



Chapter 1: Introduction and Vision

The purpose of this Master Comprehensive Bicycle Transportation Plan is to provide a foundation on which future decisions regarding bicycle transportation will be based, including both long and short range strategies and actions that will most efficiently integrate bicycling into the overall multi-modal transportation system. The chapters of this report provide those long and short range strategies, based on an approach that seeks to leverage cost-effective approaches to provide improved bicycling conditions across Palm Beach County, with a concerted effort to focus investments where facilities are most likely to be used. Over time, as facility improvements are implemented in a manner that meets community expectations, the utility of bicycling as a true transportation option will increase. As more and more roadways accommodate to bicycle travel, reality will begin to resemble the Vision described by this plan.

In 2035 Palm Beach County will be a place where bicycling is experienced as

- **a safe and convenient transportation option and**
- **an attractive form of recreation for residents and visitors alike.**

1.1 BENEFITS OF BICYCLING

The desired results of this effort - increasing the viability of biking and as transportation and recreation options for residents of and visitors to Palm Beach County - will benefit the County

in numerous ways (see Figure 1.1). In addition to being a highly enjoyable activity in and of itself, bicycling fulfills important functions in the overall transportation network and in people's everyday lives. Bicycling provides basic mobility - and therefore access to work, school, and necessary personal appointments - for people who cannot afford a car or who are unable to drive or are prohibited from driving, and also provides transportation options for those people who would prefer not to travel by automobile on all trips. Bicycling can also serve as the final leg of transit trips, allowing riders to get between home and their boarding stop and between their disembarking stop and their final destination.

In addition to these direct benefits to the mobility of bicyclists, increased bicycling benefits the overall transportation network by providing cost-effective options for short trips and increasing the viability of transit for longer trips, both of which can provide alternatives to car trips and reduce the problem of roadway congestion. Bicycling produces no emissions, and so provides travel options that do not contribute to air pollution. More significantly, bike trips can replace many short automobile trips, which contribute disproportionately to emissions levels. Biking has personal and social benefits as well, as it provides opportunities to incorporate physical activity into the daily routines of Palm Beach County residents, leading to better public health and a greater quality of life.

Bicycling opportunities can also serve as an attractive family activity for visitors. Communities across the country have embraced non-motorized transportation as a popular and beneficial option that residents





Why Improve Bicycling Conditions?



Personal, Local and Regional Benefits

Healthy Living and Quality of Life

- 30 minutes of moderate exercise, five days a week, can significantly reduce risks for many illnesses including heart disease, high blood pressure, arthritis, depression and obesity.
- Bicycling for short errands can provide the sort of moderate exercise needed to reduce these risks.
- Improved bicycling conditions provide transportation benefits while also providing opportunities for physical activity.
- Improved bicycling conditions add to the vitality and quality of life of community centers and recreational destinations across Palm Beach County.

Transportation Options

- Improved bicycling conditions provide basic mobility for people who do not have personal automobiles.
- Improved bicycling conditions provide access to public transit for longer trips.
- Improved bicycling conditions allow people to use their cars less, thereby saving money on gas and car maintenance.

Congestion Mitigation

- Improved bicycling conditions provide commuting options for people who live relatively close to work.
- Improved bicycling conditions provide access to public transit for longer trips.
- Improved bicycling conditions are cost-effective ways to accommodate more trips on our existing transportation rights-of-way.

Air Quality

- Bicycle trips create no vehicle emissions.
- Enhanced opportunities for local bicycling, combined with access to transit, allows people to reduce their contribution to the problem of air pollution.
- Vehicles burn fuel less efficiently before their engines have warmed up, increasing harmful emissions. Bike trips can replace short car trips which pollute at disproportionately high levels.

PHOTO COURTESY OF PALM BEACH COUNTY



**Master Comprehensive
Bicycle Transportation Plan
for Palm Beach County**



Figure 1.1: Poster describing the benefits of non-motorized modes, prepared for plan workshops





increasingly expect and visitors actively seek when making choices about where to locate their families and spend their vacation dollars. With this plan, Palm Beach County is taking important steps towards a future in which biking and walking are experienced as viable options for trips of all purposes.

