

LAKELAND CITY-WIDE PATHWAYS PLAN

City of Lakeland, Florida
Effective Date: June 18, 2009
Amendment Effective Date: June 20, 2012



CITYWIDE PATHWAYS PLAN

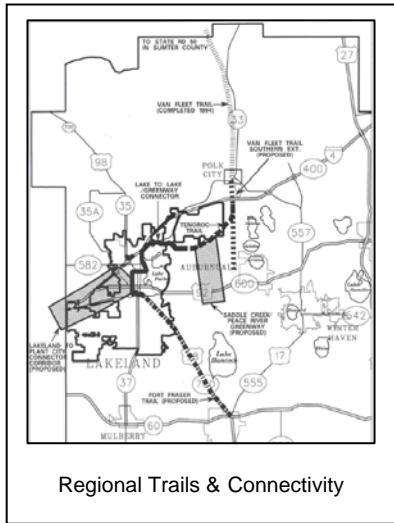
The City of Lakeland's 2009-2018 Capital Improvement Plan programs approximately \$1 million per year for construction and maintenance of sidewalks on the City's public street system. These sidewalks are generally planned and designed to maximize connectivity to transit routes and provide for short trips between a neighborhood and adjacent school, retail center or recreation facilities. Bicycle lanes and unmarked paved shoulders are also evaluated for inclusion in all roadway construction projects – again with the intent of providing more localized connectivity between a mix of nearby residential and non-residential uses. The City also works with the Polk Transportation Organization (TPO), Polk County and Florida Department of Transportation (FDOT) to include sidewalks, bicycle lanes and paved shoulders on all public roadway capacity and maintenance projects in the Lakeland Planning Area.

As is the case with the roadway network, it is necessary to classify and evaluate bicycle and pedestrian pathways according to the function they serve in overall mobility. In the Lakeland area, a primary pathway network is emerging that provides regional connectivity and improved accessibility to major residential communities and activity centers throughout our community. The Lake-to-Lake Bikeway and Greenway Connector network is the center of this regional trail system, ultimately connecting the Van Fleet National Trail and TECO-Auburndale Trail with the Fort Fraser Trail between Bartow and Lakeland.

Lake-to-Lake Bikeway and Greenway: The Lake-to-Lake Bikeway and Greenway Connector network, as depicted in Illustration III-16, includes primary on- and off-road pathways that link the City's recreational facilities, lakes, historic neighborhoods, and activity centers. The hub of the Lake-to-Lake network is Lake Mirror Park in Downtown Lakeland, which includes Barnett Family Park, Lake Mirror Center, Hollis Gardens and the historic loggia constructed during the 1920s during the "City Beautiful" planning movement. Other major destinations on the Lake-to-Lake Network include Lake Hollingsworth and Florida Southern College, Peterson Park and Lake Bonny Park across from Lakeland High School. In addition



to providing recreational corridors for walkers, joggers and bicyclists, the Lake-to-Lake network serves an important transportation function by providing attractive parallel bicycle/pedestrian corridors to constrained roadways such as South Florida Avenue in the Dixieland District. The network Lake-to-Lake system also enhances access to fixed-route transit (bus) services provided in the Lakeland metro area.



As of 2009, some of the Lake-to-Lake Network improvements included the designation of bicycle lanes on Lake Hunter Drive, and road-diet projects on Dr. Martin Luther King Jr. Avenue and the south side of Lake Wire Drive, near the Citrus Connection main bus terminal. A road-diet project on Parker Street east of Massachusetts Avenue was programmed in FY 2009-2010, including \$800,000 in Federal Transportation Enhancement Program and Mid-Town Community Redevelopment Area funds, This project was intended to transform a one mile section of Parker Street from a four-lane undivided collector roadway into a divided two-lane street with bicycle lanes, enhanced crosswalks, transit amenities and landscaped medians.

General Van Fleet State Trail/TECO-Auburndale Trail: Opened in 1994, the General Van Fleet State Trail extends 29 miles north from Polk City to State Road 50 at Mabel in Sumter County. The Van Fleet trail was constructed primarily with Federal Transportation Enhancement Program funds that are available for such bicycle and pedestrian facilities. With the construction of the TECO-Auburndale Trail, Lake Myrtle Park and pending southern extension of the Van Fleet Trail, the City of Auburndale and Town of Polk City continue to make critical linkages between this regional trail facility and urbanized population centers in central Polk County. Utilizing Federal Transportation Enhancement Program dollars, Polk County will construct a 12-foot wide multi-use trail facility along the south side of its Pace Road roadway project between Berkley Road and the programmed Polk Parkway interchange in the City of Lakeland. The Pace Road interchange design will include a continuation of the Pace Road Trail to a multi-use trail that is constructed as part of the proposed SR 33-USF/Williams East-West Road project. Combined, this new east-west trail corridor will connect the Van Fleet and TECO-Auburndale Trails with the University of South Florida Polytechnic campus scheduled to open in 2011 and eventually will connect to the City’s Lake-to-Lake Bikeway and Greenway Connector network in the central part of Lakeland.

