distances, which encourages walking and bicycling. Utilizing these elements results in a built environment that promotes more "eyes on the street" and "natural surveillance." This increases safety, discourages crime, and, thereby further increases the attractiveness of walking, bicycling, and using transit.

#### Public Realm Improvements

The pedestrian experience is almost as important as the actual distance traveled. The public realm is the area between building facades on each side of the street, including the street, sidewalk and landscaped areas. Improvements to the public realm can have dramatic effects on walking and cycling. Creating facilities that pedestrians feel safe and comfortable walking along is essential. Street trees and building features such as awnings, display windows, and arcades to provide protection from the elements will extend the reasonable pedestrian shed. Placing buildings at the back of sidewalk improves access and convenience for the pedestrian. The pedestrian experience can be further enhanced by providing complementary uses and amenities such as restaurants, shops, public artwork, and benches.



#### Pedestrian Shed

Research shows that trip distance is the most important factor affecting our choice to walk. People will generally walk between a quarter-mile to a half mile (called the pedestrian shed) to routine destinations such as shopping or transit. These distances take approximately five to ten minutes for the average person to walk. Locating key attractions within the pedestrian shed of higher density residential areas will increase the number of pedestrians and cyclists.

## Shorten Block Lengths, Increase Interconnectivity and Limit Cul-de-Sacs

Great communities have a diversity of street types serving different users and community needs. They should vary in size and scale and should terminate at an intersection with other streets, creating a dense network of transportation routes. A gridded street system, with high interconnectivity is ideal for increasing route options and improving convenience. It reduces the need for four and six-lane highways, which reduces vehicle speeds and increases safety for pedestrians and cyclists. For block size to be supportive to pedestrians and therefore supportive to all modes of travel, block perimeters should be limited to an average perimeter of approximately 1,320 feet. Cul-de-sacs should be used very sparingly such as when some physical barrier prohibits connecting into the network. Maximum cul-de-sac lengths should be provided in development regulations and pedestrian access should be encouraged when cul-de-sacs back up to each other.

## CASE STUDY: Traffic Calming & Redesigning Neighborhoods Sacramento, CA



Planted Diverters

#### **Problem**

The City of Sacramento lacked a cohesive guide explaining the advantages and disadvantages of various traffic calming treatments that could potentially improve pedestrian safety. **Solution** 

The final 70-page Traffic Calming Guidelines publication not only specifies a toolbox of traffic calming measures, but also defines the process to follow for retrofitting existing neighborhoods, the probable results of the measures, and standard designs for the implementation of traffic calming measures. It lists advantages and disadvantages to various treatments and provides illustrative pictures, estimated costs, and impacts. The Guidelines toolkit is a key element in the education and communication between planners and residents. Once these changes are made, such as enforcement and educational components, an evaluation period takes place.

At this point in the process the City staff present a report to the neighborhood, and if necessary, further measures are considered. Partners included the Planning and Fire departments, the City School District, Walk Sacramento, Sacramento Area Bicycle Advocates, and Dan Burden's Walkable Communities. Funding was provided through a combined effort of the City of Sacramento, the State of California Office of Traffic Safety, the Business, Transportation, and Housing Agency, and the Federal Highway Administration. The total cost for the development of the guidebook was approximately \$27,000.

#### Results

The City of Sacramento adopted the Guidelines to assist the public, city staff, consultants, and developers in creating a safer environment for pedestrians by identifying traffic calming devices and steps for implementation. Speeds were reduced in local neighborhoods, and new neighborhoods were designed from the start to promote reduced speeds.

Source: Pedestrian and Bicycle Information Center http://www.pedbikeinfo.org/



#### Design Streets for Lower Speeds

Lower speeds not only increase actual safety for pedestrians and cyclists, but also increase the perception of safety. Collier County and its municipalities should develop regulations that allow design features to reduce vehicle speeds. There are numerous design treatments that can reduce speeds on roadways, including:

- Reducing lane widths
- Providing on-street parking
- Incorporating street calming features including raised crosswalks, speed tables, bulb-outs, and chokers at intersections
- Utilize traffic circles
- Provide textured crosswalks







The following section presents bicycle and pedestrian facility needs for Collier County. It includes the Prioritized Needs Plan that identifies and prioritizes bicycle and pedestrian needs on the identified Major Roads network, and also identifies greenway and bike route needs.

#### Prioritized Needs Plan

The project team worked closely with the MPO staff and the Stakeholders Working Group to develop the following Prioritized Needs Plan. The Prioritized Needs Plan is a tool that can be used by the PAC, staff, the MPO, and member jurisdictions to help them identify, evaluate, and select potential bicycle and pedestrian projects. It forms the first step in the project selection process and provides general guidance to the PAC, which is responsible for identifying specific facility projects and their parameters, evaluating the unique conditions associated with each project, assessing the development feasibility, selecting, and ranking projects for funding and eventual

Developing the Prioritized Needs Plan entailed the following process:

- Defining the Bicycle and Pedestrian Network (see Existing Conditions section)
- 2. Updating the Bicycle and Pedestrian Existing Facilities Inventory (see Existing Conditions section)
- 3. Identifying, Mapping and Cataloguing all Bicycle and Pedestrian Needs
- 4. Evaluating Needs

construction.

5. Prioritizing Needs and Identify Estimated Construction Costs

#### **Needs Identification**

As described in the Existing Conditions section of this report, the project team defined the bicycle and pedestrian network and updated the MPO's facilities inventory to correct discrepancies and reflect facility construction that occurred after 2006. Once identified, existing facilities were classified according to facility type (see page 17) and entered into a GIS database. Based on this data, gaps in the network were identified, classified as bicycle or pedestrian needs and mapped accordingly. See Exhibits 7 and 8, which illustrate all bicycle and pedestrian needs respectively. The maps distinguish between needs on one side of the road versus both sides. Also, when existing facilities were severely segmented of "broken", these segments were treated as if there were no facilities, and identified as needs.

#### **Needs Evaluation**

An important component of the Prioritized Needs Plan is evaluating each need according to a standard methodology in order to assess its relative importance in helping meet plan goals and address network deficiencies.



The project team built upon the GIS methodology developed by staff and the PAC, and presented in the 2010 Addendum to the 2006 Comprehensive Pathways Plan. The project team and Stakeholders Working Group used the identified goals, issues, and concerns to select criteria to evaluate each facility need. Over 20 criteria were discussed, considered, and eventually whittled down to the following ten that are presented in order of importance as ranked by the Stakeholders Working Group:

- 1. Safety
- 2. Proximity to Schools
- 3. Proximity to Transit
- 4. Proximity to Health Care and Public Facilities
- 5. Proximity to Activity, Commercial, Employment, Tourism Center
- 6. Connectivity/Missing Links
- 7. Population Density
- 8. Significant Corridor
- 9. Continuous Bike Route
- 10. High Transit Reliance Areas

All ten criteria were used to evaluate the bicycle needs. However, pedestrian needs were evaluated according to all the criteria except Continuous Bike Routes which do not apply to pedestrian facilities.

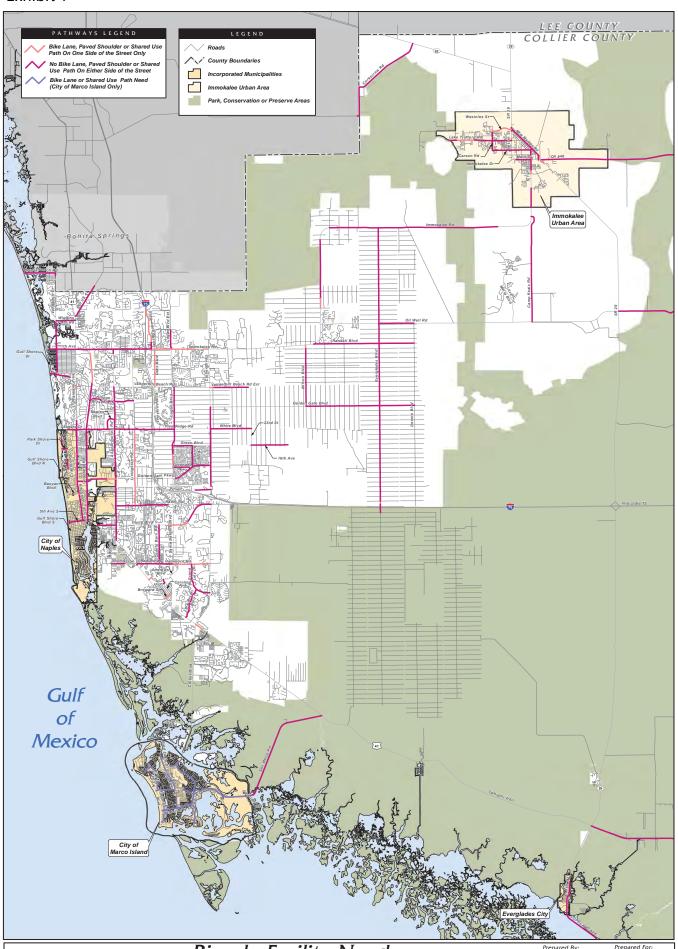
Exhibit 9 presents the 10 criteria, how each criteria was measured, the significance of that criteria, and the relative weight it was given. Appendix B presents the Stakeholders Working Group's ranking of the criteria and how the relative weights were assigned.

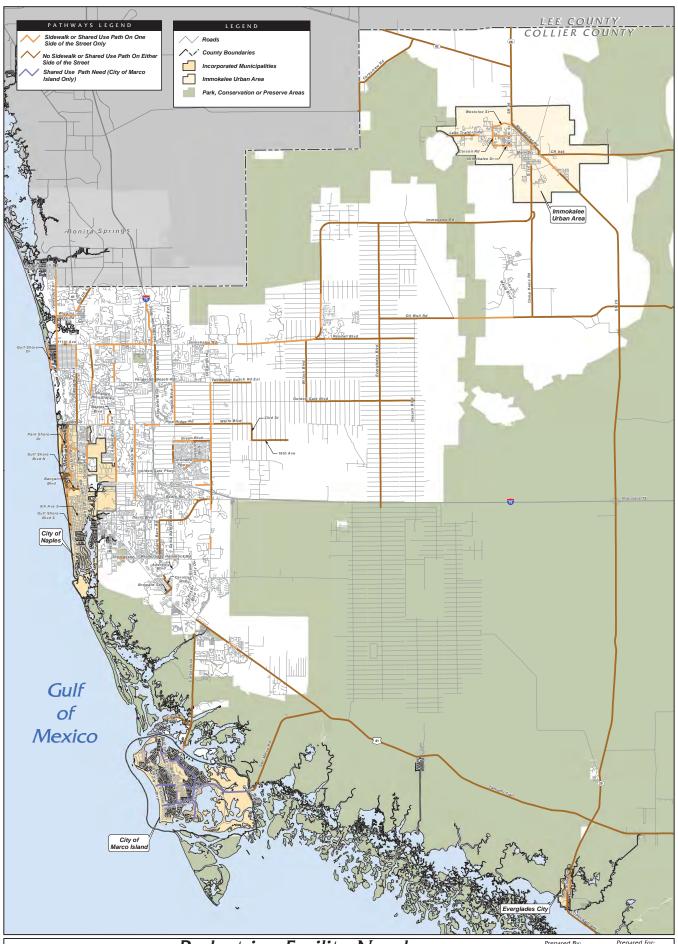
COMPREHENSIVE

PATHWAYS PLAN

For each of the criteria, a GIS map was created. These maps identified the individual criteria being measured - for example, the Proximity to Schools Map identified all schools recognized by the Collier County Board as well as Colleges and Universities. A two mile radius was drawn around each school. Using GIS capabilities, every bicycle or pedestrian need that fell within two miles of a school was identified and given the weighted score for Schools. If a need did not fall within the radii, it was given a score of zero. This was done for each of the criteria. The 10 GIS maps created for this evaluation process follow as Exhibits 10 through 20.

All needs were evaluated by segment and a total score was assigned to each segment. The segment scores were used to assign a priority ranking to each identified need. Appendix C provides a detailed list of needs broken down by segment and their scoring for each criterion.