1.2 STRUCTURE OF THE PLAN

This document takes a methodical approach to identifying ways to improve bicycling conditions in Palm Beach County. First, it paints a picture of the existing conditions for bicycling around the county, by evaluating existing infrastructure conditions, reviewing safety data and by surveying planning and code-based initiatives related to bicycling. The infrastructure analysis reveals that the countywide study network of arterial and collector roadways has a distance-weighted average Bicycle Level of Service (a nationally established measure of bicycling conditions) grade of “D” (on an A-F scale). This is a common result in major metropolitan areas across the United States; it presents a challenging environment for bicyclists which could be improved, but it is not unusually difficult compared to other communities. The plan then establishes performance thresholds derived from public input, that infrastructure performance should achieve Bicycle Level of Service “C” on priority roadways in the county, and Bicycle Level of Service “D” elsewhere.

The existing conditions were measured against these thresholds, and it was found that 523 miles of roadway are already meeting these expectations, while another 596 miles were in need of improvement. Based on

geometric (including lane count and width) and traffic data (including speed and volume) collected on each roadway, the plan then recommends strategies, such as re-striping to create bike lanes, widening shoulders, and performing detailed studies of corridors on which neither of the first two strategies are feasible (a special section of the plan develops pilot studies of six such corridors, as examples of this more intensive approach). The plan then prioritizes the recommended improvements based on a variety of benefit measures, including demand indicators and measurable performance improvements, and estimated costs of implementation. These prioritized recommendations are stratified into tiers to guide decisions by the Metropolitan Planning Organization (MPO) with respect to their ultimate implementation.

The MPO presently provides funding assistance to bicycle projects through their inclusion in larger roadway projects and through the Florida Department of Transportation’s (FDOT) Transportation Enhancement Program. These will continue to be important avenues for implementing bicycle facilities. Inclusion of bicycle facilities in roadway projects, sometimes referred to as “routine accommodation” and consistent with the “Complete Streets” ethos, is a very effective way to provide bicycle accommodation. It incorporates a relatively small incremental cost within a significantly larger overall budget and the more comprehensive construction processes provide flexibility of design by removing many of the constraints faced by standalone bicycle projects. Routine accommodation will continue to be an important approach to providing bicycle facilities in Palm Beach





County, but this Plan also provides prioritized facility recommendations (described above and detailed in Chapters 5 and 6) that will assist the MPO in deciding which standalone bicycle projects to support with funding assistance as other funding strategies become established.

The Plan also contains policy and program recommendations that, if implemented, will support the vision of a future in which bicycling is experienced as a safe and convenient mode of transportation in Palm Beach County. Finally, the Plan proposes an evaluation process that will assist the MPO in tracking the progress made on the plan's objectives, the meeting of its goals, and ultimately, the achievement of the vision.

1.3 PUBLIC INVOLVEMENT

The development of this plan had two distinct phases of public involvement. A series of four public open house workshops were held in April 2010, in Belle Glade, Jupiter, West Palm Beach, and Boca Raton. At these meetings, participants were able to review the existing conditions (Bicycle Level of Service) results and provide their input on what should be acceptable performance thresholds for the plan's study network. Participants were also asked to identify a limited number of roadways on which bicycle improvements should be prioritized. The responses to these questions figured directly into the determination of performance thresholds and identification of priority corridors.

A final public meeting was held in December 2010, and a draft report was posted on the MPO website to allow comment upon the draft document.

The Plan's progress and general recommendations was presented to the MPO Board on October 21, 2010. Comments and suggestions from MPO board members were taken into consideration as the draft final Plan was developed.

1.4 VISION, GOALS, AND OBJECTIVES

This Plan's recommendations were developed to assist the MPO, the County, and local municipalities work together to achieve the overall vision. This vision can be realized by meeting a number of discrete goals, which in turn are supported by specific objectives.

VISION:

In 2035 Palm Beach County will be a place where bicycling is experienced as

- **a safe and convenient transportation option, and**
- **an attractive form of recreation for residents and visitors alike.**

Achieving this vision will help Palm Beach County remain a preferred place to live and visit, with a truly multimodal transportation system, an unparalleled quality of life, and a healthy, active, and vibrant population. The following goals (*and supporting objectives in italics*), if met, will help Palm Beach County become the place described in the Vision.