Fort Fraser Trail: Opened in 2006, the first section of the Fort Fraser Trail extends approximately seven miles south from State Road 540 (Winter Lake Road) to State Road 60 in Bartow. Funding for this first section of the Trail was provided by FDOT with construction being managed by the City of Lakeland. Polk County provides maintenance and security along the Trail. Trailhead facilities were constructed near the Lakeland campus of the University of South Florida/Polk Community (State) College and in Highland City. The Highland City Trailhead was partially funded with FDOT Park and Ride Program grant dollars and serves as a park-and-ride facility for the “Bartow Express” bus route serving the US 98



corridor between Lakeland and Bartow. In 2004 a U.S. 98 Corridor Access Management Plan (CAMP) was developed and adopted by FDOT in conjunction with the City of Lakeland, City of Bartow and Polk County; the CAMP limits roadway crossings of the Fort Fraser Trail along its entire length. Once the railroad line that operates along US 98 north of SR 659 (Combee Road) is abandoned, a northern extension of the Fort Fraser Trail is planned to link the trail to the Lake Mirror Park and the Lake-to-Lake Bikeway Greenway Network in Downtown Lakeland, represented by Pathway Segments #4 and #16 in Illustration III-17. Potential trailhead facilities exist along this future trail extension at the City's Lake Bonny Park and at a park-and-ride facility constructed beneath the US 98 (In-Town Bypass) overpass with FDOT park-and-ride and intermodal program dollars. A second connection between the Lake-to-Lake Network and Fort Fraser Trail is planned via Lakeland Highlands Road, along the south side of SR 570 (Polk Parkway), through a bicycle/pedestrian easement negotiated with the Lakeland Marketplace Shopping Center (see Pathway Segments #20 and #15.)

Pathways Vision Plan: While significant progress has been made in implementing the Lake-to-Lake Bikeway/Greenway Network, significant gaps remained as of 2009. These gaps prevent the network from achieving its full potential as a system that encourages residents and visitors to use alternative forms of transportation such as bicycles, walking or transit for intra-city trips. Thus, the City initiated a Pathways visioning and planning effort as described below in order to identify gaps and deficiencies and obstacles, receive public input and prioritize improvements in the pathway network. Beginning in 2007, City staff and its project consultant (Renaissance Planning Group) embarked on an effort to identify key gaps in the Lake-to-Lake Bikeway/Greenway Network and other corridors to connect the City with nearby regional trail facilities. Focus group meetings and a day-long charrette were conducted to obtain input on existing barriers and pathway opportunities that should be addressed during the Pathways Plan Update. The project consultant conducted a “handlebar” survey in the field to identify other additional barriers, critical crossings and right-of-way constraints in the Central City area. Additional input was also solicited from the Lakeland Citizen Advisory Committee and the Neighborhood Advisory Council comprised of neighborhood association officers.



Pathways Vision: Planning for Connectivity

Not surprisingly, the most significant barriers to a well-connected pathway system were identified as major roadway corridors such as Florida Avenue, Memorial Boulevard, Interstate 4 and Lakeland Highlands Road. The CSXT rail line traversing Downtown Lakeland was also seen as a barrier to cross-town mobility. In terms of potential pathway

opportunities, corridors along natural features such as the eastern shore of Lake Parker and greater use of parallel local streets and alleys were seen as routes that should be pursued for future development or enhancement and as alternatives to pathway use along congested and constrained roadway corridors such as South Florida Avenue through the Dixieland District.

Potential pathway corridors throughout the Lakeland Planning Area were prioritized using stakeholder input and the handlebar survey; other considerations in the prioritization process were corridors identified through the Polk Urban Greenways (PUGS) planning effort, the Lakeland Southwest Sector Plan, the Lakeland Parks and Recreation Master Plan and Polk Transportation Planning Organization Long-Range Transportation Plans. Candidate corridors were prioritized using the following objective criteria:

- **Lake-to-Lake Bikeway/Greenway Gaps:** Is the Pathway project located on a designated segment that has not been completed to date?
- **Proximity:** What is the project distance to schools, transit stops, lakes, parks and activity centers?
- **Network Connectivity:** Is there project connectivity to existing trails, sidewalks or bicycle lanes?
- **Congested Roadways:** Is the project parallel to and located within ¼ mile of a congested roadway?
- **Land Use Characteristics:** Is the project located within walking distance of Community Redevelopment Areas or near frequent (30 minute) transit service?
- **Transit Emphasis Corridor:** Is the project located in close proximity to the South Florida Avenue Transit Corridor or other locations with premium transit services?
- **Connectivity between Residential and Commercial/Employment Centers:** Does the project provide connectivity between a residential use and a Community or Regional Activity Center as identified on the City's Future Land Use Map?
- **Major Roadway Crossing:** Does the project traverse a major roadway?