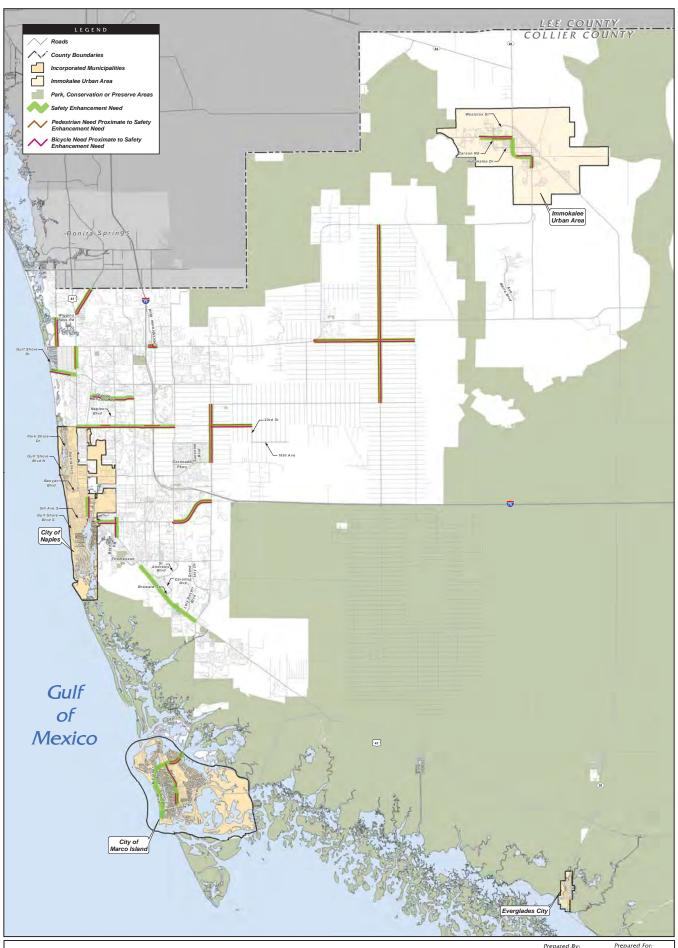


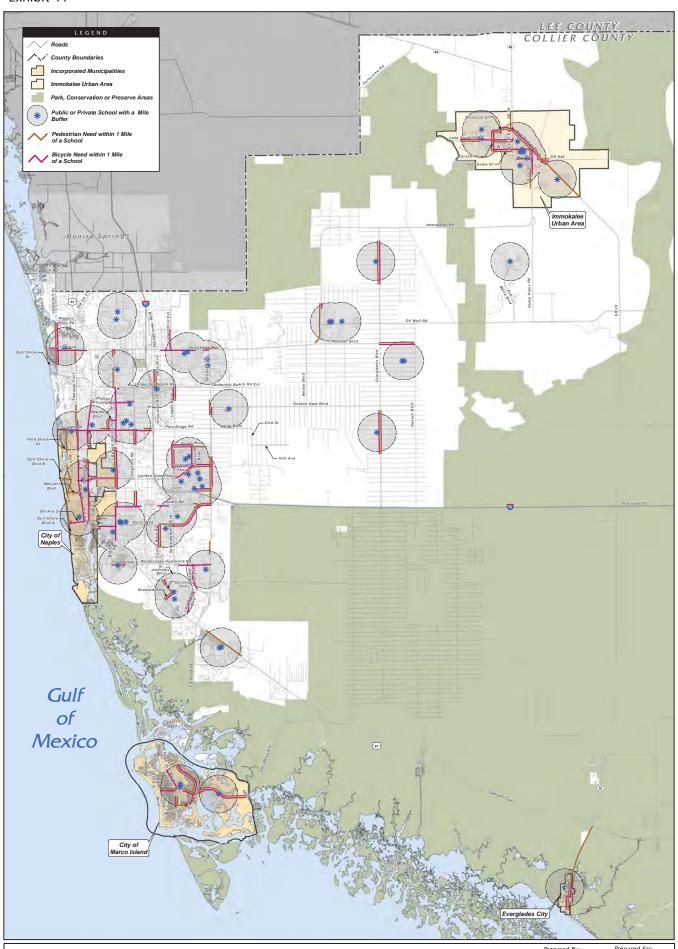
#### Exhibit 9

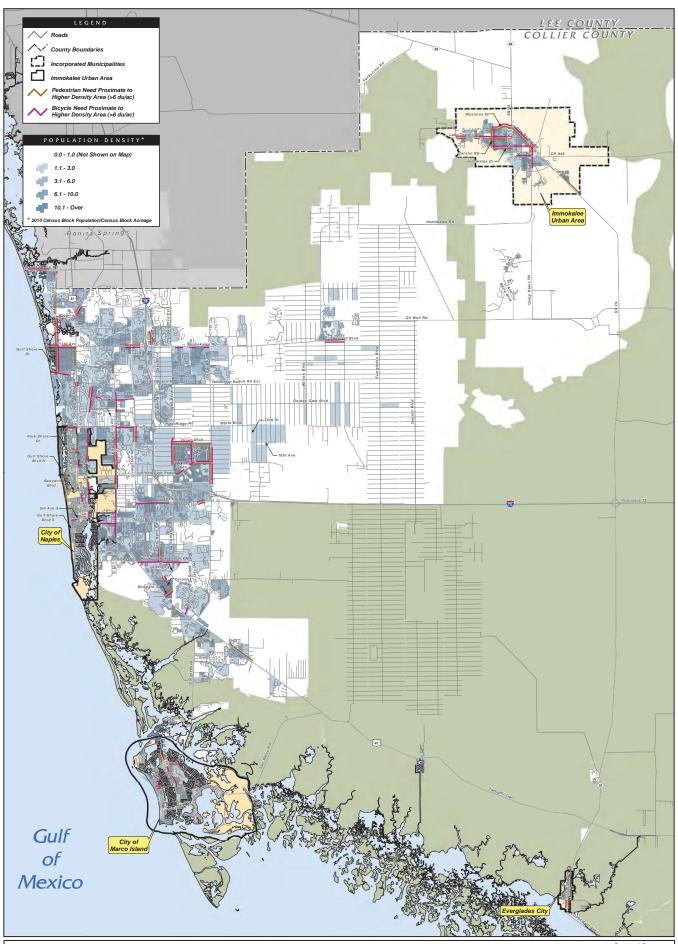
| CRITERIA                                                         | Measurement                                                                                                                                                             | Significance                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety                                                           | Map roadway corridors with bicycle and/or safety concerns as identified by Stakeholders Working Group. Identify facilities needs within corridor and score accordingly. | Improving user safety and reducing crashes and fatalities is the top priority for the Pathways Plan. Providing adequate bicycle and pedestrian facilities is the most immediate tool in improving safety conditions. Additionally, improving actual or perceived safety conditions can encourage more people to walk and bike. |
| School Proximity                                                 | Map all schools. Identify facility needs within 1 mile radius of Schools. Score needs accordingly.                                                                      | To encourage young people to walk or bike to school. To provide safe routes to school in alignment with Federal Safe Routes to School funding program.                                                                                                                                                                         |
| Proximity to Transit                                             | Map all transit lines. Select facilities needs that fall on those lines. Score needs accordingly.                                                                       | Transit, bicycle and pedestrian modes of transportation complement and support each other. Transit users must walk or bike to the bus stop. Providing facilities to the stops encourages transit use, offers mobility choices for all and reduces the reliance on the automobile.                                              |
| Proximity to Health Care & Public Facilities                     | Map all hospitals and government facilities. Select facility needs within 1 mile. Score needs accordingly.                                                              | To provide access and transportation options for all users to essential service facilities.                                                                                                                                                                                                                                    |
| Proximity to Activity, Commercial,<br>Employment, Tourism Center | Map significant commercial, entertainment, recreational, tourism and employment centers. Select facility needs within 1 mile. Score needs accordingly.                  | Provides access, and connectivity to the most frequented areas of the County. Promotes use of alternative modes, and contributes to livability and economic activity.                                                                                                                                                          |

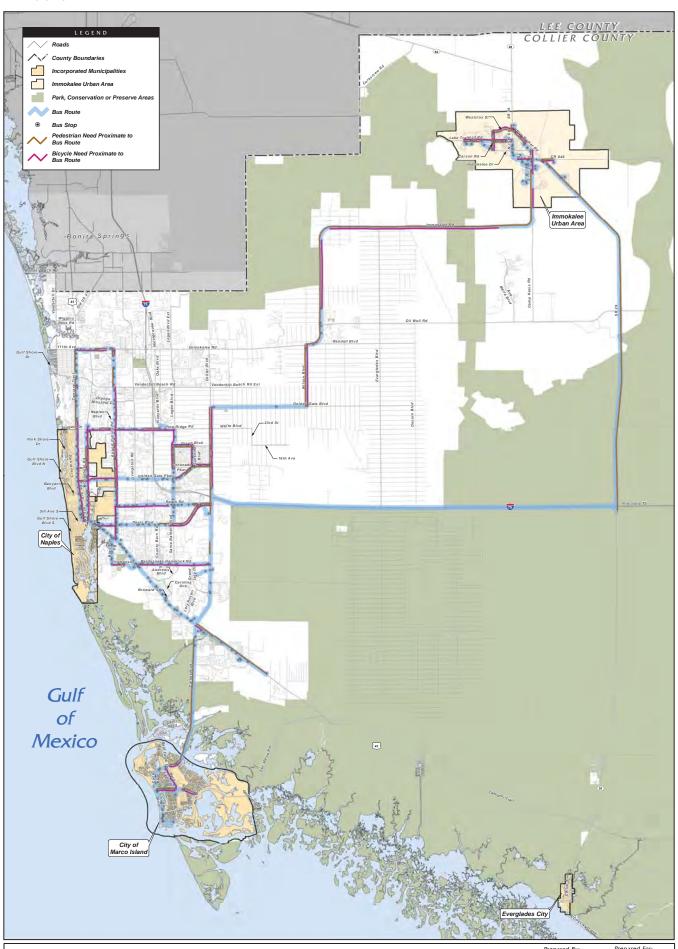


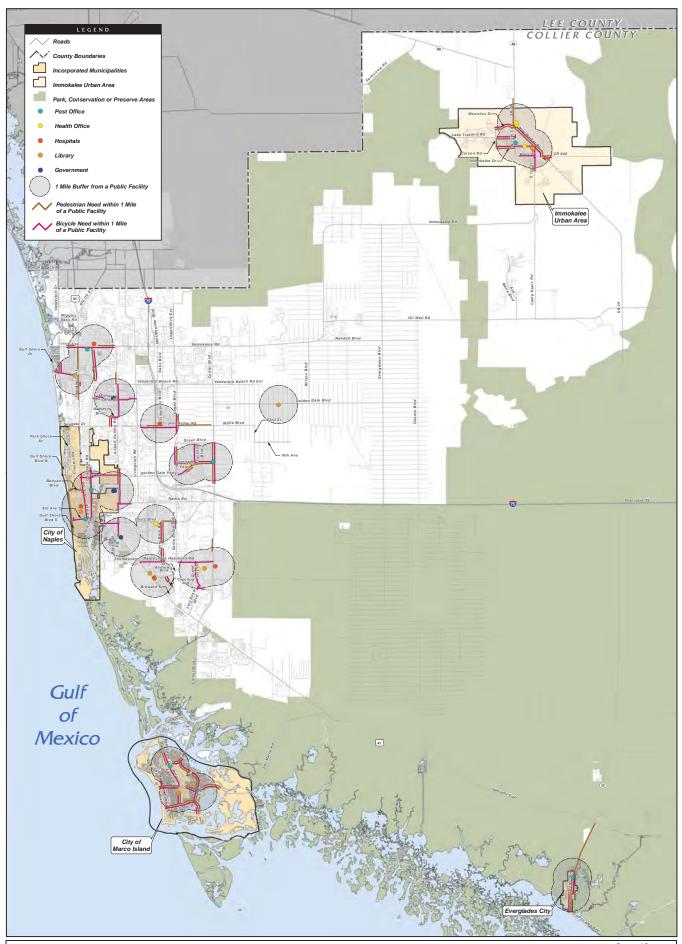
| CRITERIA                    | Measurement                                                                                                                                                                                                                                                 | Significance                                                                                                                                                                                                                                                                                |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connectivity/Missing Links  | Identify significant facility gaps or gaps that can be easily closed to enhance connectivity to a point of interest or continuity within a corridor. Score needs within these facility gaps accordingly.                                                    | Gaps in bicycle and pedestrian facilities can create hazardous conditions and discourage people from walking of biking to their destination. Filling in gaps can improve connectivity and facility continuity, improve safety conditions, and promote greater walking and cycling activity. |
| Population Density          | Using 2010 census tract data, map population density throughout the County and identify areas with the highest densities. Score needs along those areas accordingly.                                                                                        | With limited funds and seemingly limitless facility needs, the intent is to invest in facilities which will benefit the greatest amount of people.                                                                                                                                          |
| Significant Corridor        | Identify a few priority corridors where complete and continuous facilities are desired. Identify significant corridors that interconnect the County from and North-South or East-West perspective. Score facility needs within those corridors accordingly. | Continuous, cross-county facilities enhance county-wide mobility options, connect neighborhoods and activity nodes, and provide safe and convenient facilities to most urbanized areas.                                                                                                     |
| Continuous Bike Route       | Identify significant bike routes that are heavily used or could be heavily used by avid cyclists and identify facility needs within those identified and routes. Score bicycle needs along those routes accordingly.                                        | To provide safe and enjoyable routes for the avid cyclist. To meet needs avid and frequent uses. To promote cycling and physical activity.                                                                                                                                                  |
| High Transit Reliance Areas | Map 10 most utilized transit stops in Collier County. Identify needs within 1 mile of those areas and score those needs accordingly.                                                                                                                        | To provide facilities in areas where a large proportion of population has to walk, bike and use transit to meet basic transportation needs. Expands mobility options for user groups such as the young, elderly, and tourists who may not have a car they can use.                          |

