

2010



Pedestrian and Bicycle Circulation Plan Update



Adopted by:

The Pedestrian Bicycle Advisory Board

July 12, 2010

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Introduction

The City of Winter Park Pedestrian and Bicycle Circulation Plan (PBCP) provides an overview of specific pedestrian and bicycle improvements throughout the City.

What is the Pedestrian and Bicycle Circulation Plan?

The Pedestrian and Bicycle Circulation Plan is the City's blueprint for pedestrian and bicycle travel. First adopted in 1995 and originally identified as the Bicycle Circulation Plan (BCP) (See appendix C) it recognized the need to reconcile two seemingly conflicting goals: to provide mobility and access throughout the city in a way that is safe to all modes of transportation and convenient; and, to preserve the charm and tranquility of Winter Park by minimizing automobile congestion, air pollution, and noise.

The PBCP operates under the policy umbrella of the Winter Park Comprehensive Plan. In order to establish the setting for this Pedestrian Bicycle Circulation Plan, the following paragraphs are excerpts from the City Comprehensive Plan Transportation Element.

2-1: TRANSPORTATION GOALS, OBJECTIVES, AND IMPLEMENTING POLICIES. *This section stipulates goals, objectives, and implementing policies for the Transportation Element pursuant to 9J-5, FAC. The purpose of this element is to provide guidance for appropriate plans and policies needed to insure a walkable, pedestrian and bicycle-friendly, treed, relaxed, beautiful, safe, urban village that promotes neighborliness and courtesy among citizens and visitors.*

Goal 2-1: BALANCED TRANSPORTATION SYSTEM. *It shall be the goal of the City of Winter Park to ensure the provision of a balanced transportation system that promotes its mission.*

OBJECTIVE 2-1.1: SAFE AND BALANCED MULTIMODAL SYSTEM. *The design and character of the streets within Winter Park shall create a safe, balanced multimodal transportation system that promotes and supports the broad transportation needs of current and future Winter Park residents. The attached Figures 13 and 14 serve as the City's official near term (five year) and long term (20 year) future transportation plan.*

Policy 2-1.1: Transportation System Principles. *The continuous improvement of the City's transportation system is dependent on coordinating all improvements to the transportation network and to develop improvements that support that network. The Transportation Element Goal recognizes transit, bicycle and pedestrian activities as alternative modes of transportation for each street in the community.*

Policy 2-1.2: Final Design for Streets. *The City shall seek citizen and business participation in those decision-making processes related to the transportation planning process, roadway modifications, transit service, the provision of bicycle and pedestrian amenities, and other design characteristics.*

Policy 2-1.4: Implementing Regulations. *The City shall utilize land use, zoning, the Land Development Code, concurrency management, transportation impact analyses, proportionate fair share and other applicable regulations to coordinate the design of network facilities, transit*

corridors, **bicycle and pedestrian** facilities, appropriate setbacks, rights-of-way, and centerlines of the roadway network.

Policy 2-1.5: Pedestrian and Bicycle Advisory Board. The City Council shall continue the function of the Pedestrian and Bicycle Advisory Board to review and improve the **pedestrian and bicycle** circulation system, and pursue and direct funding for improvements. Appointments to the Board shall be comprised of Winter Park residents made by City Council. Board Advisors shall include representatives from Planning and Community Development, Public Works, Public Safety, and Parks and Recreation.

Policy 2-1.6: Route-to-School Plan. The City shall by 2010, create a plan for school access for students living within the City that walk to school and those students that walk to schools within the City. At a minimum, the plan will recommend enhancements to the sidewalk, pedestrian crossings, and bicycle network.

Policy 2-1.7: Sidewalk Inventory. The City will continue to inventory the location and conditions of the sidewalk network, as well as crosswalk locations, on all roadways.

Policy 2-1.8: Sidewalk Program Principles. The City currently has a Sidewalk Program. The Sidewalk Program is based upon the following principles:

- Every Arterial and Collector level facilities will have a continuous sidewalk on both sides of the street.
- Every Local Street will have a continuous sidewalk on one side of the street.

Policy 2-1.9: Sidewalk Program Priorities. The priority installation of new sidewalks and the reconstruction of existing sidewalks on Arterial, Collector and Local Streets shall be generally ranked by the following categories:

1. Proximity to School (1-mile, or less)
2. Proximity to Transit Stop (1/4-mile, or less)
3. Proximity to Public Park (1/2-mile, or less)
4. Neighborhood or resident request

The order of construction within categories shall be determined by: vehicular traffic speed, vehicular lane width, vehicular volumes, pedestrian usage, proximity to a pedestrian attractor, and construction feasibility.

Policy 2-1.10: Provide a Bicycle Circulation System. The City, in partnership with Orange and Seminole Counties, MetroPlan Orlando, and other local and state agencies, will continue to plan, fund and construct a network of bicycle facilities as depicted in the Winter Park Bicycle Circulation Plan, to increase the non-motorized transportation system.

Purpose of the 1995 BCP and the PBCP update

The PBCP update builds on the 1995 BCP and embraces its stated purposes:

I. To Maintain Winter Park as the Premier Urban Village in the State of Florida

Winter Park has evolved as one of the most livable and memorable communities in Florida. Public spaces like streets, squares, and parks were designed to be the urban setting for everyone to conduct their daily lives. Thousands of oaks were planted by prior generations for the enjoyment of current generations. Neighborhoods were designed to accommodate diverse people and activities. This pedestrian and bicycle system will help maintain and enhance a more livable environment for ourselves and our children.

II. To Minimize Threats to Winter Park's Urban Fabric

Over the last thirty years, Winter Park's very livable urban fabric has been slowly chipped away. Society has locked itself into the automobile as the only means of transportation regardless of who we are, what our age, and where we are going. We must begin to provide the infrastructure to encourage other forms of transportation to protect Winter Park's livable urban fabric.

III. Develop Viable Transportation Alternatives

Bicycle travel is becoming an important element of local transportation systems for communities throughout the country. In Boulder Colorado, a large percentage of all travel in the City is done by walking, bicycling, or riding transit. In Davis California, a large percentage of the population commutes to work by bicycle. Winter Park's Pedestrian and Bicycle Circulation Plan will facilitate walking and bicycling as a viable transportation alternative for residents.

IV. To become an Important Element of Winter Park's Community Planning Effort

The basis of the 1995 BCP was the "Winter Park in Perspective" planning process to rediscover the planning and architectural traditions that had shaped the City. For example, the "Treasured Places" workshop citizens identified hundreds of locations throughout the City which they wanted preserved, or enhanced. The BCP utilized these ideas of Winter Park residents to develop the plan for a more successful system. The Winter Park 1995 BCP was developed with the participation of the following groups:

WINTER PARK RESIDENTS

-The residents of the City participated in a series of workshops in the spring of 1995;

SURROUNDING COMMUNITIES

-Representatives from the City of Orlando, the City of Maitland, and Orange County were on hand at the workshops in 1995 to assist in making connections between Winter Park and their communities; and

ROLLINS COLLEGE

-Students in the Environmental Studies department at Rollins College in 1995 developed and applied a method for determining the bicycle friendliness of roadways in Winter Park.

-In the year 2000 a Pedestrian and Bicycle Advisory Board of resident walkers, cyclists, and city staff was established to facilitate pedestrian and bicycle improvements throughout the city.

-In September of 2007 residents of the City and the Neighborhood Council participated in the effort to update the existing 1995 plan.

The ideas and information for this update of the PBCP are the compilation of the 1995 BCP plan (Appendix C), the existing pedestrian and bicycle facilities, the proposed pedestrian and bicycle improvements, and input from residents for updating the plan.

Pedestrian and Bicycle Facility Descriptions

The following pictures and paragraphs present common pedestrian and bicycle facility descriptions.



Bike Paths (Trails), like the Cady Way Trail, are used for non-motorized travel and are physically separate from streets. All paths in Winter Park are multi-use facilities available to everyone – bicyclists, skaters, skate boarders, runners and walkers. They provide a pleasant place for recreation because they are separated from streets and conflicts with automobiles.



Bike Lanes are portions of streets reserved for the exclusive use of bicycles. They are designated by signs and pavement markings showing a bicycle and a diamond-shaped restricted lane symbol. Bike Lanes are typically found on arterial streets.



Bike Routes are streets which are well-suited for cycling. They are identified with a green bike route sign. Bike routes are generally residential streets. The majority of Winter Park’s streets do not have a specific bike route designation. However, all City streets are open to cycling.



Many **bike routes** in the City do not have bicycle pavement markings, but selected streets will have the “**sharrow**” marking on the pavement to identify to vehicles and cyclists the shared use of the street.



Bike Parking should be provided at bicycle destinations, such as schools, parks, stores, high employment concentrations, and major transit stops. The City passed a Bicycle Parking Ordinance in 2006 to accomplish this.



Trailheads are intended to be reference points of entry and gateways to the Winter Park bicycle network. Trailhead amenities may include information kiosks, drinking fountains, benches, tables, automobile parking, and related facilities.



Multiuse Sidewalks are sidewalks that are a minimum 8 feet wide and usually are found through or adjacent to neighborhoods. They serve not only pedestrians but the inexperienced cyclists, usually young children.



Typical **Sidewalks** that are 4 to 5 feet wide are found throughout the residential neighborhoods. They serve not only pedestrians but the inexperienced cyclists, usually young children.



Curb-cut Ramps are found at all intersections of streets with sidewalks.