TRANSPORTATION GOALS FOR SAFETY

Palm Beach County and its municipalities shall increase bicycle safety by achieving the following goals:





S1 Provide bicycle facilities that are designed to maximize user safety and provide a comfortable experience that encourages their use.

- *Increase the mileage of roadways achieving their designated performance threshold for bicycling by 2030.*
- *Plan and fund regular maintenance for on-street bicycle facilities.*

S2 Educate the public about the safe operation of bicycles.

- *Plan and fund regular educational campaigns on bicycle safety, especially in response to crash factors found to be common in Palm Beach County.*

S3 Encourage the public to choose bicycling as a preferred mode when appropriate.

- *Plan, fund and promote the system of on-street and off-street bicycling facilities with emphasis on providing access to preferred destinations within short distances.*
- *Enforce laws, codes, and ordinances that have bearing on the safe integration of bicycles into the transportation system.*
- *Train and encourage law enforcement officers to enforce laws related to bicycle safety, especially those found to be related to common crash factors in Palm Beach County.*
- *Continuously evaluate bicycle related initiatives for effectiveness and making adjustments to these initiatives when appropriate; and*
- *Plan and fund regular review of the objectives described above, in order to track their effectiveness so that results may be reported to the public and adjustments may be made as needed.*

TRANSPORTATION GOALS FOR CONVENIENCE

Palm Beach County and its municipalities shall increase the convenience of bicycling as a mode of transportation by achieving the following goals:

C1 Provide a network of bicycle facilities that serves the broadest possible range of users and accesses important destinations.

- *Prioritize investments in improved on-street bicycle facilities to focus on areas with high potential for bicycle trips and/or which serve populations with less access to personal motor vehicles.*

C2 Encourage bicycling as a practical mode for certain trip types.

- *Plan and fund encouragement programs with public and private partners (including employers and local businesses) to provide incentives for customers and employees who travel by bicycle, and to recognize regular participation.*
- *Review and revise (as necessary) development codes, incentive programs, and private partnerships to increase the availability of short term and long term bicycle parking and show facilities at important destinations, intermodal points, and employment centers.*

C3 Educate the public about the facilities available to serve their transportation needs.

- *Plan and fund promotional efforts, such as maps and wayfinding systems which will increase public awareness of available bicycle infrastructure and its utility for work and shopping trips.*

C4 Enforce traffic laws to promote bicycling safety.





- *Identify specific motorist behaviors that should be targeted in enforcement campaigns.*
- C5 Monitor the use of bicycling activity and periodically adjust priorities so as to meet the needs of area bicyclists as they change over time.
 - *Plan and fund regular reviews of bicycling activity in targeted areas, use of designated routes, and participation in encouragement programs, so that results may be reported to the public and adjustments made as needed.*
- R4 Enforce laws and regulations that impact recreational bicycling.
- R5 Monitor recreational bicycling in the County and making recommendations responding to evolving needs.
 - *Plan and fund regular reviews of recreational bicycling activity so that results may be reported to the public and adjustments made as needed.*

RECREATION GOALS

Palm Beach County and its municipalities shall increase recreational bicycling in the County by achieving the following goals:

- R1 Provide on-street facilities that provide access to the County’s network of greenways and trails.
 - *Prioritize investments in improved on street bicycle facilities to focus on segments which connect to local greenways and trails.*
- R2 Encourage use of the greenways, trails, and the on-street facilities that provide access to them.
 - *Plan and fund promotional materials, such as maps, brochures, and/or wayfinding systems that emphasize connections to Greenways and trails via on-street facilities.*
 - *Coordinate promotion of greenways, trails, and on-street facilities that serve recreational trips with the Palm Beach County Convention and Visitors Bureau, Visit FLORIDA, local hotels and resorts, and other representatives of the local tourism industry.*
- R3 Educate the public about the opportunities available for recreational bicycling and the practices that maximize bicyclist safety.