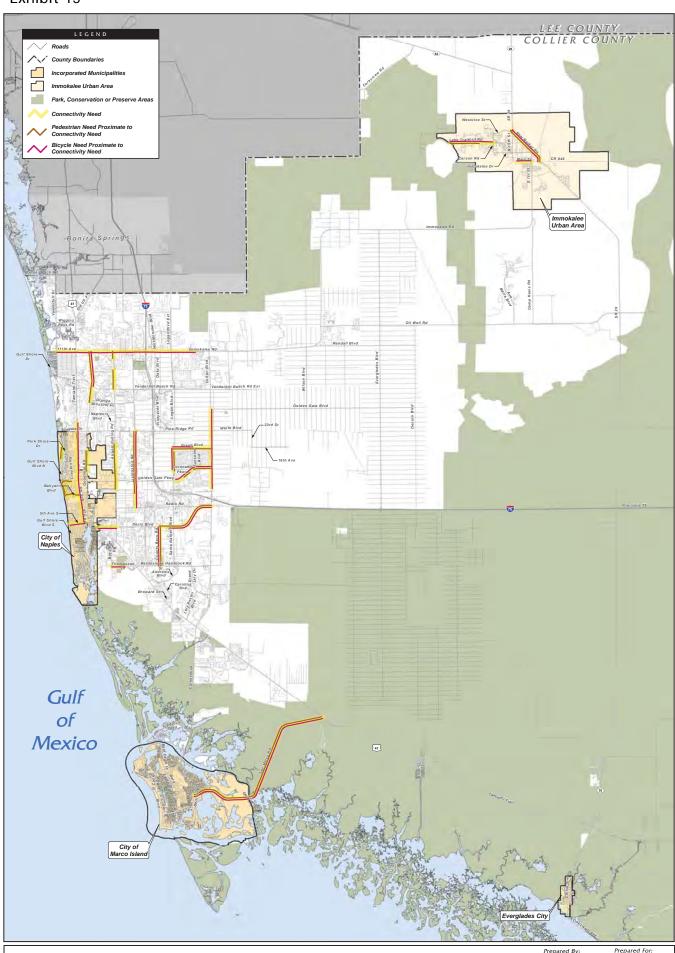


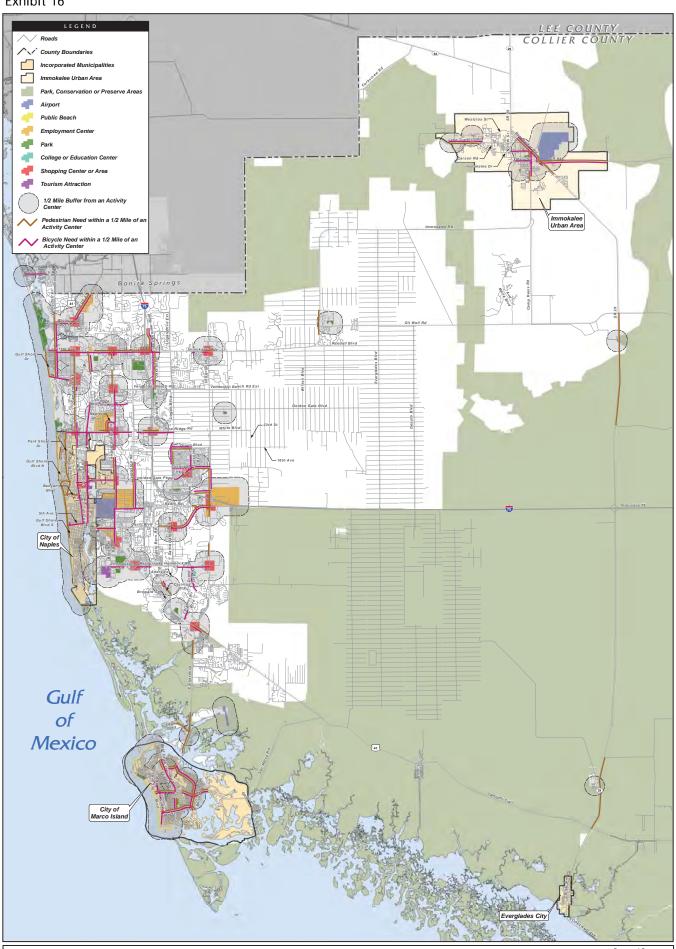


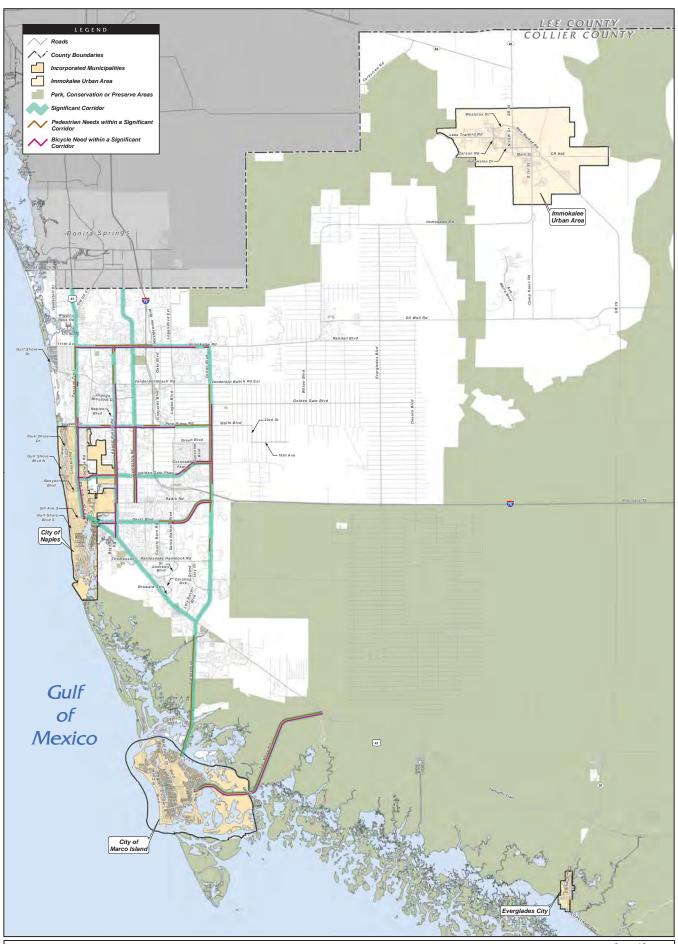


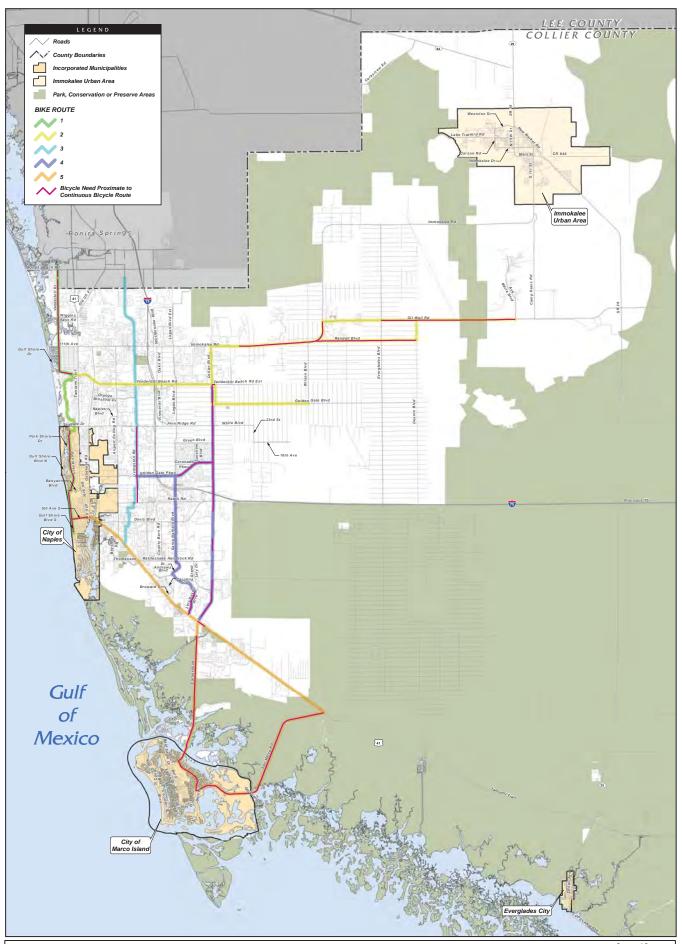


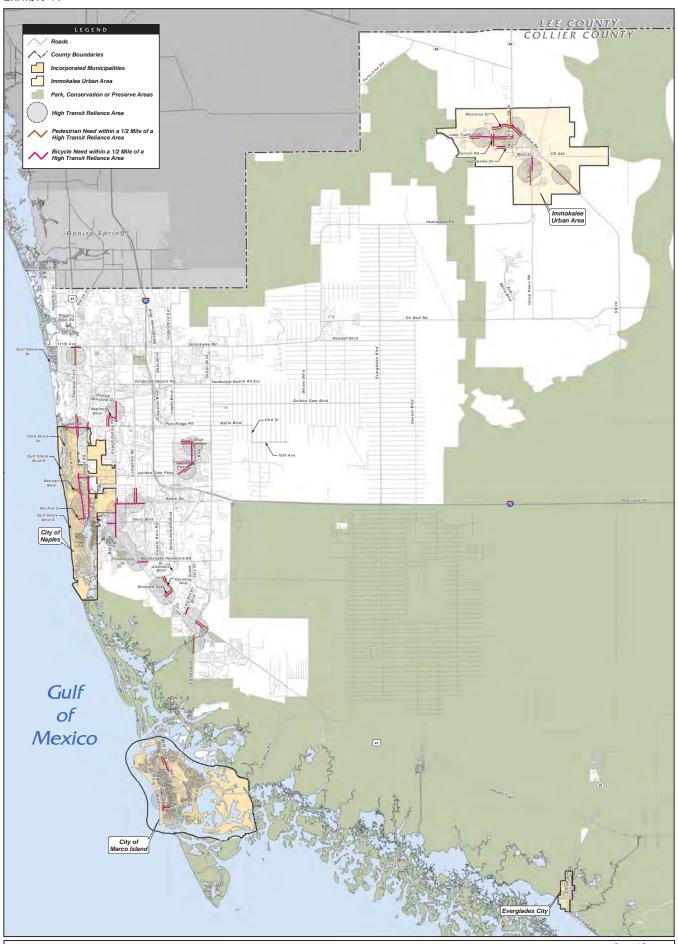














#### Prioritized Needs

Bicycle facility needs received a potential score ranging from 0 to 55. Those scores were used to assign a priority ranking of Low, Medium of High. Low Priority needs scored less than 12, Medium Priority needs scored between 12.1 through 23, and High Priority Needs scored greater than 23.

For pedestrian facility needs, scoring was slightly different since nine (9) criteria were used instead of 10. The potential scoring range was from 0 to 50.33. The Low Priority needs scored less than 10, the Medium Priority needs scored between 10.1 and 19, and the High Priority needs score above 19.

Once ranked according to priority, needs were further reviewed to a) identify if they were already part of a programmed roadway improvement, or if they were part of a planned roadway improvement in the MPO's Long Range Transportation Plan; b) to identify the needed facility and assign it a construction cost estimate; c) to identify particular characteristics associated with the feasibility of building the needed facility.

The prioritized bicycle and pedestrian needs are presented in Exhibits 23 and 24, which list the prioritized needs in tabular format, and Exhibits 24 and 25, which map and color code those needs.

The following two tables summarize the needs for each local jurisdiction according to assigned priority.

#### **Estimated Construction Costs**

It should be noted that the estimated cost associated with each need is for facility construction costs only and does not include additional costs such as right-of-way acquisition and drainage improvements. The linear mile cost utilized for the various facilities is presented in Appendix D and is consistent with the estimated costs identified in the LRTP and FDOT's District 1 methodology.

The intent behind providing the estimated construction costs is to provide "order of magnitude" estimates that the PAC can use for their preliminary assessment of needs. It is understood that as projects are identified, construction feasibility will be evaluated and that estimates will be further refined to include costs beyond basic facility construction.





|                                                  |        | Exhibit 20 |        |        |  |  |  |  |  |  |  |
|--------------------------------------------------|--------|------------|--------|--------|--|--|--|--|--|--|--|
| Prioritized Bicycle Needs (Linear Miles)         |        |            |        |        |  |  |  |  |  |  |  |
| Low Medium High High - Programmed                |        |            |        |        |  |  |  |  |  |  |  |
| Everglades City                                  | 0.000  | 1.859      | 0.000  | 0.000  |  |  |  |  |  |  |  |
| Marco                                            | 1.664  | 1.297      | 4.241  | 9.504  |  |  |  |  |  |  |  |
| Naples                                           | 0.000  | 0.296      | 12.574 | 0.000  |  |  |  |  |  |  |  |
| Immokalee                                        | 4.427  | 0.697      | 9.411  | 2.325  |  |  |  |  |  |  |  |
| Unincorporated Collier (Not Including Immokalee) | 84.183 | 31.735     | 45.264 | 5.518  |  |  |  |  |  |  |  |
| Total Collier                                    | 90.214 | 35.187     | 71.49  | 17.348 |  |  |  |  |  |  |  |

|                                                     |                                             | Exhibit 21 |        |                      |  |  |  |  |  |  |  |  |
|-----------------------------------------------------|---------------------------------------------|------------|--------|----------------------|--|--|--|--|--|--|--|--|
|                                                     | Prioritized Pedestrian Needs (Linear Miles) |            |        |                      |  |  |  |  |  |  |  |  |
|                                                     | Low                                         | Medium     | High   | High -<br>Programmed |  |  |  |  |  |  |  |  |
| Everglades City                                     | 0.000                                       | 0.000      | 2.253  | 0.000                |  |  |  |  |  |  |  |  |
| Marco                                               | 0.904                                       | 3.525      | 1.617  | 7.060                |  |  |  |  |  |  |  |  |
| Naples                                              | 0.000                                       | 6.544      | 2.490  | 1.075                |  |  |  |  |  |  |  |  |
| Immokalee                                           | 6.108                                       | 0.542      | 8.504  | 2.988                |  |  |  |  |  |  |  |  |
| Unincorporated Collier<br>(Not Including Immokalee) | 204.372                                     | 30.678     | 28.180 | 12.334               |  |  |  |  |  |  |  |  |
| Total Collier                                       | 211.384                                     | 41.289     | 43.045 | 23.457               |  |  |  |  |  |  |  |  |

| Bicycle Need ID<br>Number | Roadway Name         | From                  | То                        | Miles | Bicycle Need<br>Ranking | Proposed Improvement                | Estimated Const.<br>Cost | Jurisdiction        | Comment                                            | Identified TIP Project<br>(Programmed Funding) | LRTP<br>Roadway<br>Project | Cost Also<br>Identified as<br>Ped Need |
|---------------------------|----------------------|-----------------------|---------------------------|-------|-------------------------|-------------------------------------|--------------------------|---------------------|----------------------------------------------------|------------------------------------------------|----------------------------|----------------------------------------|
| B1                        | 111TH AVE N          | VANDERBILT DR         | TAMIAMI TRL N             | 1.00  | High                    | BIKE LANES, 2 SIDES                 | \$266,213.04             | COLLIER             |                                                    |                                                |                            |                                        |
| B2                        | 16TH AVE SW          | 9TH ST SW +           | 23RD ST SW                | 1.91  | Low                     | BIKE LANES, 2 SIDES                 | \$509,289.90             | COLLIER             |                                                    |                                                |                            |                                        |
| В3                        | 5TH AVE S            | 12TH ST S             | GULFSHORE BLVD S          | 0.95  | High                    | SHARE THE ROAD                      | TBD                      | TBD NAPLES COST TBD |                                                    |                                                |                            |                                        |
| B4                        | 9TH ST N             | CENTRAL AVE           | HARBOUR DR                | 2.30  | High                    | BIKE LANES, 2 SIDES                 | \$611,435.71             | NAPLES              |                                                    |                                                |                            |                                        |
| B5                        | 9TH ST S             | CENTRAL AVE           | 5TH AVE S                 | 0.38  | High                    | BIKE LANES, 2 SIDES                 | \$101,402.85             | NAPLES              |                                                    |                                                |                            |                                        |
| В6                        | ADDISON CT           | W INLET DR            | E INLET DR                | 0.14  | Low                     | WIDE SIDEWALK/ SUP, 1 SIDE          | \$24,766.88              | MARCO<br>ISLAND     |                                                    |                                                |                            | х                                      |
| В7                        | AIRPORT PULLING RD N | RADIO RD              | VANDERBILT BEACH RD       | 6.47  | High                    | BIKE LANES, 2 SIDES                 | \$1,722,171.97           | COLLIER             | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP |                                                |                            |                                        |
| B8                        | AIRPORT PULLING RD S | RADIO RD              | TAMIAMI TRL E             | 1.81  | High                    | BIKE LANES, 2 SIDES                 | \$480,420.45             | COLLIER             | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP |                                                |                            |                                        |
| В9                        | AMAZON CT            | N COLLIER BLVD        | CASTAWAYS ST              | 0.06  | Medium                  | BIKE LANES, 2 SIDES                 | \$15,569.00              | MARCO<br>ISLAND     |                                                    |                                                |                            |                                        |
| B10                       | BALD EAGLE DR        | HEATHWOOD DR          | N COLLIER BLVD            | 1.16  | High                    | BIKE LANES, 2 SIDES                 | \$307,282.57             | MARCO<br>ISLAND     |                                                    |                                                |                            |                                        |
| B11                       | BALD EAGLE DR        | N COLLIER BLVD        | GIRALDA CT                | 0.61  | Medium                  | WIDE SIDEWALK/ SUP, 1 SIDE          | \$109,080.81             | MARCO<br>ISLAND     |                                                    |                                                |                            |                                        |
| B12                       | BANYAN BLVD          | PINE CT               | 12TH AVE N                | 0.02  | Medium                  | BIKE LANE, 1 SIDE                   | \$3,318.75               | NAPLES              |                                                    |                                                |                            |                                        |
| B13                       | BLUEBILL AVE         | BLUEBILL AVE          | VANDERBILT DR             | 0.37  | High                    | BIKE LANES, 2 SIDES                 | \$97,217.77              | COLLIER             |                                                    |                                                |                            |                                        |
| B14                       | BONITA BEACH RD      | VANDERBILT DR         | KINGS KEW                 | 1.72  | Low                     | BIKE LANES, 2 SIDES                 | \$456,720.02             | COLLIER             |                                                    |                                                |                            |                                        |
| B15                       | BROADWAY E           | COPELAND AVE N        | COLLIER AVE               | 0.12  | Medium                  | BIKE LANES, 2 SIDES                 | \$31,194.67              | EVERGLADES<br>CITY  |                                                    |                                                |                            |                                        |
| B16                       | BROWARD ST           | TAMIAMI TRL E         | CAROLINA AVE              | 0.47  | High                    | PAVED SHOULDER, 1 SIDE (south east) | \$32,083.28              | COLLIER             |                                                    | Programmed                                     |                            |                                        |
| B17                       | CAMP KEAIS RD        | IMMOKALEE RD          | OIL WELL RD               | 5.68  | Low                     | PAVED SHOULDER, 2 SIDES             | \$767,897.64             | COLLIER             |                                                    |                                                | Х                          |                                        |
| B18                       | CARSON RD            | IMMOKALEE DR          | WESTCLOX ST               | 1.01  | High                    | BIKE LANES, 2 SIDES                 | \$268,807.08             | COLLIER             |                                                    |                                                |                            |                                        |
| B19                       | CASTAWAYS ST         | SATURN CT             | AMAZON CT                 | 0.22  | Medium                  | BIKE LANES, 2 SIDES                 | \$58,493.79              | MARCO<br>ISLAND     |                                                    |                                                |                            |                                        |
| B20                       | CHARLOTTE ST         | IMMOKALEE DR          | NEW MARKET RD W           | 0.09  | High                    | BIKE LANES, 2 SIDES                 | \$23,155.60              | COLLIER             |                                                    |                                                |                            |                                        |
| B21                       | COLLIER AVE          | BROADWAY E            | BEGONIA ST                | 0.74  | Medium                  | BIKE LANES, 2 SIDES                 | \$197,719.55             | EVERGLADES<br>CITY  |                                                    |                                                |                            |                                        |
| B22                       | COLLIER BLVD         | GOLDEN GATE PKWY      | CITY GATE BLVD N          | 4.16  | High                    | BIKE LANES, 2 SIDES                 | \$1,105,695.48           | COLLIER             | LRTP PROJECT EXTENDS NORTH TO GREEN BLVD           |                                                | Х                          |                                        |
| B23                       | COPELAND AVE S       | EVERGLADES CITY LINE  | SMALLWOOD DR              | 2.45  | Low                     | BIKE LANES, 2 SIDES                 | \$651,783.30             | COLLIER             |                                                    |                                                |                            |                                        |
| B24                       | COPELAND AVE S       | BROADWAY E            | OYSTER BAR LN             | 1.00  | Medium                  | BIKE LANES, 2 SIDES                 | \$265,703.06             | EVERGLADES<br>CITY  |                                                    |                                                |                            |                                        |
| B25                       | CORKSCREW RD         | SR 82                 | CORKSCREW RD CURB         | 5.38  | Low                     | PAVED SHOULDER, 2 SIDES             | \$726,814.78             | COLLIER             |                                                    |                                                |                            |                                        |
| B26                       | CORONADO PKWY        | GOLDEN GATE PKWY      | SANTA BARBARA BLVD        | 0.93  | High                    | BIKE LANES, 2 SIDES                 | \$247,809.19             | COLLIER             |                                                    |                                                |                            |                                        |
| B27                       | COUNTY BARN RD       | DAVIS BLVD            | WOODMERE LAKE CIR         | 1.08  | Medium                  | BIKE LANES, 2 SIDES                 | \$286,587.96             | COLLIER             |                                                    |                                                |                            |                                        |
| B28                       | COUNTY BARN RD       | WHITAKER RD           | RATTLESNAKE<br>HAMMOCK RD | 0.89  | Medium                  | BIKE LANES, 2 SIDES                 | \$236,392.78             | COLLIER             |                                                    |                                                |                            |                                        |
| B29                       | CR 846               | IMMOKALEE<br>BOUNDARY | STOCKADE RD               | 1.01  | Low                     | PAVED SHOULDER, 2 SIDES             | \$136,544.93             | COLLIER             |                                                    |                                                |                            |                                        |
| B30                       | CR 846 E             | AIRPARK BLVD          | COUNTY BOUNDARY           | 8.64  | Low                     | PAVED SHOULDER, 2 SIDES             | \$1,167,854.60           | COLLIER             |                                                    |                                                |                            |                                        |
| B31                       | CR 846 E             | E MAIN ST             | AIRPARK BLVD              | 0.43  | Medium                  | BIKE LANES, 2 SIDES                 | \$113,862.97             | COLLIER             |                                                    |                                                |                            |                                        |