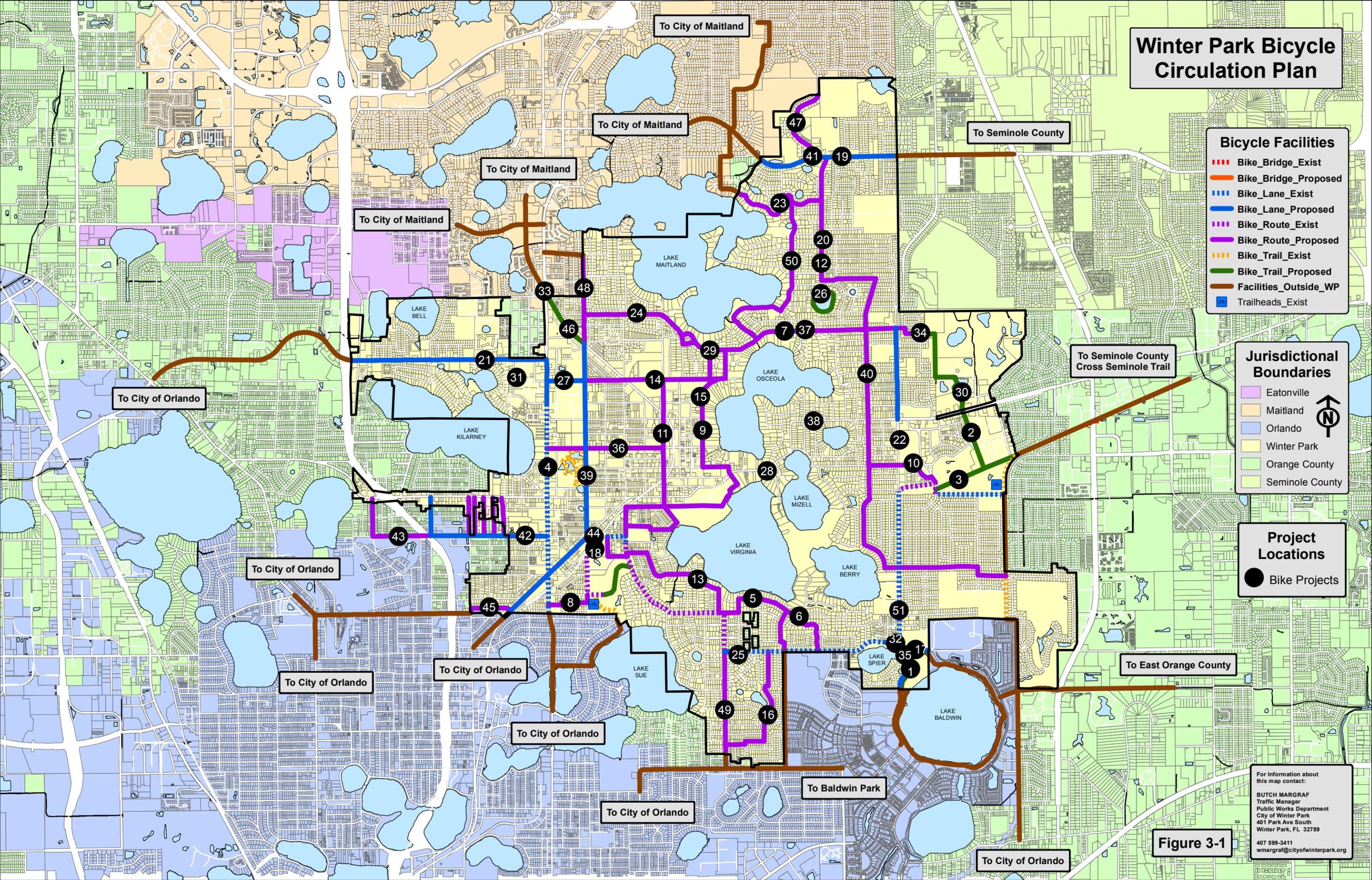
Sidepaths are paths or sidewalks that have been designated for use by cyclists and are within the right of way of a public road, but are not immediately adjacent to vehicular traffic (i.e., the traveled way).

Winter Park Bicycle Circulation Plan

- ### Bicycle Facilities
- ▬▬▬ Bike_Bridge_Exist
 - ▬▬▬ Bike_Bridge_Proposed
 - ▬▬▬ Bike_Lane_Exist
 - ▬▬▬ Bike_Lane_Proposed
 - ▬▬▬ Bike_Route_Exist
 - ▬▬▬ Bike_Route_Proposed
 - ▬▬▬ Bike_Trail_Exist
 - ▬▬▬ Bike_Trail_Proposed
 - ▬▬▬ Facilities_Outside_WP
 - Trailheads_Exist

- ### Jurisdictional Boundaries
- Eatonville
 - Maitland
 - Orlando
 - Winter Park
 - Orange County
 - Seminole County

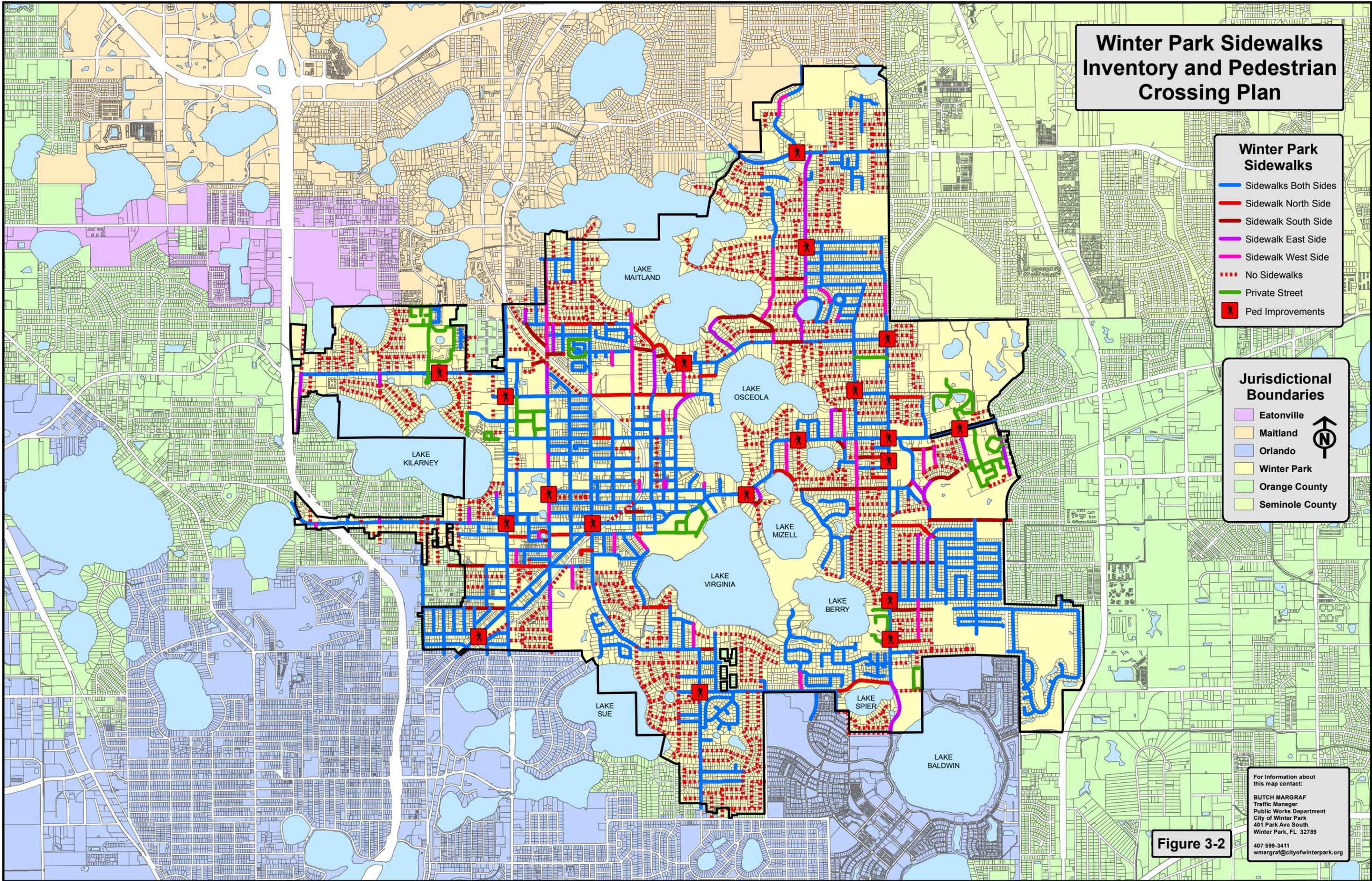
- ### Project Locations
- Bike Projects



For information about this map contact:
BUTCH MARGRAF
 Traffic Manager
 Public Works Department
 City of Winter Park
 401 Park Ave South
 Winter Park, FL 32789
 407 599-3411
 wmargraf@cityofwinterpark.org

Figure 3-1

Winter Park Sidewalks Inventory and Pedestrian Crossing Plan



Winter Park Sidewalks

- Sidewalks Both Sides
- Sidewalk North Side
- Sidewalk South Side
- Sidewalk East Side
- Sidewalk West Side
- - - No Sidewalks
- Private Street
- Ped Improvements

Jurisdictional Boundaries

- Eatonville
- Maitland
- Orlando
- Winter Park
- Orange County
- Seminole County

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Figure 3-2

Sidewalks Inventory Statistics, Estimated Costs, and Road Statistics

The City's adopted Comprehensive Plan Transportation Element Policies 2-1.8 and 2-1.9 describe and prioritize where sidewalks are required within the City.

The City currently has a 156 mile inventory of existing sidewalks as the following:

138 total miles of existing sidewalks on 69 miles of roads with sidewalks on both sides

18 total miles of existing sidewalks on roads with sidewalks on only one side

156 total miles of existing sidewalks

56 total miles of roads with no sidewalks

56 total miles of sidewalks are proposed on at least one side of the roads (295,680 LF)

\$5,322,240 estimated cost of new sidewalks at \$18 per LF

(cost includes placed concrete and sod restoration)

143 Total Centerline Miles of Roads (69 mi +18 mi +56 mi)

133 miles of City roads

9 miles of FDOT roads

1 mile of County roads

143 total centerline miles of roads

Pedestrian Element

Pedestrian travel is the real measure of the accessibility of the transportation system. Walking is the original mode of travel and is essential to all other modes whether one is walking from a parked car to the front door of a business or from a transit stop to home. The pedestrian portion of every trip helps determine the enjoyment, safety, and convenience of that trip. The pedestrian system provides the connections between different modes of travel and is a critical element in supporting the transit system. The lack of a pedestrian system is an obstacle to “active living.”