## 2012 COMPREHENSIVE PATHWAYS PLAN Bicycle Priority Needs

| Bicycle Need ID<br>Number | Roadway Name         | From                      | То                    | Miles | Bicycle Need<br>Ranking | Proposed Improvement             | Estimated Const.<br>Cost | Jurisdiction                                               | Comment                                                                                  | Identified TIP Project<br>(Programmed Funding)                                                                          | LRTP<br>Roadway<br>Project | Cost Also<br>Identified as<br>Ped Need |
|---------------------------|----------------------|---------------------------|-----------------------|-------|-------------------------|----------------------------------|--------------------------|------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------------------|
| B32                       | DAVIS BLVD           | TAMIAMI TRL E             | AIRPORT PULLING RD S  | 1.00  | High                    | BIKE LANES, 2 SIDES              | \$264,802.39             | COLLIER                                                    |                                                                                          |                                                                                                                         |                            |                                        |
| B33                       | DAVIS BLVD           | COUNTRYSIDE DR            | COLLIER BLVD          | 2.73  | High                    | BIKE LANES, 2 SIDES              | \$726,049.39             | COLLIER                                                    | LRTP PROJECT STARTS WEST OF<br>COUNTRYSIDE DR AT FL CLUB CIR<br>AND ENDS AT COLLIER BLVD | PE 2012/13 DIH \$10,000 & SU \$100,533. CST 2013/14 DIH \$42,680 & SU \$457,181. CST 2014/15 DDR \$99,468 & DIH \$9,918 | х                          |                                        |
| B34                       | E MAIN ST            | N 1ST ST                  | 2ND ST                | 0.09  | Medium                  | BIKE LANES, 2 SIDES              | \$23,306.70              | COLLIER                                                    |                                                                                          |                                                                                                                         |                            |                                        |
| B35                       | E MAIN ST            | 12TH ST                   | 14TH ST               | 0.19  | High                    | BIKE LANES, 2 SIDES              | \$50,883.52              | COLLIER                                                    |                                                                                          |                                                                                                                         |                            |                                        |
| B36                       | EVERGLADES BLVD N    | GOLDEN GATE BLVD E        | IMMOKALEE RD          | 9.33  | Low                     | PAVED SHOULDER, 2 SIDES          | \$1,261,294.97           | COLLIER                                                    |                                                                                          |                                                                                                                         | х                          |                                        |
| B37                       | EVERGLADES BLVD S    | GOLDEN GATE BLVD E        | 48TH AVE SE           | 5.61  | Low                     | PAVED SHOULDER, 2 SIDES & 1 SIDE | \$747,761.47             | COLLIER                                                    |                                                                                          |                                                                                                                         |                            |                                        |
| B38                       | GOLDEN GATE BLVD E   | WILSON BLVD N             | DESOTO BLVD N         | 5.69  | Low                     | PAVED SHOULDER, 2 SIDES          | \$769,605.52             | COLLIER                                                    |                                                                                          |                                                                                                                         | х                          |                                        |
| B39                       | GOLDEN GATE PKWY     | 9TH ST N                  | AIRPORT PULLING RD N  | 2.07  | High                    | BIKE LANES, 2 SIDES              | \$549,493.69             | COLLIER                                                    |                                                                                          |                                                                                                                         |                            |                                        |
| B40                       | GOLDEN GATE PKWY     | COLLIER BLVD              | 55TH ST SW            | 2.07  | High                    | BIKE LANES, 2 SIDES              | \$549,762.78             | COLLIER                                                    |                                                                                          |                                                                                                                         |                            |                                        |
| B41                       | GOODLETTE-FRANK RD N | CENTRAL AVE               | PINE RIDGE RD         | 4.38  | High                    | BIKE LANES, 2 SIDES              | \$1,164,895.10           | COLLIER                                                    | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP                                       |                                                                                                                         |                            |                                        |
| B42                       | GOODLETTE-FRANK RD N | VANDERBILT BEACH<br>RD    | CREEKSIDE BLVD        | 1.59  | Medium                  | BIKE LANE, 1 SIDE                | \$211,938.95             | COLLIER                                                    | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP                                       |                                                                                                                         |                            |                                        |
| B43                       | GOODLETTE-FRANK RD N | PINE RIDGE RD             | VANDERBILT BEACH RD   | 2.42  | Medium                  | BIKE LANES, 2 SIDES              | \$645,112.56             | COLLIER                                                    | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP                                       |                                                                                                                         |                            |                                        |
| B44                       | GOODLETTE-FRANK RD S | CENTRAL AVE               | 5TH AVE S             | 0.38  | High                    | BIKE LANES, 2 SIDES              | \$101,707.96             | COLLIER                                                    | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP                                       |                                                                                                                         |                            |                                        |
| B45                       | GRAND LELY DR        | RATTLESNAKE<br>HAMMOCK RD | COLLIER BLVD          | 2.12  | Low                     | SHARE THE ROAD                   | TBD                      | COLLIER                                                    | COST TBD                                                                                 |                                                                                                                         |                            |                                        |
| B46                       | GREEN BLVD           | SUNSHINE BLVD             | LOGAN BLVD S          | 1.04  | High                    | BIKE LANES, 2 SIDES              | \$277,812.49             | COLLIER                                                    |                                                                                          |                                                                                                                         | Х                          |                                        |
| B47                       | GREENBRIER ST        | SAN MARCO RD              | SATURN CT             | 0.36  | Medium                  | BIKE LANES, 2 SIDES              | \$95,591.05              | MARCO<br>ISLAND                                            |                                                                                          |                                                                                                                         |                            |                                        |
| B48                       | GULF SHORE BLVD S    | 4TH AVE                   | 6TH AVE S             | 0.15  | Medium                  | BIKE LANES, 2 SIDES              | \$40,275.28              | NAPLES                                                     |                                                                                          |                                                                                                                         |                            |                                        |
| B49                       | HEATHWOOD DR         | SAN MARCO RD              | BALD EAGLE DR         | 0.18  | High                    | 12' SUP                          | \$57,475.98              | MARCO<br>ISLAND                                            |                                                                                          |                                                                                                                         |                            | х                                      |
| B50                       | HERNANDO DR          | "BEACH"                   | TIGERTAIL CT          | 0.55  | High                    | WIDE SIDEWALK/ SUP, 2 SIDES      | \$96,862.34              | MARCO<br>ISLAND                                            |                                                                                          | PROGRAMMED                                                                                                              |                            | х                                      |
| B51                       | IMMOKALEE DR         | CARSON RD                 | N 15TH ST             | 2.01  | High                    | BIKE LANES, 2 SIDES              | \$535,134.73             | COLLIER                                                    | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP                                       |                                                                                                                         |                            |                                        |
| B52                       | IMMOKALEE RD         | TAMIAMI TRL N             | REMINGTON WAY         | 0.55  | High                    | BIKE LANES, 2 SIDES              | \$146,041.51             | COLLIER                                                    | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP                                       |                                                                                                                         |                            |                                        |
| B53                       | IMMOKALEE RD         | 39TH AVE NE               | PLATT RD              | 3.58  | Low                     | PAVED SHOULDER, 1 SIDE & S SIDES | \$450,532.68             | COLLIER                                                    | CONSTRAINED ROADWAY, MAY<br>CONSIDER WIDE SIDWALK/SUP                                    |                                                                                                                         |                            |                                        |
| B54                       | IMMOKALEE RD         | CORKSCREW LN              | Point on Immokalee Rd | 8.83  | Low                     | PAVED SHOULDER, 2 SIDES          | \$1,194,134.28           | COLLIER                                                    | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP                                       |                                                                                                                         |                            |                                        |
| B55                       | IMMOKALEE RD         | CREEKSIDE TRL             | ROSE BLVD             | 5.71  | Medium                  | BIKE LANES, 1 SIDE & 2 SIDES     | \$1,290,376.65           | COLLIER                                                    | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP                                       |                                                                                                                         |                            |                                        |
| B56                       | IMMOKALEE RD         | PEBBLEBROOKE DR           | TO POINT EAST OF 951  | 0.36  | Medium                  | BIKE LANES, 2 SIDES & 12' SUP    | \$118,359.01             | COLLIER CONSTRAINED ROADWAY, WIDE SIDWALK/SUP MAY SUFFICE. |                                                                                          |                                                                                                                         |                            |                                        |
| B57                       | INLET DR             | S BARFIELD DR             | TRAVIDA TER           | 0.56  | High                    | WIDE SIDEWALK/ SUP, 1 SIDE       | \$100,069.50             | MARCO<br>ISLAND                                            | ,                                                                                        | PROGRAMMED                                                                                                              |                            | х                                      |
| B58                       | LAKE TRAFFORD RD     | TIPPINS TER               | N 15TH ST             | 2.90  | High                    | BIKE LANES, 1 SIDE & 2 SIDES     | \$644,052.70             | COLLIER                                                    |                                                                                          |                                                                                                                         |                            |                                        |
| B59                       | LAKE TRAFFORD RD     | PEPPER RD                 | "LAKE"                | 0.34  | Low                     | BIKE LANES, 2 SIDES              | \$90,196.53              | COLLIER                                                    |                                                                                          |                                                                                                                         |                            |                                        |
| B60                       | LANDMARK ST          | WINTERBERRY DR            | SAN MARCO RD          | 1.09  | High                    | BIKE LANES, 2 SIDES              | \$290,608.73             | MARCO<br>ISLAND                                            |                                                                                          | CST 2015/16 LFP \$464,528<br>& SU \$260,273                                                                             |                            |                                        |

## 2012 COMPREHENSIVE PATHWAYS PLAN Bicycle Priority Needs

| Bicycle Need ID<br>Number | Roadway Name           | From                    | То                         | Miles | Bicycle Need<br>Ranking | Proposed Improvement        | Estimated Const.<br>Cost | Jurisdiction    | Comment                                                       | Identified TIP Project<br>(Programmed Funding) | LRTP<br>Roadway<br>Project | Cost Also<br>Identified as<br>Ped Need |
|---------------------------|------------------------|-------------------------|----------------------------|-------|-------------------------|-----------------------------|--------------------------|-----------------|---------------------------------------------------------------|------------------------------------------------|----------------------------|----------------------------------------|
| B61                       | LELY RESORT BLVD       | GRAND LELY DR           | TAMIAMI TR E               | 1.65  | Medium                  | SHARE THE ROAD              | TBD                      | COLLIER         | COST TBD                                                      |                                                |                            |                                        |
| B62                       | LIVINGSTON RD S        | PINE RIDGE RD           | RADIO RD                   | 4.00  | Medium                  | BIKE LANE, 1 SIDE           | \$532,577.88             | COLLIER         |                                                               |                                                |                            |                                        |
| B63                       | LOGAN BLVD N           | LOGAN BLVD N            | VANDERBILT BEACH RD        | 2.82  | Low                     | PAVED SHOULDER, 2 SIDES     | \$380,686.16             | COLLIER         |                                                               |                                                |                            |                                        |
| B64                       | LOGAN BLVD S           | HAWTHORN WOODS<br>WAY   | GREEN BLVD                 | 0.27  | High                    | PAVED SHOULDER, 2 SIDES     | \$36,983.73              | COLLIER         |                                                               |                                                |                            |                                        |
| B65                       | MAGNOLIA POND DR       | COLLIER BLVD            | TITAN WAY                  | 0.81  | Low                     | BIKE LANES, 2 SIDES         | \$216,709.10             | COLLIER         |                                                               |                                                |                            |                                        |
| B66                       | N 15TH ST              | LAKE TRAFFORD RD        | LEE ST                     | 0.14  | High                    | BIKE LANE, 1 SIDE           | \$18,043.23              | COLLIER         |                                                               |                                                |                            |                                        |
| B67                       | N 15TH ST              | W MAIN ST               | N 11TH ST                  | 0.05  | High                    | BIKE LANES, 2 SIDES         | \$12,359.55              | COLLIER         |                                                               |                                                |                            |                                        |
| B68                       | N 15TH ST              | JEFFERSON AVE W         | WESTCLOX ST                | 0.08  | Medium                  | BIKE LANES, 2 SIDES         | \$22,322.76              | COLLIER         |                                                               |                                                |                            |                                        |
| B69                       | N 1ST ST               | E MAIN ST               | IMMOKALEE DR               | 0.51  | High                    | BIKE LANES, 2 SIDES         | \$135,198.54             | COLLIER         |                                                               |                                                |                            |                                        |
| B70                       | N BARFIELD DR          | S BARFIELD DR           | N COLLIER BLVD             | 2.01  | High                    | WIDE SIDEWALK/ SUP, 1 SIDE  | \$356,551.98             | MARCO<br>ISLAND |                                                               | PROGRAMMED                                     |                            | х                                      |
| B71                       | N COLLIER BLVD         | E ELKCAM CIR            | BUTTONWOOD CT              | 0.66  | High                    | WIDE SIDEWALK/ SUP, 2 SIDES | \$233,740.25             | MARCO<br>ISLAND |                                                               | PROGRAMMED                                     |                            | х                                      |
| B72                       | NAPLES BLVD            | PINE RIDGE RD           | AIRPORT PULLING RD N       | 0.87  | Medium                  | BIKE LANES, 2 SIDES         | \$230,561.43             | COLLIER         | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP            |                                                |                            |                                        |
| B73                       | NEW MARKET RD E        | CHARLOTTE ST            | E MAIN ST                  | 0.93  | Medium                  | BIKE LANES, 2 SIDES         | \$246,100.27             | COLLIER         |                                                               | CST 2014/15 ACSU<br>\$914,668, EB \$271,680    |                            |                                        |
| B74                       | NEW MARKET RD W        | CHARLOTTE ST            | SR 29 N                    | 1.61  | High                    | BIKE LANES, 2 SIDES         | \$427,187.74             | COLLIER         |                                                               | CST 2014/15 ACSU<br>\$914,668, EB \$271,680    |                            |                                        |
| B75                       | NORTHBROOKE DR         | IMMOKALEE RD            | BRYNWOOD DR                | 2.18  | Low                     | BIKE LANES, 2 SIDES         | \$579,254.01             | COLLIER         | EXISTING WIDE SW MAY SUFFICE,<br>SHARE THE ROAD OPTION MAY BE |                                                |                            |                                        |
| B76                       | OAKES BLVD             | VANDERBILT BEACH<br>RD  | IMMOKALEE RD               | 1.99  | Low                     | PAVED SHOULDER, 1 SIDE      | \$134,227.80             | COLLIER         |                                                               |                                                |                            |                                        |
| B77                       | OIL WELL RD            | EVERGLADES BLVD N       | DESOTO BLVD N              | 1.84  | Low                     | PAVED SHOULDER, 1 SIDE      | \$124,093.87             | COLLIER         | LRTP PROJECT EXTENDS FURTHER EAST TO OIL WELL GRADE RD        |                                                | х                          |                                        |
| B78                       | OIL WELL RD            | SR 29                   | CR 858                     | 4.68  | Low                     | PAVED SHOULDER, 2 SIDES     | \$632,775.78             | COLLIER         |                                                               |                                                |                            |                                        |
| B79                       | OLD US 41 N            | TAMIAMI TRL N           | MEDITERRA                  | 1.48  | Medium                  | BIKE LANES, 2 SIDES         | \$393,784.61             | COLLIER         | LRTP PROJECT ENDS AT<br>LEE/COLLIER LINE                      |                                                | Х                          |                                        |
| B80                       | OLDE CYPRESS BLVD      | IMMOKALEE RD            | OLDE CYPRESS N<br>BOUNDARY | 1.02  | Low                     | BIKE LANES, 2 SIDES         | \$271,575.98             | COLLIER         | EXISTING WIDE SW/SUP MAY SUFFICE                              |                                                |                            |                                        |
| B81                       | ORANGE BLOSSOM DR      | GOODLETTE-FRANK RD<br>N | LIVINGSTON RD N            | 2.37  | High                    | BIKE LANES, 2 SIDES         | \$630,562.77             | COLLIER         | LRTP PROJECT STARTS AT AIRPORT PULLING RD ENDS AT LIVINGSTON. |                                                | х                          |                                        |
| B82                       | PARK SHORE DR          | US 41                   | CYPRESS WOODS DR           | 0.12  | Medium                  | BIKE LANE, 1 SIDE           | \$15,918.41              | NAPLES          |                                                               |                                                |                            |                                        |
| B83                       | PERU ST                | WINTERBERRY ST          | SEAGRAPE DR                | 0.07  | Low                     | BIKE LANES, 2 SIDES         | \$19,610.08              | MARCO<br>ISLAND |                                                               |                                                |                            |                                        |
| B84                       | PINE RIDGE RD          | TAMIAMI TRL N           | LOGAN BLVD S               | 5.13  | High                    | BIKE LANES, 2 SIDES         | \$1,363,556.61           | COLLIER         | CONSTRAINED ROADWAY, MAY CONSIDER WIDE SIDWALK/SUP            |                                                |                            |                                        |
| B85                       | RADIO RD               | AIRPORT PULLING RD<br>N | LIVINGSTON RD S            | 1.01  | High                    | BIKE LANES, 2 SIDES         | \$267,791.72             | COLLIER         |                                                               |                                                |                            |                                        |
| B86                       | RADIO RD               | LIVINGSTON RD S         | COUNTRYSIDE DR             | 1.73  | Medium                  | BIKE LANES, 2 SIDES         | \$461,307.08             | COLLIER         |                                                               |                                                |                            |                                        |
| B87                       | RADIO RD               | RADIO LN                | DAVIS BLVD                 | 0.12  | Medium                  | BIKE LANE, 1 SIDE           | \$16,522.85              | COLLIER         |                                                               |                                                |                            |                                        |
| B88                       | RANDALL BLVD           | APPROACH BLVD           | DESOTO BLVD N              | 3.68  | Low                     | PAVED SHOULDER, 2 SIDES     | \$497,175.87             | COLLIER         |                                                               |                                                | х                          |                                        |
| B89                       | RANDALL BLVD           | IMMOKALEE RD            | APPROACH BLVD              | 1.64  | Medium                  | PAVED SHOULDER, 2 SIDES     | \$222,312.57             | COLLIER         | LRTP PROJECT STARTS EAST OF IMMOK AT 8TH ST                   |                                                | х                          |                                        |
| B90                       | RATTLESNAKE HAMMOCK RD | TAMIAMI TRL E           | COLLIER BLVD               | 3.87  | High                    | BIKE LANES, 2 SIDES         | \$1,028,701.10           | COLLIER         |                                                               |                                                |                            |                                        |
| B91                       | S 1ST ST               | SCHOOL RD               | W MAIN ST                  | 0.62  | High                    | BIKE LANES, 2 SIDES         | \$165,783.22             | COLLIER         | LRTP PROJECT EXTENDS NORTH TO EUSTIS AND SOUTH OF CAMP KEAIS  |                                                | х                          |                                        |