Encouraging pedestrian travel includes the following:

- * Providing a continuous network so that pedestrians are not stranded short of their destination or forced into difficult or potentially dangerous situations.
- * Ensuring a safe walking environment through adequate maintenance, vegetation trimming, and lighting.
- * Creating a pedestrian-oriented environment through high-quality urban design and pedestrian amenities.
- * Providing routine education on the rights and responsibilities of pedestrians, bicyclists, and vehicle drivers.

The PBCP pedestrian element addresses key improvements needed to complete the missing links connecting popular destinations and providing linkages between home, shopping, work, schools, parks, and transit. In many areas, these pedestrian connections will provide a pedestrian environment similar to the downtown. In other areas, the pedestrian connections are strategic, providing pedestrian linkages between activity areas and transit. Proposed pedestrian improvements include signalized crossings, enhanced signed pedestrian crossings, and an additional 56 miles of new sidewalks.

Pedestrian Policies

Because walking is the cornerstone of all travel, the PBCP seeks to provide a high-quality pedestrian environment as the foundation for all other modes of transportation.

The City’s standard for pedestrian mobility and accessibility is the ability of a wheelchair user to move safely and conveniently through the transportation system.

A high-quality pedestrian environment includes the ability to travel safely and conveniently along the street and to have reasonable crossing opportunities; to travel through a comfortable and interesting environment; and to have appropriate pedestrian amenities such as benches, shade and water fountains.

Bicycle Element

Cycling is a symbol of the healthy and active lifestyle in Winter Park. With growing public health concerns about obesity and air quality, cycling remains one of the most effective modes of transportation to promote health and improve air quality. Further, travel by bicycle is an inexpensive alternative to travel by car, especially with the increasing gasoline costs, and bicycles can easily and efficiently serve short to medium distance trips for many purposes.

The ability to travel by bike is based on developing a continuous network of streets that allow safe and convenient travel by all modes throughout the city including bicycles. A good bicycle plan also recognizes that cyclists range from the experienced commuter who is comfortable in traffic to children who cannot safely use a busy street. Consequently, the City must encourage a system of off-street multi-use paths as an option to the street system.

The long range bicycle network for the city is comprehensive and will provide on- and off-street connections throughout the city. With the completion of this network, an additional 30 miles of bicycle routes, lanes, and multi-use paths will be added. These facilities will provide safe connections and opportunities for bicycle travel throughout the city for all levels of riders.

Bicycle Policies

The City will complete a system of primary and secondary bicycle corridors to provide bicycle access to all major destinations and all parts of the community.

The City will coordinate with MetroPlan Orlando, Orange County, neighboring communities, the City Parks and Recreation Department, and other government entities and plans to ensure that city and county projects connect with and/or help to complete the corridor network.

The City will work with property owners, developers, the Orange County School District (OCPS), and the City Parks and Recreation Department to ensure that commercial, public, and mixed-use and multi-unit residential sites provide direct, safe and convenient internal bicycle circulation from external connections to areas near building entrances and other on-site destinations.

The City will combine education and enforcement efforts to help instill safe and courteous use of the shared public roadway, with a focus on better educating students on how to properly share the road with bicyclists, pedestrians and users of transit.

Pedestrian and Bicycle Projects

Similar to the proposed traffic improvement list, the list of bicycle and pedestrian improvements is a starting point and a snapshot in the improvement process. The proposed projects are listed in Table 3-1 PROPOSED PEDESTRIAN BICYCLE PROJECTS on the following pages. Funding for the proposed projects is anticipated from various sources including future General Fund allocations, state and federal funding through MetroPlan and/or earmarks, local grants, and CRA.

Recent accomplishments in the process of improving mobility are listed in Table 3-2 COMPLETED PEDESTRIAN BICYCLE PROJECTS on the following pages. Funding for these completed projects came from various sources including the City's General Fund, FDOT, CRA Funds and Grants.

City of Winter Park

Pedestrian and Bicycle Circulation Plan FY 2010

Figure 3-1

PROPOSED PEDESTRIAN BICYCLE PROJECTS										
	Project Name	From	To	Description of Improvement	Comp	Type	Estimated Cost	Staff Priority Rank	Commission Rank	Funding Source
1	Lake Baldwin Trail Connection	Fleet Peeples Park		construct 12 feet wide path through Fleet Peeples Park connecting the Lake Baldwin Trail	Y	BP	102,000	1		American Recovery and Reinvestment Act (ARRA)
2	St Andrews Trail	Aloma Ave		pipe the drainage ditch along St Andrews Blvd and build 12 feet wide bike trail on the ground surface	N	BP	2,000,000	2		unfunded/seeking grants
3	Ward Park Trail	Perth Lane	Cady Way Trail	construct 12 feet wide bike trail thru Ward Park	N	BP	100,000	3		unfunded/seeking grants
4	Orlando Ave Bike Lanes	Fairbanks Ave	Gay Road	relocate curb line at Fairbanks, stripe SB bike lane	N	B		4		unfunded/seeking grants
5	Virginia Drive Sidewalk Connection	at bollards		construct concrete sidewalk between bollards	N	BP	500	5		unfunded/seeking grants
6	Preserve Point Virginia Drive Sidewalk Connection	Preserve Point Drive	Virginia Drive	construct concrete driveway apron	N	BP	1,000	6		unfunded/seeking grants
7	Palmer Ave Park Ave Bike Route	Lakemont Ave	Denning Drive	sign bike route	N	B	3,000	7		unfunded/seeking grants
8	Camelia Ave Bike Route	Orlando Ave	Denning Drive	sign bike route	N	B	2,700	8		unfunded/seeking grants
9	Interlachen Ave Rollins College Bike Route	Palmer Ave	Minnesota Ave	sign bike route	N	B	6,900	9		unfunded/seeking grants
10	Mizell Ave Bike Route	Dundee Drive	Phelps Ave	sign bike route	N	B	2,100	10		unfunded/seeking grants
11	New York Ave Bike Route	Park Ave	Pennsylvania Ave	sign bike route	N	B	3,000	11		unfunded/seeking grants
12	Temple Drive Phelps Ave Bike Route	Howell Branch Rd	Cady Way Trail	sign bike route	N	B	8,400	12		unfunded/seeking grants
13	Virginia Drive Bike Route	Glenridge Way	Minnesota Ave	sign bike route	N	B	8,400	13		unfunded/seeking grants
14	Webster Ave Bike Route	Denning Drive	Georgia Ave	sign bike route	N	B	2,400	14		unfunded/seeking grants
15	Interlachen Ave Sidewalk	Winter Park CC	Swoope Ave	construct 5 feet wide sidewalk	Y	P	7,200	15		unfunded/seeking grants
16	Howard Drive Bike Route	Glenridge Way	Winter Park Rd	sign bike route	N	BP	3,000	16		unfunded/seeking grants
17	Glenridge Way East Bike Lanes	Lakemont Ave	city limits east	reconfigure striping for bike lanes	N	P		17		unfunded/seeking grants
18	Barnum Ave Sidewalk	Denning Drive	Minnesota Ave	construct 5 feet wide sidewalk	Y	BP	14,760	18		unfunded/seeking grants
19	Howell Branch Rd Bike Lanes	Seminole Cty Line	city limit west	reconfigure striping for bike lanes	N	B		19		unfunded/seeking grants
20	Pedestrian Crossing Temple Drive at Whitesell Drive	Temple Drive	Whitesell Drive	install signs and pavement markings for pedestrian crossing	N	P	1,500	20		unfunded/seeking grants
21	Pedestrian Crossing Lee Road at 1700 block	Lee Road	1700 block	install signs and pavement markings for pedestrian crossing	N	P	25,000	21		unfunded/seeking grants
22	Signalized Pedestrian Crossing	Lakemont Ave	Goodrich Ave	construct signalized pedestrian crossing on Lakemont Ave near Goodrich Ave	N	P	40,000	22		unfunded/seeking grants
23	Via Del Mar Venetian Way Bike Route	Temple Drive	Howell Branch Creek	sign bike route	N	B	1,800	23		unfunded/seeking grants
24	N Park Ave Sidewalk	Green Cove Rd	Pennsylvania Ave	construct 5 feet wide sidewalk	N	P	13,500	24		unfunded/seeking grants
25	Glenridge Way Bike Lanes	Laurel Road	Winter Park Rd	widen brick section of Glenridge Way for bike lanes	N	B	50,000	25		unfunded/seeking grants
26	Lake Knowles Walking Trail	Lake Knowles		construct 8' wide walking path and boardwalk	N	P	50,000	26		unfunded/seeking grants
27	Webster Ave Bike Lanes	Orlando Ave	Denning Drive	reconfigure striping for bike lanes	N	B	15,000	27		unfunded/seeking grants
28	Reduce Henkel Circle at Osceola Ave Roadway Width	Osceola Ave	Henkel Circle	reduce Henkel Circle width at Osceola Ave	N	P	50,000	28		unfunded/seeking grants
29	Reduce Old England Ave at Palmer Ave Roadway Width	Palmer Ave	Old England Ave	reduce Old England Ave width at Palmer Ave	N	P	50,000	29		unfunded/seeking grants
30	Mayflower Trail	Aloma Ave	Palmer Ave	construct multiuse trail	N	BP	190,000	30		unfunded/seeking grants
31	Executive Drive Multiuse Trail	Gay Rd	Lee Rd	construct 8' wide feet wide sidewalk	N	BP	36,000	31		unfunded/seeking grants
32	Glenridge Way at Lakemont Ave Bike Lane Widening	Lakemont Ave	Glenridge Way	widen existing bike lanes	N	B	20,000	32		unfunded/seeking grants
33	Pedestrian Bicycle Bridge Orlando Ave	Orlando Ave	near railroad bridge	construct pedestrian bicycle bridge	N	BP	5,000,000	33		unfunded/seeking grants
34	Mayflower Trail Pedestrian Bicycle Connection	Palmer Ave	east end of Palmer Ave	construct 8' wide multiuse path from east Palmer Ave to Mayflower Trail	N	BP	10,000	34		unfunded/seeking grants
35	Lakemont Ave Bike Lanes	Glenridge Way	Baldwin Park	widen Lakemont Ave for bike lanes	N	B	40,000	35		unfunded/seeking grants

36	Morse Blvd Bike Route	Orlando Ave	New York Ave	sign bike route	N	B	1,800	36	unfunded/seeking grants
37	Palmer Ave Sidewalk	Temple Drive	Alabama Drive	construct sidewalk north side of Palmer	N	P	15,300	37	unfunded/seeking grants
38	Signalized Pedestrian Crossing	Aloma Ave	Sylvan Blvd	construct signalized pedestrian crossing on Aloma Ave near Sylvan Blvd	N	P	150,000	38	unfunded/seeking grants
39	Signalized Pedestrian Crossing	Denning Drive	New England Ave	construct signalized pedestrian crossing on Denning Drive near New England Ave	N	P	45,000	39	unfunded/seeking grants
40	Signalized Pedestrian Crossing	Phelps Ave	Lakehurst Ave	construct signalized pedestrian crossing on Phelps Ave near Lakehurst Ave	N	P	35,000	40	unfunded/seeking grants
41	Signalized Pedestrian Crossing	Howell Branch Rd	Temple Trail	construct signalized pedestrian crossing on Howell Branch Road at Temple Trail	Y	P	50,000	41	Safe Routes To School Grant
42	Minnesota Ave Bike Facilities	Orlando Ave	Formosa Ave	widen road for bike facilities	N	B	500,000	42	unfunded/seeking grants
43	Minnesota Ave Bike route	Formosa Ave	Overspin/Fairbanks	sign bike route	N	B	2,000	43	unfunded/seeking grants
44	Minnesota Ave Bike Facilities	CSX Tracks	Orlando Ave	widen road for bike lanes	N	B	500,000	44	unfunded/seeking grants
45	Berkshire Ave Bike Route	Orange Ave	Clay Street	sign bike route	N	B	600	45	unfunded/seeking grants
46	CSX Right of Way Bike Trail	Denning Drive	Orlando Ave	construct bike path along CSX right of way	N	BP	100,000	46	unfunded/seeking grants
47	Temple Trail Bike Route	Howell Branch Rd	city limit north	sign bike route	N	B	600	47	unfunded/seeking grants
48	Sunnyside Drive Bike Route	Park Ave	Juanita Rael	sign bike route	N	B	1,200	48	unfunded/seeking grants
49	Winter Park Road Bike Route	Corrine Drive	Glenridge Way	sign bike route	N	B		49	unfunded/seeking grants
50	Via Tuscany Alabama Drive Bike Route	Via Del Mar	Palmer Ave	sign bike route	N	B	1,800	50	unfunded/seeking grants
51	Pedestrian Crossing Lakemont Ave near Winter Park Towers south Driveway	Lakemont Ave	Winter Park Towers south Drwy	construct median refuge island and install signs and pavement markings for pedestrian crosswalk	N	P	10,000	51	unfunded/seeking grants
52	Denning Drive Bike Lanes	north RR crossing	Orange Ave	modify lane widths to stripe bike lanes	N	T	1,000,000	53	unfunded/seeking grants

Traffic and Transportation Plan FY 2011

Figure 2-1

PROPOSED TRANSPORTATION PROJECTS							
	Project Name	From	To	Description of Improvement	Estimated Cost	Staff Priority Rank	Status/Source
1	Rebuild Lakemont/Palmer Traffic signals	Lakemont Ave	Palmer Ave	Rebuild Traffic Signals - add 3 signalized xwalks	100,000	1	unfunded/seeking grants
2	Construct Conduits for traffic signal Interconnect on Fairbanks Ave	New York Ave	Orlando Ave	Construct conduits, pull boxes, and communication lines for traffic signal coordination	40,000	2	unfunded/seeking grants
3	Construct Conduits for traffic signal Interconnect on Aloma Ave	Lakemont Ave	Balfour Ave	Construct conduits, pull boxes, and communication lines for traffic signal coordination	40,000	3	unfunded/seeking grants
4	Construct Dual Left Turns on Orange Ave at Orlando Ave	Orange Ave	Orlando Ave	Reconfigure the northeastbound and southwestbound traffic lanes for dual left turns	50,000	4	unfunded/seeking grants
5	Implement City Wayfinding Plan	citywide		Install directional signs for guests and visitors	50,000	5	CRA funded
6	Fairbanks Ave Roadway Surface Improvements Project (Landscape medians/access management)	I4	Orlando Ave	construct sanitary sewer line along center line of roadway, streetscape, upgrade traffic signals, landscape medians	2,400,000	6	FDOT scheduled resurfacing funds
7	Rebuild Glenridge/Winter Park Rd signals	Winter Park Rd	Glenridge Way	Rebuild Traffic Signals - add 4 signalized xwalks	75,000	7	unfunded/seeking grants
8	Rebuild Lakemont/Whitehall signals	Lakemont Ave	Whitehall Drive	Rebuild Traffic Signals - add 4 signalized xwalks	100,000	8	unfunded/seeking grants
9	Modify Aloma/Phelps signal	Aloma Ave	Phelps Ave	modify signal geometry to split phase Phelps Ave traffic movements	50,000	9	unfunded/seeking grants
10	Lee Road Extension	Orlando Ave	Denning Drive	extend Lee Road east to Denning Drive, this is a condition of the 1792 Master Plan with FDOT	10,000,000	10	on MetroPlan LRTP list no. 19
11	1792 Orlando Ave Master Plan	city limits north Monroe Street	city limits south Norfolk Ave	reconstruct Orlando Ave with wider sidewalks, medians, narrower lanes, landscaping	3,000,000	11	on MetroPlan LRTP list no. 19
12	Modify SB Left Turns at Webster Ave on 1792	Orlando Ave	Webster Ave	remove SB left turn lane, relocate concrete median to lengthen NB Lee Rd left turn lane	50,000	12	unfunded/seeking grants
13	Reconstruct New York/Fairbanks Intersection	Fairbanks Ave	New York Ave	rebuild the intersection and signals relocating the NW corner pole and controller cabinet	150,000	13	unfunded/seeking grants
14	Alternate Route to Orlando Ave signs on Lee Road	Lee Road	Orlando Ave	install Alternate Route signs on Lee Road approaching Executive Drive	2,000	14	unfunded/seeking grants
15	Temple Drive Palmer Ave Traffic signal	Palmer Ave	Temple Drive	construct a residential scale traffic signal at Palmer and Temple intersection with signalized peds	100,000	15	unfunded/seeking grants
16	Fairbanks Ave Right of Way Acquisition	Pennsylvania Ave	Orlando Ave	Acquire right of way along Fairbanks Ave to add left turn lanes to EB and WB Pennsylvania Ave, EB and WB Denning Drive, and increase right turn storage capacity WB at Orlando Ave	4,000,000	16	unfunded/seeking grants
17	Construct Traffic Signal at Henkel Circle Trismen Terrace on Osceola Ave	Fairbanks Ave	Henkel Circle	construct a traffic signal on Osceola Ave at Henkel Circle/Trismen Terrace	200,000	17	unfunded/seeking grants

Proposed Pedestrian and Bicycle Facilities Improvements

The following items are descriptions in more detail of the projects listed in the Proposed Pedestrian Bicycle Projects Table 3-1.

1. **Lake Baldwin Trail Connection** – Construct 12 feet wide path through the perimeter of Fleet People’s Park connecting the existing ends of the Lake Baldwin Trail and completing the 2.4 mile trail around Lake Baldwin. **DONE**
2. **St Andrews Trail** – Construct storm pipe and fill the St Andrews ditch south of Aloma Ave to Ward Park. Construct 12 feet wide meandering multiuse trail over the filled ditch from Aloma Ave to Ward Park and connect it to the Cady Way Trail.
3. **Ward Park Trail** - Construct 12 feet wide asphalt path through Ward Park connecting the Cady Way Trail to Perth Lane.
4. **Orlando Ave Bike Lanes** – Widen southbound right turn lane at Fairbanks Ave. Stripe bike lane from Gay Road to Fairbanks Ave southbound.
5. **Sidewalk Connection** – Construct a paved path on Virginia Drive at the divider between the bollards to connect the two Virginia Drive segments.
6. **Sidewalk Connection** – Construct a driveway apron in the grass parkway to complete the connection of Preserve Point Drive of Windsong to Virginia Drive of Timberlane Shores.
7. **Palmer Ave Park Ave Bike Route** – Sign Palmer Ave from the east side of Lakemont Ave at the Mayflower Trail connection to Park Ave then west to Denning Drive as a bike route.
8. **Camellia Ave Bike Route** – Sign Camellia Ave from 1792 to Denning Drive including Denning Drive from Camellia Ave to the Garden Drive/Mead Gardens entrance.
9. **Interlachen Ave Rollins College Bike Route** – Sign Old England Ave southbound from Palmer Ave to Interlachen Ave to New England Ave to Chase Ave to Ollie Ave then thru streets of Rollins College to Holt Ave to Pennsylvania Ave then south to Minnesota Ave as a bike route. Sign Georgia Ave northbound from Interlachen Ave to connect northbound to Palmer Ave as a bike route.
10. **Mizell Ave Bike Route** – Sign Perth Lane from Dundee Drive north to Mizell Ave then west to Osceola Ave to Brewer Ave as a bike route.
11. **New York Ave Bike Route** – Sign New York Ave from Park Ave south to Holt Ave to French Ave to Lakeview Ave to Vitoria Ave to Huntington Ave to Pennsylvania Ave as a bike route.