## 2012 COMPREHENSIVE PATHWAYS PLAN Bicycle Priority Needs

| Bicycle Need ID<br>Number | Roadway Name        | From                   | То                | Miles | Bicycle Need<br>Ranking | Proposed Improvement             | Estimated Const.<br>Cost | Jurisdiction         | Comment                                                        | Identified TIP Project<br>(Programmed Funding)        | LRTP<br>Roadway<br>Project | Cost Also<br>Identified as<br>Ped Need |
|---------------------------|---------------------|------------------------|-------------------|-------|-------------------------|----------------------------------|--------------------------|----------------------|----------------------------------------------------------------|-------------------------------------------------------|----------------------------|----------------------------------------|
| B92                       | S BARFIELD DR       | N BARFIELD DR          | INLET DR          | 0.64  | High                    | WIDE SIDEWALK/ SUP, 1 SIDE       | \$114,284.22             | MARCO<br>ISLAND      |                                                                | PROGRAMMED                                            |                            | х                                      |
| B93                       | S HEATHWOOD DR      | ANDALUSIA TER          | AUBURNDALE AVE    | 0.50  | High                    | 12' SUP                          | \$162,632.39             | MARCO<br>ISLAND      |                                                                | PROGRAMMED                                            |                            | х                                      |
| B94                       | SAINT ANDREWS BLVD  | TAMIAMI TRL E          | PEBBLE BEACH BLVD | 0.18  | Low                     | PAVED SHOULDER, 1 SIDE           | \$12,296.13              | COLLIER              |                                                                |                                                       |                            |                                        |
| B95                       | SAN MARCO RD        | N COLLIER BLVD         | HEATHWOOD DR      | 1.00  | High                    | WIDE SIDEWALK/ SUP, 1 SIDE       | \$176,598.49             | MARCO<br>ISLAND      |                                                                | PROGRAMMED                                            |                            | х                                      |
| B96                       | SAN MARCO RD        | N BARFIELD DR          | MARCO CITY LIMIT  | 2.91  | High                    | WIDE SIDEWALK/ SUP, 1 SIDE       | MARCO                    |                      |                                                                |                                                       | х                          |                                        |
| B97                       | SAN MARCO RD        | TAMIAMI TRL E          | MARCO CITY LIMIT  | 6.35  | Medium                  | PAVED SHOULDER, 2 SIDES          | \$858,573.37             | COLLIER              |                                                                |                                                       |                            |                                        |
| B98                       | SAN MARCO RD        | SAND HILL ST           | BALMORAL CT       | 0.62  | High                    | WIDE SIDEWALK/ SUP, 1 SIDE       | \$110,255.02             | MARCO<br>ISLAND      |                                                                | PROGRAMMED                                            |                            | х                                      |
| B99                       | SANTA BARBARA BLVD  | GREEN BLVD             | CORONADO PKWY     | 1.13  | High                    | BIKE LANES, 1 SIDE & 2 SIDES     | \$210,601.90             | COLLIER              | LRTP PROJECT EXTENDS SOUTH TO PAINTED LEAF LN                  |                                                       | х                          |                                        |
| B100                      | SATURN CT           | CASTAWAYS ST           | GREENBRIER ST     | 0.04  | Medium                  | BIKE LANES, 2 SIDES              | \$11,869.61              | MARCO<br>ISLAND      |                                                                |                                                       |                            |                                        |
| B101                      | SEAGATE DR          | CRAYTON RD             | TAMIAMI TRL N     | 0.48  | Medium                  | BIKE LANES, 2 SIDES              | \$128,058.97             | NAPLES               |                                                                |                                                       |                            |                                        |
| B102                      | SEAGRAPE DR         | PERU ST                | SWALLOW AVE       | 0.69  | Low                     | BIKE LANES, 2 SIDES              | \$182,387.98             | MARCO<br>ISLAND      |                                                                |                                                       |                            |                                        |
| B103                      | SMALLWOOD DR        | BEGINNING OF ISLAND    | END OF ISLAND     | 0.62  | Low                     | PAVED SHOULDER, 2 SIDES          | \$83,512.28              | COLLIER              | EXISTING SUBSTANDARD PAVED SHOULDERS & SUP MAY SUFFICE         |                                                       |                            |                                        |
| B104                      | SR 29 N             | WESTCLOX ST            | NEW MARKET RD W   | 0.10  | Medium                  | BIKE LANE, 1 SIDE                | \$12,908.76              | COLLIER              | LRTP PROJECT EXTENDS SOUTH TO IMMOKALEE DR.                    |                                                       | х                          |                                        |
| B105                      | SUNSHINE BLVD       | GREEN BLVD             | GOLDEN GATE PKWY  | 1.09  | High                    | BIKE LANES, 2 SIDES              | \$291,042.63             | COLLIER              | -                                                              |                                                       |                            |                                        |
| B106                      | TAMIAMI TRL E       | SR 29                  | TURNER RIVER RD   | 6.67  | Low                     | PAVED SHOULDER, 2 SIDES & 1 SIDE | \$753,561.37             | TIP PROJECT INCLUDES |                                                                | ENV 2012/13 DEM<br>\$291,593. 2013/14<br>\$150,934    |                            |                                        |
| B107                      | TAMIAMI TRL E       | COLLIER BLVD           | MONDAGO LN        | 0.46  | High                    | PAVED SHOULDER, 1 SIDE           | \$30,823.85              | COLLIER              | LRTP PROJECT EXTENDS SOUTHEAST TO EAST OF                      | CST 2012/2013 CIGP<br>\$3,180,888 LFP 8,005,019       | х                          |                                        |
| B108                      | TAMIAMI TRL N       | HARBOUR DR             | PELICAN BAY BLVD  | 2.58  | High                    | BIKE LANES, 2 SIDES              | \$685,823.83             | NAPLES               |                                                                |                                                       |                            |                                        |
| B109                      | TAMIAMI TRL N       | BANYAN RD              | PELICAN BAY BLVD  | 0.19  | High                    | BIKE LANE, 1 SIDE                | \$24,730.31              | COLLIER              | TIP PROJECT EXTENDS NORTH TO<br>VANDERBILT BEACH ROAD          | CST 2014/15 DIH 41,102 &<br>SU \$842, 521. PE 2013/14 |                            |                                        |
| B110                      | THOMASSON DR        | BAYSHORE DR            | ORCHARD LN        | 0.70  | High                    | BIKE LANES, 2 SIDES              | \$185,172.52             | COLLIER              |                                                                |                                                       |                            |                                        |
| B111                      | TIGERTAIL CT        | HERNANDO DR            | N COLLIER BLVD    | 0.39  | High                    | WIDE SIDEWALK/ SUP, 1 SIDE       | \$69,714.42              | MARCO<br>ISLAND      |                                                                | PROGRAMMED                                            |                            | х                                      |
| B112                      | VANDERBILT BEACH RD | "BEACH"                | GULF PAVILLION DR | 1.05  | High                    | BIKE LANES, 2 SIDES              | \$280,393.49             | COLLIER              |                                                                |                                                       |                            |                                        |
| B113                      | VANDERBILT BEACH RD | COLLIER BLVD           | SUNDANCE RD +     | 2.01  | Low                     | BIKE LANES, 1 SIDE & 2 SIDES     | \$515,045.04             | COLLIER              | LRTP PROJECT EXTENDS EAST TO WILSON BLVD                       |                                                       | х                          |                                        |
| B114                      | VANDERBILT DR       | BLUEBILL AVE           | DOCKSIDE DR       | 1.39  | High                    | BIKE LANES, 2 SIDES              | \$371,102.41             | COLLIER              |                                                                |                                                       |                            |                                        |
| B115                      | VANDERBILT DR       | 2ND ST                 | BONITA BEACH RD   | 0.12  | Low                     | BIKE LANES, 2 SIDES              | \$32,559.80              | COLLIER              |                                                                |                                                       |                            |                                        |
| B116                      | VANDERBILT DR       | VANDERBILT BEACH<br>RD | 111TH AVE N       | 1.34  | Medium                  | BIKE LANES, 2 SIDES              | \$356,484.93             | COLLIER              |                                                                |                                                       |                            |                                        |
| B117                      | W INLET DR          | TRAVIDA TER            | ADDISON CT        | 0.49  | Low                     | WIDE SIDEWALK/ SUP, 1 SIDE       | \$86,543.22              | MARCO<br>ISLAND      |                                                                |                                                       |                            | х                                      |
| B118                      | W MAIN ST           | N 1ST ST               | N 15TH ST         | 0.71  | High                    | BIKE LANES, 2 SIDES              | \$189,157.41             | COLLIER              |                                                                |                                                       |                            |                                        |
| B119                      | WARREN ST           | SAINT ANDREWS BLVD     | CAROLINA AVE      | 0.26  | High                    | BIKE LANES, 2 SIDES              | \$70,455.58              | COLLIER              |                                                                |                                                       |                            |                                        |
| B120                      | WESTCLOX ST         | N 15TH ST              | CARSON RD         | 1.05  | High                    | BIKE LANES, 2 SIDES              | \$279,335.38             | COLLIER              |                                                                |                                                       |                            |                                        |
| B121                      | WHITE BLVD          | 23RD ST SW             | COLLIER BLVD      | 2.15  | Low                     | PAVED SHOULDER, 2 SIDES          | \$290,281.02             | COLLIER              | LRTP PROJECT ENDS AT 3IST ST SW.<br>TIP PROJECT ENDS AT GOLDEN | CST 2013/13 ACSA<br>\$336,380 & SA \$112,420          | х                          |                                        |

## 2012 COMPREHENSIVE PATHWAYS PLAN Bicycle Priority Needs

| Bicycle Need ID<br>Number | Roadway Name    | From               | То             | Miles | Bicycle Need<br>Ranking | Proposed Improvement      | Estimated Const.<br>Cost | Jurisdiction    | Comment | Identified TIP Project<br>(Programmed Funding) | LRTP<br>Roadway<br>Project | Cost Also<br>Identified as<br>Ped Need |
|---------------------------|-----------------|--------------------|----------------|-------|-------------------------|---------------------------|--------------------------|-----------------|---------|------------------------------------------------|----------------------------|----------------------------------------|
| B122                      | WIGGINS PASS RD | TAMIAMI TRL N      | VANDERBILT DR  | 1.02  | Low                     | BIKE LANES, 2 SIDES       | \$270,450.84             | COLLIER         |         |                                                |                            |                                        |
| B123                      | WILSON BLVD N   | GOLDEN GATE BLVD E | IMMOKALEE RD   | 3.21  | Low                     | PAVED SHOULDER, 2 SIDES   | \$434,641.79             | COLLIER         |         |                                                | Х                          |                                        |
| B124                      | WINTERBERRY DR  | S HEATHWOOD DR     | S BARFIELD DR  | 0.81  | High                    | 12' SUP                   | \$264,937.89             | MARCO<br>ISLAND |         | PROGRAMMED                                     |                            | х                                      |
| B125                      | WINTERBERRY DR  | S HEATHWOOD DR     | S COLLIER BLVD | 0.79  | High                    | WIDE SIDEWALK/SUP, I SIDE | \$139,907.73             | MARCO<br>ISLAND |         | PROGRAMMED                                     |                            |                                        |

TOTAL:

\$41,247,724.76

| Pedestrian Need<br>ID Number | Roadway Name         | From                | То                     | Miles | Pedestrian Need<br>Ranking | Proposed Improvement     | Estimated Const. Cost | Jurisdiction    | Comment                                                                 | Identified TIP<br>Project<br>(Programmed<br>Funding) | LRTP<br>Roadway<br>Project |
|------------------------------|----------------------|---------------------|------------------------|-------|----------------------------|--------------------------|-----------------------|-----------------|-------------------------------------------------------------------------|------------------------------------------------------|----------------------------|
| P1                           | 111TH AVE N          | 6TH ST N            | 8TH ST N               | 0.51  | High                       | SW One Side & Both Sides | \$73,830.58           | COLLIER         |                                                                         |                                                      |                            |
| P2                           | 16TH AVE SW          | 9TH ST SW           | 23RD ST SW             | 1.91  | Low                        | SW, 2 Sides              | \$438,951.79          | COLLIER         | RURAL - PAVED SHOULDER (NEEDED) MAY<br>SUFFICE                          |                                                      |                            |
| P3                           | 23RD ST SW           | WHITE BLVD          | 16TH AVE SW            | 0.88  | Low                        | SW, 2 Sides              | \$200,654.50          | COLLIER         | RURAL - PAVED SHOULDER (EXISTING) MAY<br>SUFFICE                        |                                                      |                            |
| P4                           | ADDISON CT           | W INLET DR          | E INLET DR             | 0.14  | Low                        | 8' SW, 1 Side            | \$24,766.88           | MARCO           |                                                                         |                                                      |                            |
| P5                           | AIRPORT PULLING RD N | CURLING AVE         | IMMOKALEE RD           | 0.37  | High                       | SW, 1 Side               | \$42,063.88           | COLLIER         | SEGMENT BETWEEN P5 & P6 MAY NEED RETROFIT TO ADDRESS DRAINAGE ISSUES    |                                                      | х                          |
| P6                           | AIRPORT PULLING RD N | VANDERBILT BEACH RD | NOTTINGHAM DR          | 0.99  | High                       | SW, 1 Side               | \$113,417.79          | COLLIER         | SEGMENT BETWEEN P5 & P6 MAY NEED<br>RETROFIT TO ADDRESS DRAINAGE ISSUES |                                                      | х                          |
| P7                           | AIRPORT PULLING RD N | LONGBOAT DR         | TIMBERWOOD CIR         | 2.37  | High                       | SW, 1 Side               | \$272,012.52          | COLLIER         |                                                                         |                                                      |                            |
| P8                           | BALD EAGLE DR        | N COLLIER BLVD      | GIRALDA CT             | 0.61  | Medium                     | 8' SW, 1 Side            | \$109,080.81          | MARCO ISLAND    |                                                                         |                                                      |                            |
| P9                           | BANYAN BLVD          | Gulshore BLVD N     | 9th ST N               | 0.71  | High                       | One Side & Both Sides    | \$141,795.98          | NAPLES          |                                                                         |                                                      |                            |
| P10                          | BROADWAY E           | COPELAND AVE N      | COLLIER AVE            | 0.12  | High                       | SW, 1 Side               | \$13,443.18           | EVERGLADES CITY |                                                                         |                                                      |                            |
| P11                          | BROWARD ST           | TAMIAMI TRL E       | CAROLINA AVE           | 0.41  | Medium                     | SW, 2 Sides              | \$108,827.89          | COLLIER         |                                                                         |                                                      |                            |
| P12                          | CAMP KEAIS RD        | IMMOKALEE RD        | OIL WELL RD            | 5.68  | Low                        | SW, 2 Sides              | \$1,302,380.94        | COLLIER         |                                                                         |                                                      |                            |
| P13                          | CAPRI BLVD           | ANTIGUA ST          | COLLIER BLVD           | 1.49  | Low                        | One Side & Both Sides    | \$307,869.55          | COLLIER         |                                                                         |                                                      |                            |
| P14                          | CAROLINA AVE         | WARREN ST           | BROWARD ST             | 0.65  | High                       | Both Sides               | \$149,524.00          | COLLIER         |                                                                         |                                                      |                            |
| P15                          | CARSON RD            | IMMOKALEE DR        | WESTCLOX ST            | 1.01  | High                       | One Side                 | \$115,841.04          | COLLIER         | PROGRAMMED                                                              |                                                      |                            |
| P16                          | CHARLOTTE ST         | JEFFERSON AVE W     | IMMOKALEE DR           | 0.01  | High                       | SW, 1 Side               | \$1,424.97            | COLLIER         |                                                                         |                                                      |                            |
| P17                          | COLLIER AVENUE       | BROADWAY E          | DUPONT ST              | 1.08  | High                       | One Side & Both Sides    | \$155,968.32          | EVERGLADES CITY |                                                                         |                                                      |                            |
| P18                          | COLLIER BLVD         | GREEN BLVD          | VANDERBILT BEACH RD    | 3.05  | Medium                     | One Side                 | \$349,577.83          | COLLIER         | FUNDED ROADWAY PROJECT                                                  | CST 2013/14                                          | х                          |
| P19                          | COLLIER BLVD         | DAVIS BLVD          | GREEN BLVD             | 3.08  | High                       | One Side & Both Sides    | \$587,758.91          | COLLIER         |                                                                         |                                                      | х                          |
| P20                          | COLLIER BLVD         | BUSINESS CIR S      | DAVIS BLVD             | 0.52  | Medium                     | One Side & Both Sides    | \$88,692.26           | COLLIER         |                                                                         |                                                      |                            |
| P21                          | COLLIER BLVD         | IVERNESS CLUB DR    | CLUB ESTATES DR        | 0.64  | High                       | SW, 1 Side               | \$73,629.35           | COLLIER         |                                                                         |                                                      |                            |
| P22                          | COLLIER BLVD         | DIAMOND LAKE CIR    | TOWER RD               | 0.94  | Medium                     | SW, 2 Sides              | \$215,189.53          | COLLIER         |                                                                         |                                                      | х                          |
| P23                          | COLLIER BLVD         | MAINSAIL DR         | DIAMOND LAKE CIR       | 2.86  | Low                        | SW, 2 Sides              | \$655,144.57          | COLLIER         |                                                                         |                                                      |                            |
| P24                          | COLLIER BLVD         | MAINSAIL DR         | S END JOLLEY BRIDGE    | 2.64  | Medium                     | One Side & Both Sides    | \$551,546.10          | COLLIER         |                                                                         |                                                      |                            |
| P25                          | COPELAND AVE S       | IXORA ST            | OYSTER BAR LN          | 0.73  | High                       | SW, 2 Sides              | \$167,097.93          | EVERGLADES CITY |                                                                         |                                                      |                            |
| P26                          | COPELAND AVE S       | OYSTER BAR LN       | SMALLWOOD DR           | 2.77  | Medium                     | SW, 1 Side               | \$623,674.24          | EVERGLADES CITY | RURAL - PAVED SHOULDER (EXISTING) MAY<br>SUFFICE                        |                                                      |                            |
| P27                          | CORKSCREW RD         | CORKSCREW RD        | SR 82                  | 5.38  | Low                        | SW, 2 Sides              | \$1,232,702.98        | COLLIER         | RURAL - PAVED SHOULDER (NEEDED) MAY<br>SUFFICE                          |                                                      |                            |
| P28                          | COUNTY BARN RD       | DAVIS BLVD          | RATTLESNAKE HAMMOCK RD | 2.04  | Medium                     | SW, 2 Sides              | \$466,865.43          | COLLIER         | DRAINAGE ISSUES - FEASIBILITY STUDY MAY BE<br>NEEDED                    |                                                      | х                          |
| P29                          | CR 29                | TAMIAM TRL E        | COLLIER AVE            | 2.84  | Medium                     | SW, 2 Sides              | \$651,189.28          | COLLIER         | RURAL- PAVED SHOULDERS                                                  |                                                      |                            |
| P30                          | CR 846               | CAMP KEAIS RD       | STOCKADE RD            | 1.48  | Low                        | Both Sides               | \$339,352.16          | COLLIER         | RURAL - PAVED SHOULDRS                                                  |                                                      | х                          |
| P31                          | CR 846 E             | AIRPARK BLVD        | THORP RD               | 8.64  | Low                        | Both Sides               | \$1,980,721.77        | COLLIER         | RURAL - PAVED SHOULDER (NEEDED) MAY<br>SUFFICE                          |                                                      |                            |
| P32                          | CR 846 E             | E MAIN ST           | AIRPARK BLVD           | 0.43  | High                       | SW, 2 Sides              | \$98,137.34           | COLLIER         |                                                                         |                                                      | х                          |
| P33                          | CRAYTON RD           | CRAYTON PL N        | SEAGATE DR             | 0.13  | High                       | SW, 2 Sides              | \$30,661.71           | NAPLES          |                                                                         |                                                      |                            |
| P34                          | CRAYTON RD           | BANYAN BLVD         | IXORA DR               | 0.11  | High                       | SW, 1 Side               | \$12,126.05           | NAPLES          |                                                                         |                                                      |                            |

#### 2012 Comprehensive Pathways Plan Pedestrian Priority Needs

| Pedestrian Need<br>ID Number | Roadway Name         | From                     | То                   | Miles | Pedestrian Need<br>Ranking | Proposed Improvement  | Estimated Const. Cost | Jurisdiction | Comment                                                 | Identified TIP<br>Project<br>(Programmed<br>Funding) | LRTP<br>Roadway<br>Project |
|------------------------------|----------------------|--------------------------|----------------------|-------|----------------------------|-----------------------|-----------------------|--------------|---------------------------------------------------------|------------------------------------------------------|----------------------------|
| P35                          | CRAYTON RD           | IXORA DR                 | WHISPERING PINE LN   | 3.11  | Medium                     | One Side              | \$356,249.74          | NAPLES       |                                                         |                                                      |                            |
| P36                          | DAVIS BLVD           | COUNTY BARN RD           | COLLIER BLVD         | 3.24  | High                       | One Side & Both Sides | \$717,394.34          | COLLIER      | PARTIALLY FUNDED                                        | PARTIAL FY 2012/13<br>2013/2014                      |                            |
| P37                          | E MAIN ST            | 12TH ST                  | NEW HARVEST RD       | 0.34  | High                       | SW, 1 Side            | \$39,387.84           | COLLIER      |                                                         |                                                      |                            |
| P38                          | EVERGLADES BLVD N    | GOLDEN GATE BLVD E       | IMMOKALEE RD         | 9.33  | Low                        | SW, 2 Sides           | \$2,139,199.86        | COLLIER      | RURAL - PAVED SHOULDER (NEEDED) MAY<br>SUFFICE          | ROW 2016/17                                          | х                          |
| P39                          | EVERGLADES BLVD S    | GOLDEN GATE BLVD E       | 48TH AVE SE          | 5.61  | Low                        | SW, 2 Sides           | \$1,286,616.92        | COLLIER      | RURUAL - PAVED SHOULDERS                                | ROW 2016/17                                          | х                          |
| P40                          | GOLDEN GATE BLVD E   | WILSON BLVD N            | DESOTO BLVD N        | 5.69  | Low                        | SW, 2 Sides           | \$1,305,277.56        | COLLIER      | RURAL - PAVED SHOULDER (NEEDED) MAY<br>SUFFICE          |                                                      | х                          |
| P41                          | GOLDEN GATE PKWY     | TROPICANA BLVD           | 53RD TER SW          | 0.39  | High                       | SW, 1 Side            | \$44,994.13           | COLLIER      |                                                         |                                                      |                            |
| P42                          | GOLDEN GATE PKWY     | COLLIER BLVD             | SUNSHINE BLVD        | 0.93  | High                       | One Side & Both Sides | \$119,616.43          | COLLIER      | FUNDED                                                  | CST 2012/2013                                        |                            |
| P43                          | GOODLETTE-FRANK RD N | ORANGE BLOSSOM DR        | VANDERBILT BEACH RD  | 2.69  | Medium                     | One Side & Both Sides | \$490,535.83          | COLLIER      |                                                         |                                                      | х                          |
| P44                          | GOODLETTE-FRANK RD N | SOLONA RD                | CLUBHOUSE DR         | 1.07  | High                       | SW, 1 Side            | \$123,088.99          | COLLIER      |                                                         |                                                      |                            |
| P45                          | GREEN BLVD           | COLLIER BLVD             | LOGAN BLVD S         | 2.00  | High                       | One Side & Both Sides | \$339,011.41          | COLLIER      |                                                         |                                                      | х                          |
| P46                          | GULF SHORE BLVD N    | VILLA MARE LN            | "SOUTHERN EXTENT"    | 1.22  | Medium                     | SW, 1 Side            | \$139,746.79          | NAPLES       |                                                         |                                                      |                            |
| P47                          | GULF SHORE BIVD N    | CRAYTON                  | BANYAN               | 1.08  | High                       | One Side & Both Sides | \$225,383.03          | NAPLES       | FUNDED FROM BANYAN TO MOORING LINE                      |                                                      |                            |
| P48                          | GULF SHORE BLVD N    | 8TH AVE                  | OLEANDER DR          | 0.68  | Medium                     | SW, 1 Side            | \$78,320.26           | NAPLES       |                                                         |                                                      |                            |
| P49                          | GULF SHORE BLVD S    | 13TH AVE S               | 8TH AVE S            | 1.07  | Medium                     | One Side & Both Sides | \$130,849.52          | NAPLES       |                                                         |                                                      |                            |
| P50                          | GULF SHORE DR        | VANDERBILT BEACH RD      | BLUEBILL AVE         | 1.31  | Medium                     | SW, 1 Side            | \$150,302.78          | NAPLES       | DRAINAGE CHALLENGES, MAY AFFECT IMPROVEMENT FEASIBILITY |                                                      |                            |
| P51                          | HERNANDO DR          | SNELL CT                 | KENDALL DR           | 0.55  | High                       | 8' SW, 2 Sides        | \$193,724.68          | MARCO        | PROGRAMMED                                              | CST 2014/15                                          |                            |
| P52                          | IMMOKALEE DRIVE      | N 15TH ST                | CARSON RD            | 1.01  | High                       | One Side & Both Sides | \$137,923.68          | COLLIER      |                                                         |                                                      |                            |
| P53                          | IMMOKALEE RD         | MEDICAL BLVD             | AIRPORT PULLING RD N | 0.95  | High                       | SW, 1 Side            | \$108,643.92          | COLLIER      |                                                         |                                                      |                            |
| P54                          | IMMOKALEE RD         | PEBBLEBROOKE DR          | BELLAIRE DR          | 0.47  | High                       | SW, 1 Side            | \$53,883.62           | COLLIER      | PLANNED SUP ON N SIDE OF IMMOKALEE                      |                                                      |                            |
| P55                          | IMMOKALEE RD         | HERITAGE BAY BLVD        | RANDALL BLVD         | 4.13  | Low                        | SW, 1 Side            | \$473,578.70          | COLLIER      | RURAL - PAVED SHOULDER (EXISTING) MAY<br>SUFFICE        |                                                      |                            |
| P56                          | IMMOKALEE RD         | Point West of Camp Keais | 41ST AVE NE          | 15.16 | Low                        | One Side & Both Sides | \$3,447,176.72        | COLLIER      | RURAL - PAVED SHOULDER (NEEDED) MAY<br>SUFFICE          |                                                      |                            |
| P57                          | IMMOKALEE RD         | AIRPORT PULLING RD N     | NORTHBROOKE DR       | 1.99  | Medium                     | SW, 1 Side            | \$228,627.29          | COLLIER      |                                                         |                                                      |                            |
| P58                          | IMMOKALEE RD         | 4TH ST NE                | 41ST AVE NE          | 2.19  | Medium                     | One Side & Both Sides | \$325,909.40          | COLLIER      |                                                         |                                                      |                            |
| P59                          | INLET DR             | S BARFIELD DR            | W INLET DR           | 0.45  | High                       | 8' SW, 2 Sides        | \$158,583.93          | MARCO        | PROGRAMMED                                              |                                                      |                            |
| P60                          | LAKE TRAFFORD RD     | LIBERTY WAY              | TIPPINS TER          | 0.98  | High                       | One Side & Both Sides | \$198,471.11          | COLLIER      |                                                         |                                                      |                            |
| P61                          | LAKE TRAFFORD RD     | N 15TH ST                | CARSON RD            | 1.00  | High                       | SW, 1 Side            | \$115,077.34          | COLLIER      |                                                         |                                                      |                            |
| P62                          | LAKE TRAFFORD RD     | TIPPINS TER              | "LAKE"               | 0.54  | Medium                     | SW, 2 Sides           | \$124,314.03          | COLLIER      |                                                         |                                                      |                            |
| P63                          | LIVINGSTON RD S      | RADIO RD                 | GOLDEN GATE PKWY     | 1.41  | High                       | SW, 1 Side            | \$161,923.35          | COLLIER      |                                                         |                                                      |                            |
| P64                          | LIVINGSTON RD S      | PINE RIDGE RD            | GOLDEN GATE PKWY     | 2.59  | Medium                     | SW, 1 Side            | \$297,100.11          | COLLIER      |                                                         |                                                      |                            |
| P65                          | LOGAN BLVD N         | VANDERBILT BEACH RD      | SYCAMORE DR          | 2.06  | Low                        | SW, 1 Side            | \$236,670.29          | COLLIER      |                                                         |                                                      | х                          |
| P66                          | MAGNOLIA POND DR     | COLLIER BLVD             | TITAN WAY            | 0.81  | Medium                     | SW, 1 Side            | \$93,389.69           | COLLIER      |                                                         |                                                      |                            |
| P67                          | MOORING LINE DR      | GULFSHORE BLVD           | CRAYTON RD           | 0.46  | High                       | SW, 2 Sides           | \$106,601.33          | NAPLES       |                                                         |                                                      |                            |
| P68                          | N 1ST ST             | 2ND AVE                  | IMMOKALEE DR         | 0.37  | High                       | SW, 1 Side            | \$42,647.75           | COLLIER      | PARTIALLY FUNDED                                        | CST 2012/13                                          |                            |