12. **Temple Drive Phelps Ave Bike Route** – Sign Temple Drive from Howell Branch Road south to Chestnut Ave east to Phelps Ave to south to Balmoral Road south to Whitehall Drive east to Greene Drive south to Summerfield Road and east to Cady Way Trail as a bike route.
13. **Virginia Drive Bike Route** – Sign Preserve Point Drive from Glenridge Way north to the pedestrian bicycle connection to Timberlane Shores subdivision at Virginia Drive, west to Laurel Road, south to Lake Sue Ave, west to Forest Ave, north to Virginia Drive, west to Highland Road, north to Stirling Ave, west to Richmond Road, north to Melrose Ave, west to Pennsylvania Ave, south to Melrose Ave, west to Azalea Lane, and north to Minnesota Ave as a bike route. Sign Timberlane Drive from Glenridge Way and north to Blue Ridge Road north to Virginia Drive as a bike route.
14. **Webster Ave Bike Route** – Sign Webster Ave from Denning Drive east to Georgia Ave as bike route.
15. **Interlachen Ave Sidewalk** - Construct sidewalk on Interlachen Ave from the Winter Park Country Club parking lot south to Swoope Ave on the west side of Interlachen Ave. This segment of sidewalk connects sidewalks both north and south on Interlachen Ave. **DONE.**
16. **Howard Drive Bike Route** – Sign Howard Drive from Glenridge Way south to Woodside Ave and west to Winter Park Road as a bike route.
17. **Glenridge Way East Bike Lanes** – Narrow Glenridge Way from Lakemont Ave east to the City limits to two lanes with bike lanes. The connecting roadways from Baldwin Park and the Veterans Administration Hospital are 2 lane roads; Lakemont Avenue is a 2 lane road, 4 lanes for vehicles are not necessary.
18. **Barnum Ave Sidewalk** - Construct 5 feet wide sidewalk on Barnum Ave from Denning Drive to Minnesota Ave on the east side of the road. **DONE.**
19. **Howell Branch Rd Bike Lanes** – Restripe Howell Branch Road in Winter Park from the Seminole county line west to the Maitland city limits with bike lanes. Coordinate with Maitland and Seminole County to stripe bike lanes in their jurisdictions.
20. **Temple Drive Pedestrian Crossing** – Construct an emphasized crosswalk, pavement markings and signs, across Temple Drive at Whitesell Drive.
21. **Lee Road Pedestrian Crossing** - Construct an emphasized crosswalk, pavement markings and signs, at the 1700 block of Lee Road. Coordinate with FDOT.
22. **Lakemont Ave Signalized Pedestrian Crossing** - Construct an actuated pedestrian signal on Lakemont Ave near Goodrich Ave at the existing pedestrian crossing. This crossing serves Winter Park Hospital and the other medical facilities near Lakemont Avenue.

23. **Via Del Mar Venetian Way Bike Route** – Sign Via Del Mar from Temple Drive west to Via Tuscany, Via Tuscany north and west to Venetian Way, and Venetian Way south and west to Howell Branch Creek as bike route. This route connects with a Maitland bicycle route.
24. **N Park Ave Sidewalk** – Construct a 5 feet wide sidewalk on N Park Ave from Green Cove Road to Pennsylvania Ave on the north side of the road. This segment of sidewalk connects sidewalks both east and west on Park Ave.
25. **Glenridge Way Bike Lanes** – Widen the brick section of Glenridge Way from Laurel Road to Winter Park Road to complete the Glenridge Way bike lanes.
26. **Lake Knowles Walking Trail** – Construct a walking path around Lake Knowles. This will include a boardwalk on the south side of Lake Knowles along Elm Ave where the shoreline is inadequate for an existing surface path.
27. **Webster Ave Bike Lanes** – Reconfigure striping of Webster Ave from Orlando Ave east to Denning Drive for 2 bike lanes, 2 thru lanes, and a left turn median lane. This should be completed with the Orlando Ave Master Plan construction.
28. **Henkel Circle at Fairbanks Ave Pedestrian Improvement** - Reconstruct the exit opening of Henkel Circle at Fairbanks Ave reducing the width. This project will shorten the side street crossing distance for pedestrians on Osceola Ave. The extra wide opening is not necessary for safe egress from Henkel Circle.
29. **Old England Ave at Palmer Ave Pedestrian Improvement** - Reconstruct the southeast corner curb and narrow the side street opening of Old England Ave at Palmer Ave. This project will shorten the crossing distance for pedestrians on Palmer Ave.
30. **Mayflower Trail** – Construct a multiuse trail from Aloma Ave north through the Crealde School of Art and around the Mayflower retirement village. Coordinate with both Crealde and the Mayflower for the preferred route. This trail will connect Lakemont Ave near Lakemont Elementary school and the YMCA to Aloma Ave and the St Andrews Trail and to the Cady Way Trail.
31. **Executive Drive Multiuse Sidewalk** – Construct 8 feet wide multiuse sidewalk on Executive Drive from Lee Road to Gay Road. There are currently no sidewalks on Executive Drive. This sidewalk will provide pedestrian and bicycle connectivity from Gay Road to Lee Road as a 1200 linear feet recreation way.
32. **Glenridge Way at Lakemont Ave Bike Lanes** – Widen Glenridge Way near Lakemont Ave to increase width of the existing bike lanes to 4 feet. Current bike lanes are less than 4 feet wide at the northwest corner of the intersection and westbound along Glenridge Way.
33. **Pedestrian and Bicycle Bridge** – Construct a pedestrian bicycle bridge over Orlando Ave adjacent to the railroad bridge to provide a safe pedestrian bicycle connection to from the Winter Park pedestrian and bicycle system to Maitland’s.

34. **Pedestrian Bicycle Connection** – Construct path from Palmer Ave east to the Mayflower Trail.
35. **Lakemont Ave Bike Lanes** – Widen Lakemont Ave south of Glenridge Way to add bike lanes. These bike lanes will connect to the existing bike lanes in Baldwin Park.
36. **Morse Blvd Bike Route** – Sign Morse Blvd from Orlando Ave east to New York Ave as a bike route.
37. **Palmer Ave Sidewalk** - Construct sidewalk on Palmer Ave from Temple Drive to the east leg of Alabama Drive. There are two properties in this block that have 36 inch and greater oak trees prohibiting the construction of a sidewalk.
38. **Signalized Pedestrian Crossing on Aloma Ave** – Construct actuated pedestrian signals on Aloma Ave near Sylvan Blvd. Coordinate with the FDOT.
39. **Denning Drive Signalized Pedestrian Crossing** - Construct actuated pedestrian signals on Denning Drive near New England Ave. This signalized crossing will serve Lake Island Park providing a safe pedestrian connection from the neighborhoods east of Denning Drive.
40. **Phelps Ave Signalized Pedestrian Crossing** - Construct actuated pedestrian signals on Phelps Ave near Lakehurst Ave. This signalized crossing will serve Lakemont Elementary school and neighborhood pedestrians to cross Phelps Ave.
41. **Howell Branch Road Signalized Pedestrian Crossing** – Construct actuated pedestrian signals at the existing Howell Branch Road and Temple Trail intersection east leg. This project has been approved and will be funded through a Safe Routes to School program grant in the year 2011. Included with the pedestrian signals are enhanced pedestrian sidewalk crossings at 3 driveways along the north side of Howell Branch Road. **DONE.**
42. **Fairbanks Avenue Roadway Improvements Project** Alternate Bicycle Facility – Construct a **Sidepath** on the south side of **Minnesota Ave** from Orlando Ave west to Formosa Ave. Construct a **Bike Route** on Minnesota Ave from Formosa Ave west to Overspin Drive. Construct **Bike Routes** between Minnesota Ave and Fairbanks Ave on Nicolet Ave, Jackson Ave, Harold Ave Cherry Street, Clay Street, Formosa Ave, and Overspin Ave.
43. **Minnesota Ave Bike Route** – Sign Minnesota Ave from the Formosa Ave west to Overspin Ave/Fairbanks Ave.
44. **Minnesota Ave Bike Facilities** – Construct bike lanes on Minnesota Ave from the CSX railroad tracks west to Orange Ave.
45. **Berkshire Ave Bike Route** – Sign Berkshire Ave from Orange Ave west to Clay Street as a bike route.

46. **CSX ROW Bike Trail** – Construct bike trail along CSX right of way connecting Denning Drive to the Orlando Ave **Pedestrian and Bicycle Bridge**.

47. **Temple Trail Bike Route** – Sign Temple Trail from Howell Branch Road north into Maitland as a bike route.

48. **Sunnyside Drive Bike Route** – Sign Denning Drive from Solana Ave north to Park Ave and Sunnyside Drive north to Magnolia Ave and west into Maitland as a bike route.

49. **Winter Park Road Bike Route** – Sign Winter Park Road from Corrine Drive to Glenridge Way as a bike route.

50. **Via Tuscany Alabama Bike Route** – Sign Via Tuscany from Via Del Mar south to Alabama Drive and west to Palmer Ave as a bike route.

51. **Pedestrian Crossing** – Construct an emphasized crosswalk, pavement markings and signs, across Lakemont Ave near the Winter Park Towers driveway.

52. **Denning Drive Bike Lanes** - Reconstruct the Denning Drive traffic lanes from the north Denning Drive railroad crossing south to Orange Avenue. This plan includes 2 bike lanes, 2 thru travel lanes, left turn lanes at the intersections, and planted medians. This section of Denning Drive has excess vehicle capacity and it can maintain a high level of service with the left turn lanes.

City of Winter Park Pedestrian and Bicycle Circulation Plan FY 2010

Figure 3-2

COMPLETED PEDESTRIAN BICYCLE PROJECTS							
	Project Name	From	To	Description of Improvement	Cost	Staff Priority Rank	Funding Source
1	Bike Racks	citywide		installed bike racks in city parks and at city facilities	38,000		WPHF/FDOT
2	Convert Ped Signals to Countdown	citywide		Convert all existing Ped signals to countdown	85,000		FDOT/City funds
3	Install Crosswalk	Palmer Ave	Temple Drive	repave Palmer Ave, add emphasized crosswalk, add ADA ramps	1,000		City Paving Program
4	Install Crosswalk	Palmer Ave	Seminole Drive	repave Palmer Ave, add emphasized crosswalk, add ADA ramps	1,000		City Paving Program
5	Install Ped Crossing signal	Howell Branch Rd	Via Tuscany	added signalized ped signal for new park	3,500		
6	Orange Ave Streetscape	Fairbanks Ave	Orlando Ave	added signalized ped crossing near Capen Ave	33,960		CRA/Assessments
7	Orange Ave Streetscape	Fairbanks Ave	Orlando Ave	added signalized ped crossing at Cypress Ave	37,335		CRA/Assessments
8	Const Sidewalk on Palmer McKean gap	Alabama Drive	McKean Circle W	const sidewalk in critical sidewalk gap	15,000		City Sidewalk Program
9	Lake Baldwin Trail Connection	Fleet Peeples Park		construct 12 feet wide path through Fleet Peeples Park connecting the Lake Baldwin Trail	102,000	1	American Recovery and Reinvestment Act (ARRA)
10	Interlachen Ave Sidewalk	Winter Park CC	Swoope Ave	construct 5 feet wide sidewalk	7,200	15	City Sidewalk Program
11	Signalized Pedestrian Crossing	Howell Branch Rd	Temple Trail	construct signalized pedestrian crossing on Howell Branch Road at Temple Trail	50,000	41	Safe Routes To School Grant
12	Barnum Ave Sidewalk	Denning Drive	Minnesota Ave	construct 5 feet wide sidewalk	14,760	18	City Sidewalk Program

City of Winter Park Traffic and Transportation Plan FY 2011

Figure 2-2

COMPLETED TRANSPORTATION PROJECTS							
	Project Name	From	To	Description of Improvement	Estimated Cost	Staff Priority Rank	Funding Source
1	Convert Signals to LED	citywide		Convert 21 State Road intersections to LED	85,000		Police forfeiture funds
2	Rebuild Orange Denning Minnesota signals	Orange Ave	Denning Drive	Const mastarm signals, relocate signal setback to design standards, split phase Minnesota Ave	279,976		CRA/Assessments
3	Rewire New England Interlachen signals	New England Ave	Interlachen Ave	rewire signals for reliability and delay of total intersection rebuild expense	3,500		Streets Signal Maintenance
4	Video Detection Orlando Ave	Lee Road	Orange Ave	replace loop detection for Orlando Ave signals with video detection. Wire loops not reliable in concrete roadway	140,000		FDOT
5	Install Protected Left Turn	Howell Branch Rd	Temple Trail	install eastbound protected left turn phase	3,500		Stormwater
6	Install Protected Left Turn	Howell Branch Rd	Via Tuscany	install westbound protected left turn phase	3,500		Stormwater
7	Rebuild Fairbanks Denning signals	Fairbanks Ave	Denning Drive	rebuild signals, split phase Denning Drive	98,470		FDOT
8	Reconstruct Holt Ave	Park Ave	Pennsylvania Ave	brick Holt Ave adding 2 raised crosswalks	358,276		Street Bricking Program
9	Reconstruct French Ave	Holt Ave	Lakeview Drive	brick French Ave	152,827		Street Bricking Program
10	Retime Coordinate signals Orlando Ave	Lee Road	Orange Ave	collect exist data, retime, coordinate all signals	20,200		FDOT
11	Retime Coordinate signals Fairbanks Ave	I4	SR 436	collect exist data, retime, coordinate all signals	65,300		FDOT
12	Rebuild EB off Ramp	I4	Fairbanks Ave	rebuild signals, widen traffic lanes	50,000		FDOT
13	Rebuild Canton Signals	Denning Drive	Canton Ave	Const Mastarm Signals - added 4 signalized xwalks	75,000		CRA
14	Rebuild Webster Signals	Denning Drive	Webster Ave	Const Mastarm Signals - added 2 signalized xwalks - added 4 blankout No Turn On Red signs	105,655		CRA
15	Rebuild Morse Signals	Denning Drive	Morse Blvd	Const Mastarm Signals - added 4 signalized xwalks	79,855		CRA
16	Streetscape Webster Ave	Denning Drive	Pennsylvania Ave	narrow travel lanes, widen sidewalk	374,254		CRA
17	Restrung Fairbanks Chase signal	Fairbanks Ave	Chase Ave	added signalized ped signal for Chase Ave	26,572		FDOT

Pedestrian and Bicycle Circulation Plan

Appendix

- A. Winter Park Standards for Pedestrian Facilities
- B. Winter Park Standards for Bicycle Facilities
- C. Winter Park Bicycle Circulation Plan 1995
- D. Bicycle Parking Ordinance

Standards for Pedestrian Facilities

City of Winter Park

Revised 2/14/2006

Pedestrian facilities shall adhere to the most recent adopted version of the Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Street and Highways (“green book”, FDOT,), Chapter 8.

Sidewalk Configuration

Sidewalk shall be clear of vegetation with no overhanging vegetation below a height of 8 feet in the sidewalk corridor. Shrubbery shall not infringe on sidewalks, in accordance with City Regulations. Irrigation shall not cross the sidewalks and must be designed to irrigate only on the side of the sidewalk where the spray heads are located. Irrigation adjacent to sidewalks shall happen only between hours of midnight and 6 a.m.

Contractors shall keep adjacent sidewalks clean and clear if at all feasible during construction.

During new building construction or major renovation, the owner or developer shall upgrade or build sidewalks to standards on adjacent right-of-way.

A minimum of three (3) feet of green space separating the sidewalk from the roadway is preferred along residential streets; five (5) feet separation along arterials and collectors. Sidewalks shall be installed on both sides of the streets with a minimum width, where feasible, of 8 feet along arterial and collector roads and 5 feet along residential streets. Where 8-foot width is not feasible, a minimum clear sidewalk walking space, free of obstructions, must be 5 feet on arterials and collectors and 4 feet on residential streets. All sidewalks within 1/4 mile of schools shall be 8 feet wide.

Driveway curb cuts intersecting sidewalks shall have a maximum sidewalk-intersecting slope of 12:1, as measured along the direction of the sidewalk. Where feasible, curb cuts should not extend into the sidewalk. That is, steeper curb cuts should be used where feasible to prevent the curb cut from extending into the sidewalk.

Two curb cuts per corner should be used where feasible to accommodate mobility assistance and strollers. Intersection corner radii should not exceed 15 feet except at locations with significant truck or bus turning movements.

Pedestrian Crossings

Pedestrian crossings are to be designed based upon roadway configuration and use and existing or projected pedestrian use, with special considerations for children and school routes.

Depending on these factors, crossings shall be designed to provide pedestrian safety and comfort as:

- 1) Cross-walk markings and stop bars
- 2) Cross-walk markings, stop bars and signage
- 3) Table-top crossings
- 4) Visual crossing (table top or cross bars) with flashing signage
- 5) Visual crossing with pedestrian crossing signal

All pedestrian crossings shall include sufficient lighting at the crossing point and all marked crosswalks shall have a minimum crosswalk width of 12 feet. All crosswalks at signalized intersections shall be marked. The decision to mark a crosswalk at an unsignalized location should be deferred to FHWA's Recommendations for Installing Marked Crosswalks and Other Needed Pedestrian Improvements at Uncontrolled Locations (refer to attached Table 1 from Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations: Executive Summary and Recommendation Guidelines, FWHA, March 2002).

Pedestrian crossings may be designated mid-block. Midblock crossings shall be well lit and may include Yield to Pedestrian paddles (R1-6, MUTCD) on two-lane roadways. Advance yield line shall be provided at all midblock crossing locations 30 feet back from the crosswalk, and may be supplemented by Yield Here to Pedestrians signs (R1-5 or R1-5a, MUTCD) at the advance yield line.

Stop bars at signalized intersections should be placed a minimum of 10 feet back from crosswalks to discourage motorists from encroaching into crosswalks.

All four-lane roads shall have pedestrian refuges in the center of the roadway at cross walks, where feasible. Pedestrian refuges shall include visual cues to protect pedestrians, such as landscaping or signage. For example, four-lane sections of Morse Boulevard need mid-block pedestrian crossings.

Cross-walk distance shall be minimized using design features such as bulb-outs at intersections and pedestrian refuges in the center of streets. These distances should be the minimum as required for emergency vehicle and necessary maintenance vehicle access. Commercial truck traffic may be restricted by these features, and alternative routes for commercial traffic may be designated. Where on-street parking exists, curb bulbouts shall be used at intersections.

Pedestrian Crossing Signals

Crossing signals are to provide these features:

- 1) Activated "No Turn On Red/Yield to Peds" signs for vehicle traffic at intersections, here feasible
- 2) Countdown timers for walk signals
- 3) Beepers for visually impaired pedestrians

- 4) Push buttons that are designed so that the correct crossing button is obvious, conveniently placed, and easy to push for physically impaired (height, button shape).
- 5) An indication to pedestrians as to whether the walk push button has been activated.
- 6) All signals in the core Central Business District with high pedestrian activity shall be set to recall pedestrian signal phasing, with no push button activation required.

Lighting

All arterial and collector pedestrian crossings and all bus stops are to have adequate lighting so that drivers can see pedestrians in or near crosswalks. Special consideration must be given to make children visible.

Drivers Yield to Pedestrians

The Winter Park Police Department will enforce the Florida statute designating that motorists yield to pedestrians. This enforcement will modify motorists' behavior to make Winter Park walkable with safety and comfort.