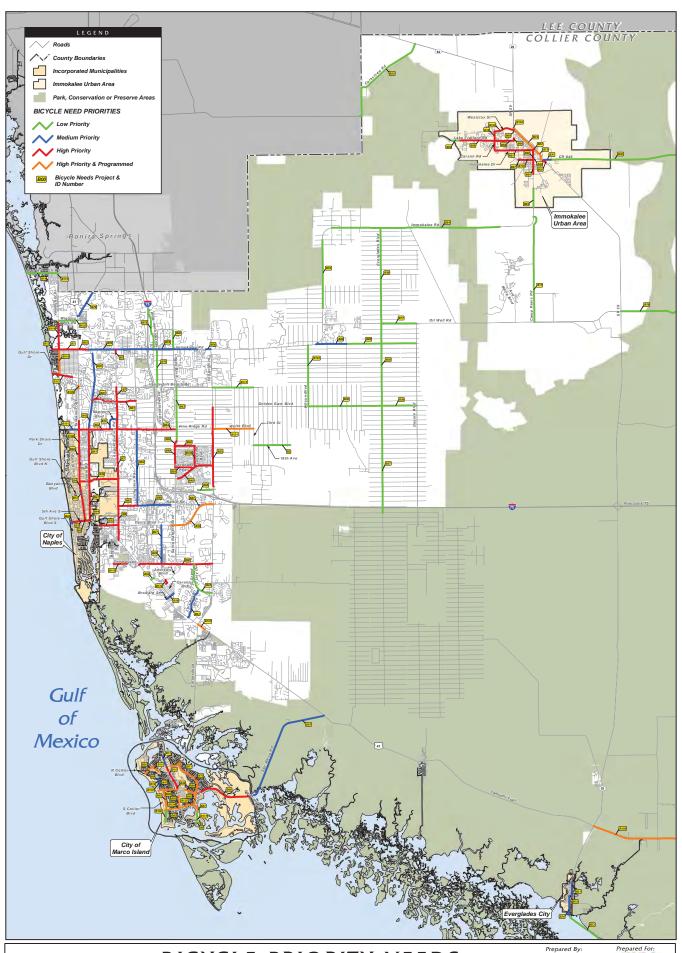
#### 2012 Comprehensive Pathways Plan Pedestrian Priority Needs

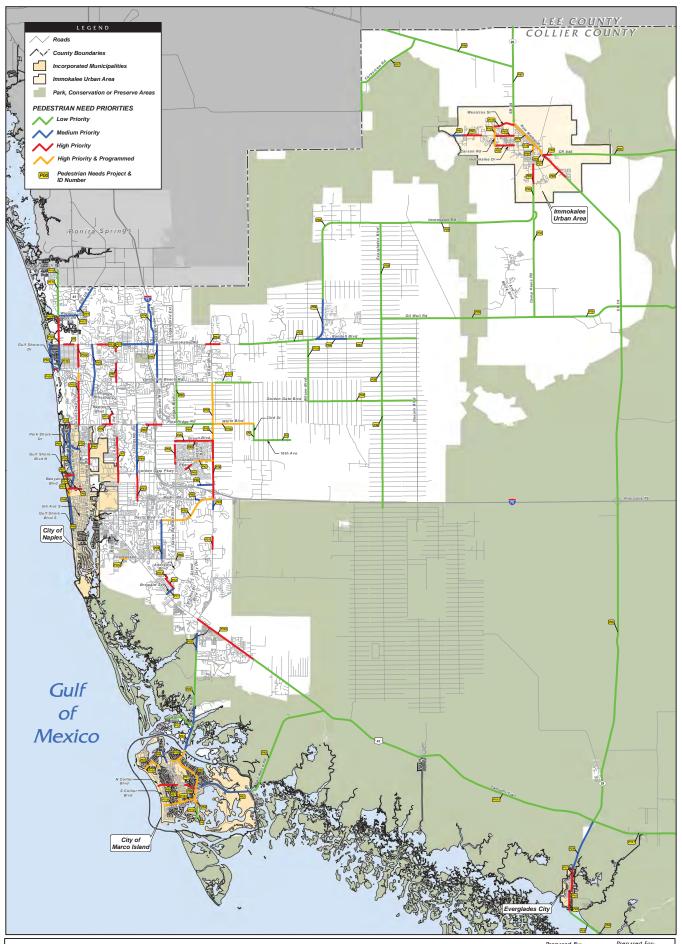
| Pedestrian Need<br>ID Number | Roadway Name       | From                   | То                  | Miles | Pedestrian Need<br>Ranking | Proposed Improvement      | Estimated Const. Cost | Jurisdiction | Comment                                                              | Identified TIP<br>Project<br>(Programmed<br>Funding) | LRTP<br>Roadway<br>Project |
|------------------------------|--------------------|------------------------|---------------------|-------|----------------------------|---------------------------|-----------------------|--------------|----------------------------------------------------------------------|------------------------------------------------------|----------------------------|
| P69                          | N BARFIELD DR      | S BARFIELD DR          | N COLLIER BLVD      | 2.01  | High                       | 8' SW, 2 Sides            | \$713,103.96          | MARCO        | PROGRAMMED                                                           |                                                      |                            |
| P70                          | N COLLIER BLVD     | ROSE CT                | COLLIER BLVD        | 0.71  | High                       | 8' SW, 2 Sides            | \$253,236.74          | MARCO        | PROGRAMMED                                                           |                                                      |                            |
| P71                          | NAPLES BLVD        | PINE RIDGE RD          | HOLLYWOOD DR        | 0.64  | High                       | SW, 1 Side                | \$73,510.71           | COLLIER      |                                                                      |                                                      |                            |
| P72                          | NEW MARKET RD E    | CHARLOTTE ST           | E MAIN ST           | 0.72  | High                       | One Side & Both Sides     | \$151,569.18          | COLLIER      |                                                                      |                                                      |                            |
| P73                          | NEW MARKET RD W    | CHARLOTTE ST           | N 15TH ST           | 1.61  | High                       | SW, 2 Sides               | \$368,188.77          | COLLIER      | FUNDED                                                               | CST 2014/15                                          |                            |
| P74                          | NORTHBROOKE DR     | IMMOKALEE RD           | BRYNWOOD DR         | 2.18  | Medium                     | One Side & Both Sides     | \$249,626.57          | COLLIER      | EXISTING SUP ON WEST SIDE                                            |                                                      |                            |
| P75                          | OAKES BLVD         | VANDERBILT BEACH RD    | IMMOKALEE RD        | 1.99  | Medium                     | SW, 2 Sides               | \$455,309.97          | COLLIER      |                                                                      |                                                      |                            |
| P76                          | OIL WELL RD        | EVERGLADES BLVD N      | SR 29               | 17.41 | Low                        | One Side & Both Sides     | \$3,634,923.03        | COLLIER      | RURAL - PAVED SHOULDER (EXISTING & NEEDED) MAY SUFFICE               |                                                      | х                          |
| P77                          | OLD US 41 N        | TAMIAMI TRL N          | COUNTY BOUNDARY     | 1.48  | Medium                     | One Side & Both Sides     | \$279,891.19          | COLLIER      |                                                                      |                                                      | х                          |
| P78                          | PARK SHORE DR      | COLONADE               | TAMIAMI TRAIL N     | 0.47  | Medium                     | SW, 1 Side                | \$53,702.65           | NAPLES       |                                                                      |                                                      |                            |
| P79                          | PINE RIDGE RD      | FOREST LAKES BLVD      | WOODSHIRE LN        | 0.49  | High                       | SW, 1 Side                | \$56,402.31           | COLLIER      |                                                                      |                                                      |                            |
| P80                          | PINE RIDGE RD      | WHIPPOORWILL LN        | NAPA BLVD           | 0.79  | High                       | SW, 1 Side                | \$91,104.78           | COLLIER      | CONSTRAINED ROADWAY, MAY CONSIDER SUP                                |                                                      |                            |
| P81                          | PINE RIDGE RD      | LOGAN BLVD S           | COLLIER BLVD        | 1.89  | Low                        | SW, 2 Sides               | \$434,357.54          | COLLIER      | CONSTRAINED ROADWAY, MAY CONSIDER SUP                                |                                                      |                            |
| P82                          | RADIO RD           | IBIS CLUB DR           | DAVIS BLVD          | 0.27  | Medium                     | One Side & Both Sides     | \$45,415.06           | COLLIER      |                                                                      |                                                      |                            |
| P83                          | RANDALL BLVD       | APPROACH BLVD          | DESOTO BLVD N       | 3.68  | Low                        | SW, 2 Sides               | \$843,227.46          | COLLIER      | RURAL - PAVED SHOULDER (NEEDED) MAY SUFFICE                          |                                                      | х                          |
| P84                          | RANDALL BLVD       | IMMOKALEE RD           | APPROACH BLVD       | 1.64  | Medium                     | One Side & Both Sides     | \$335,075.58          | COLLIER      | SOTTICE                                                              |                                                      | х                          |
| P85                          | S 1ST ST           | EUSTIS AVE             | STOCKADE RD         | 1.00  | High                       | One Side & Both Sides     | \$217,635.74          | COLLIER      |                                                                      |                                                      | х                          |
| P86                          | S BARFIELD DR      | N BARFIELD DR          | WINTERBERRY DR      | 0.64  | High                       | 8' SW, 2 Sides            | \$228,568.44          | MARCO        | PROGRAMMED                                                           |                                                      |                            |
| P87                          | S HEATHWOOD DR     | SAN MARCO RD           | WINTERBERRY DR      | 0.67  | High                       | 12' SUP, 1 Side           | \$183,439.43          | MARCO        | ANDULUSIA TO AUBURNDALE PROGRAMMED                                   |                                                      |                            |
| P88                          | SAINT ANDREWS BLVD | RATTLESNAKE HAMMOCK RD | PEGGY CIR           | 0.08  | Low                        | SW, 1 Side                | \$8,670.03            | COLLIER      |                                                                      |                                                      |                            |
| P89                          | SAN MARCO RD       | N COLLIER BLVD         | HEATHWOOD DR        | 1.00  | High                       | 8' SW, 1 Side             | \$176,598.49          | MARCO        | PROGRAMMED                                                           |                                                      |                            |
| P90                          | SAN MARCO RD       | US 41                  | CITY BOUNDARY       | 6.35  | Low                        | SW, 2 Sides               | \$1,456,170.11        | COLLIER      |                                                                      |                                                      |                            |
| P91                          | SAN MARCO RD       | SAND HILL ST           | BALMORAL CT         | 0.62  | High                       | 8' SW, 2 Sides            | \$220,510.04          | MARCO        |                                                                      |                                                      |                            |
| P92                          | SAN MARCO RD       | N BARFIELD DR          | City Limits         | 2.91  | High                       | 8' SW, 1 Side             | \$516,215.93          | MARCO        |                                                                      |                                                      |                            |
| P93                          | SANTA BARBARA BLVD | CEDAR TREE LN          | COPPER LEAF LN      | 1.00  | High                       | One Side & Both Sides     | \$210,174.87          | COLLIER      |                                                                      |                                                      |                            |
| P94                          | SMALLWOOD DR       | End of Road            | N LOPEZ LN          | 0.62  | Low                        | SW, 2 Sides               | \$141,639.71          | COLLIER      | RURAL - EXISTING PAVED SHOULDERS & PAVED SW MAY SUFFICE              |                                                      |                            |
| P95                          | SR 29              | WILLAMS LN             | AGRICULTURE WAY     | 1.35  | High                       | One Side & Both Sides     | \$192,846.53          | COLLIER      | RURAL - EXISTING PAVED SHOULDERS & PAVED SW ON WEST SIDE MAY SUFFICE |                                                      |                            |
| P96                          | SR 29              | AGRICULTURE WAY        | TAMAIMI TRL E       | 35.08 | Low                        | SW, 2 Sides               | \$8,043,729.50        | COLLIER      | RURAL - PAVED SHOULDER (EXISTING) MAY SUFFICE                        |                                                      | х                          |
| P97                          | SR 29 N            | NEW MARKET RD W        | COUNTY BOUNDARY     | 5.13  | Low                        | SW, 2 Sides               | \$1,176,411.63        | COLLIER      | RURAL - PAVED SHOULDER (EXISTING) MAY SUFFICE                        |                                                      | х                          |
| P98                          | SR 82              | SR 29 N                | COUNTY BOUNDARY     | 7.03  | Low                        | SW, 2 Sides               | \$1,611,350.63        | COLLIER      | RURAL - PAVED SHOULDER (EXISTING) MAY SUFFICE                        | PE 2012/13                                           | х                          |
| P99                          | SUNSHINE BLVD      | GREEN BLVD             | 17TH AVE SW         | 0.16  | High                       | SW, 2 Sides               | \$18,452.09           | COLLIER      | SUFFICE                                                              |                                                      |                            |
| P100                         | TAMIAMI TRL E      | COLLIER BLVD           | DUDA RD             | 3.62  | High                       | One Side & Both Sides     | \$771,434.31          | COLLIER      |                                                                      |                                                      | х                          |
| P101                         | TAMIAMI TRL E      | DUDA RD                | COUNTY BOUNDARY     | 53.13 | Low                        | SW, 2 Sides               | \$12,182,658.30       | COLLIER      | RURAL - PAVED SHOULDER (MOSTLY EXISTING) MAY SUFFICE                 |                                                      | х                          |
| P102                         | TAMIAMI TRL N      | 92ND AVE N             | 111TH AVE N         | 1.18  | High                       | SW, 2 Sides               | \$135,411.03          | COLLIER      | IVIAT SUFFICE                                                        |                                                      |                            |
| P103                         | TAMIAMI TRL N      | PINE RIDGE RD          | VANDERBILT BEACH RD | 2.70  | High                       | SW, 1 Side<br>SW, 2 Sides | \$619,161.55          | COLLIER      | FUNDED FROM VANDERBILT BEACH RD TO SOUTH OF PELICAN BAY BLVD         |                                                      | <u> </u>                   |