Standards for Bicycle Facilities

City of Winter Park

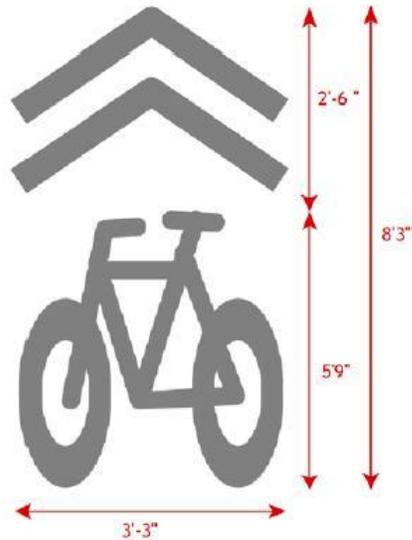
Revised 2/14/2006

Bicycle facilities shall adhere to the most recent adopted version of the Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Street and Highways (“green book”, FDOT), Chapter 9.

Bicycle Roadway Facilities

Roadways within the city limits shall accommodate bicycle traffic on all arterials and collector roads by:

- 1) Providing curb lanes of sufficient width to accommodate bikes and cars (14 feet) with marked bike lanes, or
- 2) Posting signage to share the roadway with bicycles.
- 3) On roadways designated as bicycle routes, but with insufficient width for a designated bicycle lane, the shared-use arrow (“sharrow”) pavement marking shall be considered for use to further designate the roadway as a bike route and to show the proper riding position within the lane.



(for more information, see <http://bicycledriving.com/bfz/arrow.htm>)

Arterial and collector roadways shall provide minimum four (4)-foot surfaces that are satisfactory for bicycle traffic, i.e. asphalt or concrete, next to curbs on both sides. Attention must be given to drainage grates, railroad crossings, and other potential hazards. Where a bike lane is adjacent to parallel parking, the minimum bike lane width shall be five (5) feet and the total width to the face of curb for the bike lane and parking stall shall be a minimum of 13 feet.

New arterial and collector roadways must provide bike lanes facilities. Existing arterial and collector roadways undergoing resurfacing or reconstruction must provide bike lane facilities where logistically and financially feasible. For example, tree canopy should not be sacrificed solely to provide bike lanes. Where bike lane facilities are not provided, alternate bikeways must be provided that are convenient, safe, and fully accommodate bicycle traffic and access that would otherwise have been available on the new or reconstructed roadways.

Traffic Signals

Signal sensors shall detect bicycles. Pavement markings will be placed to show bicyclists where the bicycle will be detected.

Bicycle Racks and Access

Bicycle access and bike rack parking facilities shall be provided at destination nodes such as restaurants, shops, libraries, and schools. Commercial building codes shall include bicycle access and bike rack requirements, including preferred bike rack configurations.

Bicycles shall be allowed on sidewalks except in the central business district. Where bicycles are not allowed on sidewalks, the roadways must accommodate bicycles.

School Routes

School routes shall have sidewalk accommodations for young bicyclists. Where school routes are within the central business district, school children commuting to school by bicycle may use the sidewalks. Children riding on sidewalks shall be educated in riding safely on the sidewalks and must cross all roads as pedestrians, walking their bicycles. There are particular dangers to riding a bicycle on the sidewalk, and older children are encouraged to become educated on proper bicycling methods and to ride in the street.

CITY OF WINTER PARK BICYCLE CIRCULATION PLAN

June, 1995

The Purpose of the Bicycle Circulation Plan

I. Maintain Winter Park as the Premier Urban Village in the State of Florida:

Winter Park has evolved to become one of the most livable and memorable communities in Florida. Public spaces like streets, squares, and parks were designed to be the urban setting for everyone to conduct their daily lives. Thousands of oaks were planted by prior generations for the enjoyment of current generations. Neighborhoods were designed to accommodate diverse types of people and activities. This bicycle and system will help maintain and enhance a more livable environment for ourselves and our children.

II. Minimize Threats to Winter Park's Urban Fabric:

Over the last thirty years, Winter Park's very livable urban fabric has been slowly chipped away. Society, it seems, has locked itself into the automobile as the only means of transportation regardless of who we are, what our age, and where we are going. We must begin to provide the infrastructure to encourage other forms of transportation to become attractive in order to protect Winter Park's livable urban fabric.

III. Develop Viable Transportation Alternatives:

Bicycle travel is becoming an important element of local transportation systems for communities throughout the Country. In Boulder Colorado, approximately 35% of all travel in the City is done by walking, bicycling, or riding transit, and the City has a goal of increasing this percentage to 50% by the year 2000. In Davis California, 25% of the population commutes to work by bicycle. Winter Park's Bicycle Circulation Plan will



facilitate bicycling as a viable transportation alternative for Winter Park residents.

IV. Important Element of Winter Park's Community Planning Effort:

Winter Park recently initiated the "Winter Park in Perspective" planning process to rediscover the planning and architectural traditions that have shaped Winter Park. Like the "Treasured Places" workshop, where citizens identified hundreds of locations throughout the City which they wanted preserved, or enhanced, the Bicycle Circulation Plan utilized the thoughts and ideas of Winter Park residents to make a more successful system. The Winter Park's Bicycle Pedestrian Circulation Plan was developed with the participation of the following groups:

WINTER PARK RESIDENTS

-The residents of the City participated in a series of workshops in the spring of 1995;

SURROUNDING COMMUNITIES

-Representatives from the City of Orlando, the City of Maitland, and Orange County were on hand at the workshops to assist in making connections between Winter Park and their communities; and

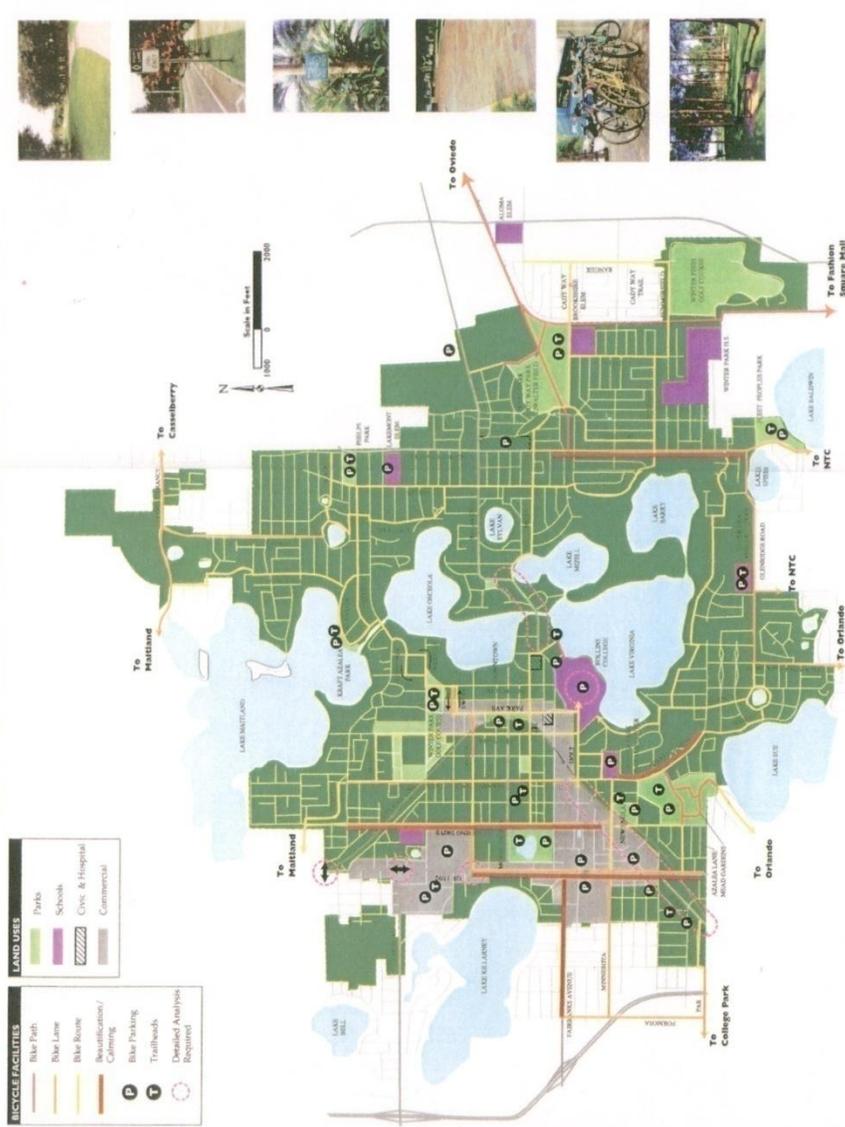
ROLLINS COLLEGE

-Students in the Environmental Studies Department at Rollins College developed and applied a method for determining the bicycle friendliness of roadways in Winter Park.



Draft Plan

City of Winter Park Bicycle Circulation Plan



Facility Descriptions

Bike Paths, like the Cody Way, are used for non-motorized travel and are physically separate from streets. All paths in Winter Park are multi-use facilities available to everyone – bicyclists, skaters, skateboarders, runners and walkers. They provide a pleasant place for recreation because they are separated from streets and conflicts with automobiles.

Bike Lanes are portions of streets reserved for the exclusive use of bicyclists. They are marked by signs and Pavement markings showing a bicycle and a diamond-shaped restricted lane symbol. Bike Lanes are typically found on arterial streets. Sidewalks are not encouraged as substitutes for bike lanes.

Bike Routes are streets which are well-suited for bicycling, but do not have any pavement markings. They are marked with signs. Bike routes are generally residential streets or rural roads. The majority of Winter Park's streets do not have a specific bike route designation. However all city streets are open to bicycling.

Beautification/Traffic Calming would make the environment more attractive, would slow down traffic, and would make the quality of a trip pleasing and safe for everybody, including automobiles.

Bike Parking should be provided at bicycle destinations, such as schools, parks, stores, high employment concentrations, and major transit stops.