#### 2012 Comprehensive Pathways Plan Pedestrian Priority Needs

| Pedestrian Need<br>ID Number | Roadway Name        | From                | То               | Miles | Pedestrian Need<br>Ranking | Proposed Improvement  | Estimated Const. Cost | Jurisdiction | Comment                                                | Identified TIP<br>Project<br>(Programmed<br>Funding) | LRTP<br>Roadway<br>Project |
|------------------------------|---------------------|---------------------|------------------|-------|----------------------------|-----------------------|-----------------------|--------------|--------------------------------------------------------|------------------------------------------------------|----------------------------|
| P104                         | THOMASSON DR        | VERITY LN           | ORCHARD LN       | 0.29  | High                       | SW, 1 Side            | \$33,783.08           | COLLIER      | PROGRAMMED - BGT MSTU                                  |                                                      |                            |
| P105                         | TIGERTAIL CT        | HERNANDO DR         | N COLLIER BLVD   | 0.39  | High                       | 8' SW, 2 Sides        | \$139,428.84          | MARCO        | PROGRAMMED                                             |                                                      |                            |
| P106                         | VANDERBILT BEACH RD | GULF SHORE CT       | COMMERCE ST      | 0.11  | High                       | SW, 1 Side            | \$12,282.50           | COLLIER      |                                                        |                                                      |                            |
| P107                         | VANDERBILT BEACH RD | WEBER BLVD N        | 25TH ST NW       | 1.86  | Low                        | SW, 2 Sides           | \$426,115.35          | COLLIER      | RURAL - PAVED SHOULDER (NEEDED) MAY<br>SUFFICE         |                                                      | х                          |
| P108                         | VANDERBILT DR       | BLUEBILL AVE        | CAPTN KATE CT    | 0.25  | High                       | SW, 1 Side            | \$29,007.25           | COLLIER      |                                                        |                                                      |                            |
| P109                         | VANDERBILT DR       | ROMA CT             | WIGGINS PASS RD  | 1.18  | High                       | SW, 1 Side            | \$134,747.22          | COLLIER      |                                                        |                                                      |                            |
| P110                         | VANDERBILT DR       | 6TH ST              | 2ND ST           | 0.24  | Low                        | SW, 1 Side            | \$27,761.79           | COLLIER      |                                                        |                                                      |                            |
| P111                         | VANDERBILT DR       | 8TH ST              | WIGGINS PASS RD  | 2.02  | Low                        | SW, 1 Side            | \$231,896.58          | COLLIER      |                                                        |                                                      |                            |
| P112                         | VANDERBILT DR       | VANDERBILT BEACH RD | 111TH AVE N      | 1.34  | Medium                     | SW, 1 Side            | \$153,625.37          | COLLIER      | DAINAGE CHALLENGES, MAY AFFECT IMPROVEMENT FEASIBILITY |                                                      |                            |
| P113                         | W INLET DR          | INLET DR            | ADDISON CT       | 0.60  | Low                        | 8' SW, 2 Sides        | \$214,641.51          | MARCO        |                                                        |                                                      |                            |
| P114                         | WARREN ST           | SAINT ANDREWS BLVD  | CAROLINA AVE     | 0.26  | High                       | SW, 2 Sides           | \$60,724.95           | COLLIER      |                                                        |                                                      |                            |
| P115                         | WESTCLOX ST         | N 15TH ST           | CARSON RD        | 1.05  | High                       | SW, 1 Side            | \$120,378.16          | COLLIER      |                                                        |                                                      |                            |
| P116                         | WHITE BLVD          | 23RD ST SW          | 39TH ST SW       | 2.12  | High                       | One Side & Both Sides | \$472,133.40          | COLLIER      | FUNDED FROM WEBER BLVD TO GOLDEN GATE CANAL/23RD ST    |                                                      | х                          |
| P117                         | WIGGINS PASS RD     | TAMIAMI TRL N       | VANDERBILT DR    | 1.02  | Medium                     | SW, 1 Side            | \$116,549.42          | COLLIER      |                                                        |                                                      |                            |
| P118                         | WILSON BLVD N       | GOLDEN GATE BLVD E  | IMMOKALEE RD     | 3.21  | Low                        | SW, 2 Sides           | \$737,167.49          | COLLIER      | RURAL - PAVED SHOULDER (NEEDED) MAY<br>SUFFICE         |                                                      | х                          |
| P119                         | WINTERBERRY DR      | S COLLIER BLVD      | S HEATHERWOOD DR | 0.81  | High                       | 12' SUP, 2 Sides      | \$441,571.51          | MARCO        | FUNDED                                                 | CST 2016/17                                          |                            |
| P120                         | WINTERBERRY DR      | S HEATHERWOOD DR    | N BARFIELD DR    | 0.79  | High                       | 12' SUP, 2 Sides      | \$429,906.32          | MARCO        | PROGRAMMED                                             |                                                      |                            |

TOTAL \$65,817,589.03







#### **Project Selection Process**

The PAC is responsible for annually identifying, evaluating and selecting projects for funding. The Needs Plan provides a framework and tool for them to make informed project decisions.

The Prioritized Needs Plan should be seen as a tool that provides general guidance and a cursory evaluation of all needs based on the selected criteria. However, individual projects tend to be complex and have a unique set of circumstances. As a result, other, more detailed or more recent information should also be considered when going through the annual project selection process. For example, a project may be ranked as High Priority, but construction feasibility may prevent it from being selected as an immediate project. Likewise, projects may be ranked as Medium or Low Priority but special funding or unique circumstances such as a number of recent injuries or fatalities may warrant it to be selected before higher ranked needs.

On an annual basis, the PAC should follow this process when selecting projects for funding:

- Review the Prioritized Needs Plan and any other potential needs from local plans or Walkable Community Studies.
- Discuss potential projects they would like to be evaluated and ask local jurisdiction to officially submit those for review and consideration
- Sponsoring jurisdictions submit projects for consideration and include a Project Evaluation Summary Form for each project.

- 4) The PAC evaluates each project on its individual merits and allows the sponsoring agent to present a case for that given project.
- 5) Based on the estimated funding allocated to Bicycle and Pedestrian projects, the PAC select projects to be sent to FDOT for Constructability Review. A Constructability Review form should be developed for each project and provided to FDOT. Projects that have already been selected by the PAC but are not yet funded by FDOT should maintain their place in queue unless circumstances associated with their selection have changed.
- 6) Based on FDOT's Constructability Review, the PAC reviews its proposed list and adjusts it as needed.
- 7) The list of proposed projects is forwarded to the TAC and CAC for endorsement and to the MPO Board for approval.

#### Greenways & Trails

As mentioned in previous sections, greenways and trails, which are bicycle and pedestrian pathways outside of the road right-of-way are popular facilities that have not received much attention and funding from the MPO in the past. This is partly due to the decision to prioritize the significant and basic on-road needs that currently exist throughout the county and because greenways and trails are often expensive and complex projects to develop. Nonetheless, they are very



popular facilities that provide numerous benefits and are preferred by a wide variety of users.

As recommended in the previous section of this report, the MPO should consider developing separate greenways and trails program to provide greenways and trails the much needed attention they deserve.

There are several promising greenway projects that have been identified and are a different conceptual or implementation stages. These projects are described below and depicted on Exhibit 26. These projects are identified bicycle and pedestrian needs and should be considered for funding.

#### **Descriptions of Greenways**

The Gordon River Greenway will run through one of the last unspoiled areas of urban Naples. The Greenway will stretch two miles from Golden Gate Parkway towards the heart of Naples, ending at Central Avenue. The first section of the Greenway opened in 1992. It consists of a paved loop trail adjacent to the Naples Municipal Airport. The Greenway Park will also feature a canoe and kayak launch, scenic overlooks, picnic shelter areas, wildlife viewing stations, bridges, benches, and educational signage with interpretive graphics.

The River of Grass Greenway (ROGG) is proposed to run parallel to Tamiami Trail (US. 41), the ROGG will be a hard-surfaced 12-14 foot wide corridor (separated from the highway) suitable for a range of non-motorized recreation activities such as bicycling, walking, bird-watching, photography, fishing, and general enjoyment of the greater Everglades natural area. ROGG will extend from

Krome Avenue (at the eastern edge of Everglades National Park near Miami) to the Naples area, a distance of approximately 75 miles. Over 90% of the pathway will go through national and state parks, and will include spurs to nearby historic and cultural centers including Everglades City and the Miccosukee Indian Village. Parks include Everglades National Park, Big Cypress National Preserve, Ten Thousand Islands National Wildlife Refuge, Fakahatchee Strand Preserve State Park, Collier-Seminole State Park, and Picayune Strand State Forest.

Rich King Memorial Greenway is an approximately three-mile asphalt pathway constructed in 2011 from Rattlesnake Hammock Road to Radio Road in the Florida Power & Light (FPL) right-of-way west of Santa Barbara Blvd. The greenway provides people of all ages an attractive, safe, accessible and free area to cycle, walk, jog or skate. This is the first phase



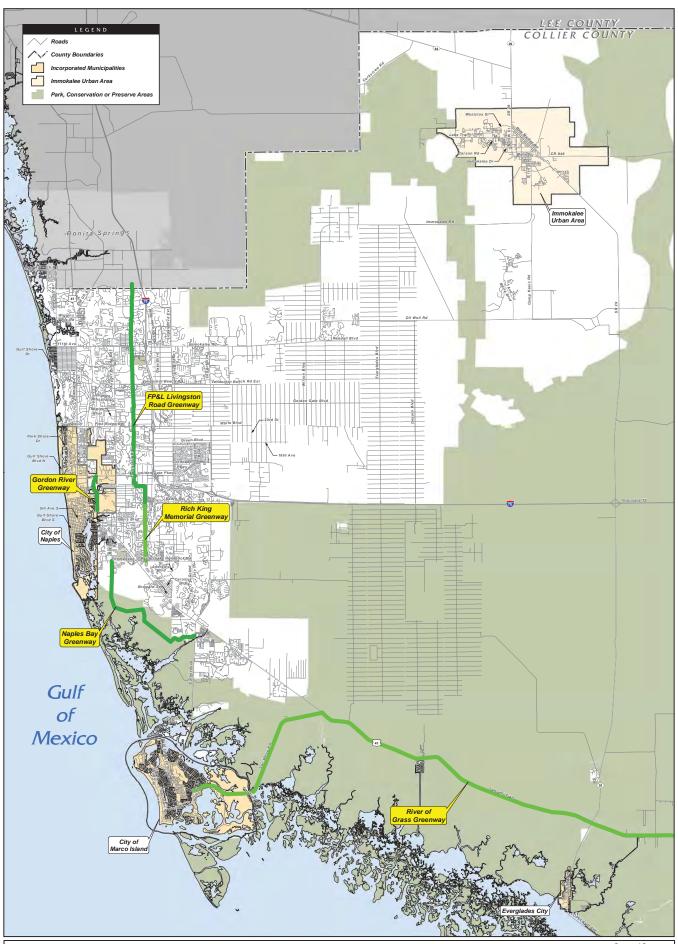


of a proposed greenway that is planned to connect with the FPL right-of-way that runs parallel to Livingston Road (see Exhibit 26).

Livingston Road/FPL Greenway is an opportunity corridor to extend the existing Rich King Memorial Greenway to the north by crossing to the west to follow the FPL right-of-way alignment that runs just west of Livingston Road. This greenway will continue north into Lee County making this a regional connection for people to cycle, walk, jog or skate.

Naples Bay Greenway is a proposed greenway that would connect two popular tourist attractors - Rookery Bay, a National Estuarine Research Reserve, and the Naples Botanical Gardens. The Greenway is proposed to run partially along the FPL right-of-way running south of Tamiami Trail East (US41) from Collier Blvd. (SR951) to the Naples Botanical Gardens at Bayshore Drive and Thomasson Drive. There would be recreational activities such as bicycling, walking, bird-watching, and photography to add enjoyment of this mangrove estuary.







#### **Bicycle Routes**

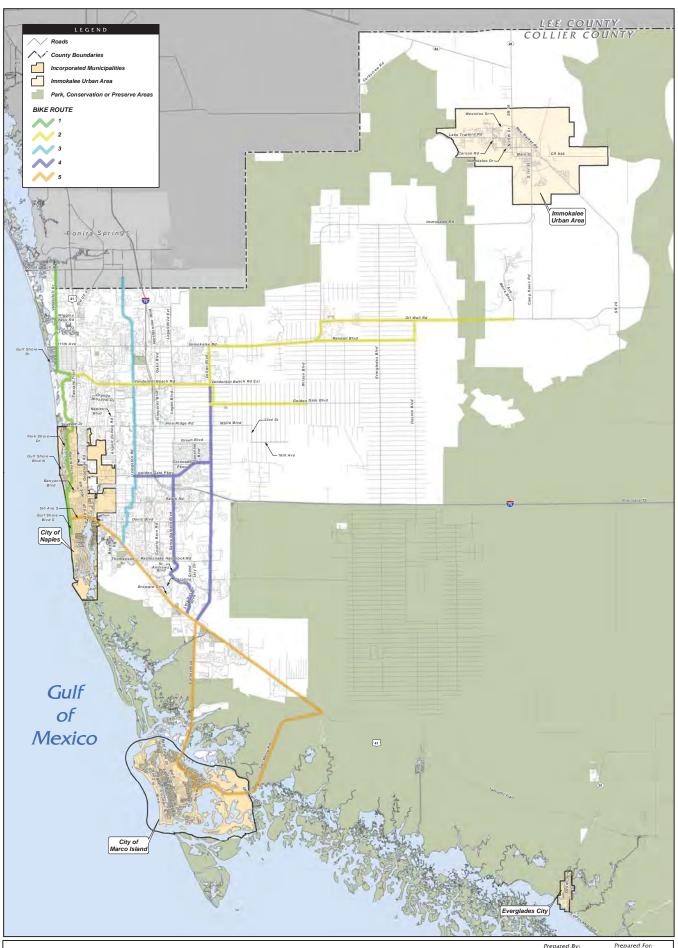
Similar to greenways and trails, the MPO and its member jurisdictions should consider developing bicycle routes in Collier County. Bicycle routes are on-roads facilities that are clearly marked and signed. These routes would not necessitate additional facilities in the short-term and could consist of existing bike lanes and paved shoulders in combination with sharrows where facilities are absent and a comprehensive wayfinding and signage program.

Collier County is home to a significant amount of avid cyclists that prefer on-road facilities and long continuous rides. These riders can regularly be observed on numerous roads throughout the county. They are bicycling advocates and are often be ambassadors for the bicycling community. Developing routes to meet

their needs is a way to accommodate a significant user group, but is also a way to improve safety conditions, encourage bicycling, and educate the public. Develop highly visible routes could bring attention to bicycling as mode of transportation and highlight the need for all modes to share the road. It could be used to educate bicyclists and motorists and could be an integral component of a marketing campaign to promote bicycling and walking in Collier County.

Exhibit 27 presents several potential bicycle routes that are currently used by bicycling enthusiast and were identified through the public involvement process and members of the Stakeholders Working Group. The routes identified on this map should also be considered as identified needs. The feasibility of developing these routes should be examined and special funding should be pursued.









The 2012 Comprehensive Pathways Plan includes substantial facility needs that will be addressed over a long period of time. It also provides numerous recommendations for policies, programs, and other initiatives that may require continued research, planning and design. It is understood that these recommendation entail costs and additional resources, and therefore, will take time to implement and will be subject to funding availability.

Nonetheless, this plan recommends that the MPO, its member jurisdiction and the PAC take the following immediate action steps to implement the plan.

# Adopt a Bicycle and Pedestrian Accommodation Policy

- Should recognize the importance of bicycle and pedestrian modes of transportations
- Should explicitly articulate that all new roadway projects should make every effort to accommodate all modes of transportation
- Should recognize the continued need to enhance or retrofit existing roadways to accommodate biking and walking.

### Develop a Priority List of Policies that local jurisdictions should be encouraged to adopt

The PAC should review the local regulatory framework and identify policies that would support and facilitate the development of roadways and communities that are walkable and livable. One example is the adoption of complete street policies that can be catered to each individual jurisdiction.

#### Develop an Education, Encouragement, and Enforcement Priority Plan

Much of the PAC's efforts are dedicated to facility development. The PAC should expand the MPO's existing bicycle and pedestrian program by developing a brief but wide-ranging education, encouragement and enforcement priority plan. This plan should identify potential programs, campaigns and events that could be developed to educate Collier County residents about safety issues, and promote biking and walking. The plan should also explore partnership with various government departments and agencies and the private sector.

# Establish a Greenways & Trails Program

A separate program for greenways and trails would bring focused attention and resources to an identified need for off-road bicycle and pedestrian facilities

### Establish a Bicycle Route Program

The bicycle route program could work towards the immediate development of one bicycle route. This could be a high impact but low cost project that utilizes existing facilities and a unified pavement marking, signage and way finding scheme.



#### Review Local Growth Management Plans and Land Development Codes & Recommend Beneficial Amendments

The MPO and its various committees should coordinate with ongoing efforts such as the Master Mobility Plan which calls for the evaluation and revision of local growth management plans and land development codes to promote and assist the development of walkable, sustainable and livable communities.

## Establish a Formal Bicycle and Pedestrian Review Process for Roadway Projects Including Resurfacing

Lastly, the PAC should establish a formal review process of every proposed roadway project to evaluate the potential to accommodate or enhance bicycle and pedestrian facilities through design improvements. One such opportunity is adding paved shoulders or bike lanes through restriping as part of the resurfacing process.