Trailheads are intended to be reference points of entry and gateway to the Winter Park bicycling network. They should include information kiosks, drinking fountains, benches, tables, and related facilities.



The Circulation Plan pictured above represents the recommended bicycle facilities determined to be needed during the Winter Park Bicycle workshop. Many thanks to the volunteer efforts of numerous citizens and staff from the city of Winter Park, who contributed to this plan.

Existing Conditions - Roadway Adequacy for Bicycle Use

As part of this project, the Environmental Studies Department at Rollins College, in association with the City, developed and applied a method to determine the bicycle friendliness of Winter Park roadways. The measurement is on a scale of "A" to "F", with "A" being ideal for bicycling, and "F" being not conducive to bicycling. The results of this analysis are shown in the figure below. The majority of Winter Park local roadways are appropriate for bicycle use, although a cyclist must use a major road for some portion of a trip.



Ward Park - Mead Gardens Bicycle Route

The Winter Park Bicycle Planning effort was initiated by a successful application for a federal and state grant to develop a bicycle route from the Cady Way Trail Head in Ward Park to Mead Gardens. The participants at the workshop agreed with the City that this is a high priority project. The Ward Park to Mead Gardens Route serves Brookshire Elementary, Glenridge Middle School, Winter Park Ninth Grade Center, and Winter Park High School. The proposed route also provides a needed connection between the Cady Way Trail and the proposed Dinky Line Trail, making over 14 miles of continuous bicycle facilities in the Orlando Metropolitan Area.



Costs / Potential Funding Sources

A majority of the system (28 miles) can be implemented for a cost of about \$210,000 without initiating major construction projects.

In addition, a significant portion of the major construction projects are accounted for in the Ward Park to Mead Gardens Bicycle Route. Federal grant money for the route will contribute over \$1 million to the overall circulation plan.

Currently Winter Park relies on Federal grant funding to finance bicycle needs. In order to fully develop this bicycle plan, the City will need to expand its local contribution to the system. This contribution could be financed by the following alternatives:

- Continue to Utilize Federal Grant & State Grant Programs
- Utilize Transportation bond revenues for bicycle facilities
- Direct Transportation Impact fees for bike facilities;
- Creative Inclusion: on-going process (Water & Sewer, Drainage, Tree Replacement)
- Establish a Bicycle Trust Fund
- Commit City's General Fund Revenues

The total cost of the circulation plan is approximately \$3.4 million dollars, of which \$1.2 million is already funded by a Federal grant. The remaining cost of \$2.4 million is eligible for Federal grants. The total remaining cost of the system on the City could be as low as 240 thousand dollars.

Bike Paths		
New construction for 3.1 miles at \$385,000 per mile		\$1,193,500
Bike Lanes		
Reconstruction for 4.8 miles at \$325,000 per mile		\$1,560,000
Restriping for 6.4 miles at \$25,000 per mile		\$160,000
Bike Routes		
Sign installation for 21.5 miles at \$1,400 per mile		\$30,100
Bike Parking		
Install 23 racks at \$1,000 per rack		\$23,000
Trailheads		
Install 14 trailheads at \$30,000 each		\$420,000
Sub-total	(35.8 miles)	\$3,386,600
Ward Park to Mead Garden Route		- \$1,114,848
City Portion		+ \$111,484
Total Cost		\$2,383,600

ORDINANCE NO. 2660-06

AN ORDINANCE OF THE CITY OF WINTER PARK, FLORIDA, AMENDING CHAPTER 58 "LAND DEVELOPMENT CODE" ARTICLE III, "ZONING REGULATIONS" SECTION 58-81 "OFF-STREET PARKING AND LOADING REGULATIONS" SO AS TO REQUIRE BICYCLE PARKING BE PROVIDED BY NEW DEVELOPMENTS OR SPECIFIED REDEVELOPMENTS AS PER THE REQUIRED USES OUTLINED HEREIN.

NOW THEREFORE, BE IT ENACTED BY THE PEOPLE OF THE CITY OF WINTER PARK:

SECTION 1. That Chapter 58 "Land Development Code", Article III "Zoning" of the Code of Ordinances is hereby amended and modified by amending Section 58-81 "Off-street parking and loading regulations", to add the requirements for bicycle parking by new developments and redevelopments in subsection (5) to read as follows:

Section 58-81. Off-street parking and loading regulations.

(5) *Bicycle Parking.*

a. *Intent and purpose.* The purpose of these regulations is:

1. To provide for bicycle access to employment, commercial, and other transportation and travel destinations; and
2. To encourage bicycles for personal transportation as an alternative to motor vehicles.

b. *Applicability.* Bicycle parking facilities shall be provided for any new building, addition, or enlargement over 50% of an existing building, or for any change in the occupancy of any building that results in the need for additional auto parking facilities in accordance with the required bicycle parking spaces specified herein. Any existing building that adds, enlarges, or redevelops with an increase of 15-49 percent of the building square footage will be required to provide two the minimum bicycle parking spaces.

c. *Exemptions.* No bicycle parking spaces shall be required for the following uses: single-family residence, two-family residence, funeral homes, automobile sales, repair, or body shop, or car wash.

d. *Bicycle parking space requirements.* Bicycle parking spaces shall be required as follows:

- 1) Office, commercial, retail: 10% of required automobile parking;

- 2) Schools: K – 8: 1 per 5 students;
- 3) Grades 9-12, Vocational tech schools and colleges: 1 per 20 students;
- 4) Recreation facilities, libraries, museums (public and private) - 15% of percent of required automobile spaces.
- 5) Multifamily residential: 1 space per 3 units;
- 6) Hotels, motels: 1 space per 30 rooms and 1 space per 50 employees;
- 7) In all places where bicycle parking is required, a minimum of two (2) and a maximum of fifty (50) bicycle parking spaces shall be provided;
- 8) Any project incorporating a parking structure in their development will be required to provide twenty (20) percent of the mandated bicycle parking in the form of bicycle lockers on the ground level of the structure. This 20% will count towards the total number of required bicycle parking spaces;
- 9) The City Planner shall determine the bicycle parking requirement for any use not referenced above based on its resemblance to one of the uses outlined above.

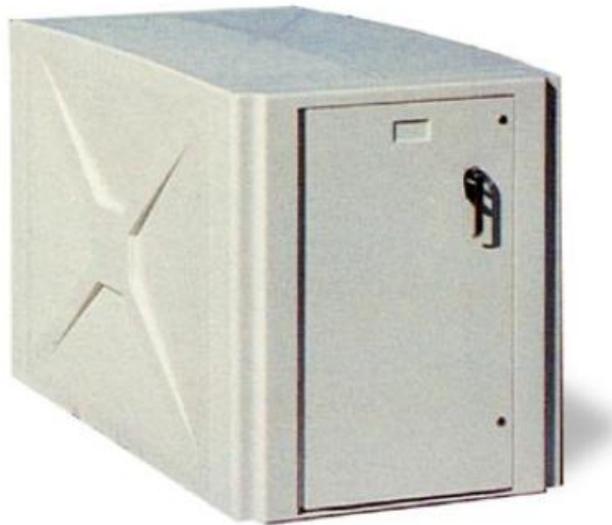
e. *Location and design of facilities.* Location and design of bicycle parking shall be as follows:



Bicycle Racks:

Design: (each rack provides 2 bicycle parking spaces)

1. The standard rack required will be the inverted “U”.
2. Distance between verticals must be a minimum of 18 inches.
3. Height not to exceed 36 inches.
4. Minimum tube diameter of 1.9 inches.
5. All racks must be black with a powder coated finish.
6. Use of any other rack must go through an approval process by the Bicycle and Pedestrian Advisory Board for consideration.



Bicycle Lockers:

1. Locker dimensions: 49" height 30" width 74" length.
2. Design of bike lockers must conform to the Bicycle and Pedestrian Advisory Board list of approved locker designs which is available in the building department.

Location:

1. Bicycle parking facilities should be located in highly visible well-lit areas to minimize theft and vandalism.
2. Whenever possible, the racks should be placed within 50' of the building entrances where bicyclists would naturally transition to a pedestrian mode of travel. Otherwise, signage at the building entrance should direct bicyclists to rack location. If a separate employee entrance exists, bicycle racks should be located near the employee entrance as well as the patron entrance.
3. Rack placement shall not impede pedestrian or vehicular circulation, and should be harmonious with their environment both in color and design. Parking facilities should be incorporated whenever possible into building design or street furniture.
4. Required bicycle parking spaces shall be at least two (2) feet by six (6) feet per bicycle.
5. An aisle of a minimum of five (5) feet wide shall be provided behind bicycle parking facilities to allow for maneuvering.

6. All lockers and racks must be securely anchored to the ground or the building structure to prevent racks and locker removal from the location.

7. Structures requiring a user supplied locking device shall be designed to accommodate both chain and U-shaped locking devices and shall support the bicycle frame at two locations (not just the wheel).

8. Bike parking facilities within auto parking areas shall be separated by a physical barrier to protect bicycles from damage by cars, such as curbs, wheel stops, bollards or other similar features.

f. *Exceptions.*

1. Where the provision of bike parking is physically not feasible, the requirements may be waived or reduced to a feasible level by the Building Department's Plan Reviewer. The Pedestrian and Bicycle Advisory Board will review these decisions twice a year and make recommendations to said reviewer for the provision of bicycle parking spaces and the implementation of this ordinance.

2. In special bicycle parking districts, as outlined below, a fee in lieu of providing bicycle parking will be required based on the parking specifications outlined herein. This fee will be used towards placement of bicycle parking in these zones, to be designated by the City Planner.

a. Special bicycle parking districts.

Park Avenue Bicycle Parking District: The area bounded by Fairbanks Avenue to the south, Center Street to the east, New York Avenue to the west, and Swoope Ave to the north.

(Ord. No. 2501-03, § 4, 1-28-03; Ord. No. 2642-05, § 1, 8-8-05; Ord. No. 2660-06, § 1, 1-23-06)