Pathway corridor project priorities were stratified into four tiers, based on segment scoring utilizing these criteria. The top tier of pathway corridors is concentrated in the central portion of Lakeland, and includes the future northern extension of the Fort Fraser Trail and connections from it to Lake Parker Park and Lake Hollingsworth. Other high priority corridors include connections to Lake Hunter, Lake Beulah and Lake Wire north to Lake Parker Park via Bella Vista Street. Illustration III-17 and Table III-17 (Pathways Projects) include the specific corridors included in the Pathways Vision Plan and their relative priority for implementation.

Pathway Project Implementation: Through the Pathways Vision Plan, projects on the prioritized Pathway Segments may be implemented through the following methods, where feasible:

- As elements of City capital improvements, including road projects;
- Through stand-alone projects funded by the City with local funds and/or discretionary grant funds from State and Federal sources.
- Through coordination with Polk County and FDOT on road projects programmed in the Lakeland Planning Area;
- As development requirements for projects within the City of Lakeland, including Developments of Regional Impact (DRI) or Planned Unit Developments (PUDs); and
- As suggested Polk County development requirements to include pathways segments in new or modified DRIs or PUDs within the Lakeland Planning Area and/or as a means to increase regional connectivity.

However, due to factors such as budgetary, environmental and right-of-way limitations, flexibility is recommended for specific approaches taken to implement the pathway corridors identified in the Pathways Vision Plan. For example, constructing a 12-foot wide dedicated multi-use trail through Downtown Lakeland is likely not feasible; however, such a facility could be incorporated into the design of new residential or retail development in suburban or rural areas around Lakeland.

Projects to be implemented through the Pathways Vision Plan should include:

- **12-Foot Wide Multi-Use Trails** constructed within 20-foot access easements or rights-of-way as stand-alone projects or constructed in conjunction with roadway improvement projects (*Estimated Unit Cost per Polk TPO: \$515,500/mile*);
- **Sidewalks** on designated Pathways Segments in neighborhoods or business districts where bicycles can share low-volume roadways with other vehicular traffic, signed with Lake-to-Lake Network and “Bikes Sharing Roadway” advisory signage (*Estimated Unit Cost per City Public Works Dept.: \$250,000/mile*);
- **Designated Bicycle Lanes** on local or collector streets with low-volumes (*Estimated Unit Cost per City Public Works Dept. \$12,000/mile*); and
- **Unpaved Trails** within 20-foot wide access easements through natural areas or between natural and developed areas to serve an added benefit as wildfire buffer.

Funding for projects on many of the pathway segments that have been scored in the Pathways Vision Plan will be considered for inclusion in the City’s Capital Improvement Plan (CIP). For those City-funded segments, five of the highest ranking segments will be selected each year for more detailed analysis to determine the most effective and efficient approaches to providing safe and attractive pathways for non-motorized transportation. As opportunities arise, other corridors will also be evaluated for implementation in conjunction

with roadway projects constructed by the City, County and FDOT and/or private development activity occurring around the City.

The following “subjective” measures will be utilized in the selection of specific projects on each Pathway Segment, for funding in the City CIP:

- **System connectivity and continuity.** This relates to the project's ability to link on- and off -road facilities and to support a more seamless non-motorized transportation network between trip origins and destinations. The intent is to avoid ranking of piecemeal projects that may not provide much benefit to system or corridor continuity.
- **Assessment of cost feasibility (or cost-benefit),** which includes potential right-of-way acquisition and community or business impacts relative to the potential value of the connection.
- **Safety Mitigation.** The ability of the project to mitigate perceived safety or potential safety problems regardless of crash data history. This information is derived from focus groups, discussions with agency staff, community input and/or professional judgment.
- **Mitigation of Obstacles or Barriers.** Because barriers are difficult to precisely define and compare equitably, this subjective measure considers the degree to which the project helps overcome barriers, such as a wide highway, fast traffic, an interstate, drainage canal or similar feature. Many barriers were defined in the focus groups and community charrette and will be addressed under this criterion.

Some regional pathway facilities may be only partially funded by the City of Lakeland, but may be eligible for regional or statewide discretionary funding sources, such as grants provided through the Florida Department of Environmental Protection's Office of Greenways and Trails. The Polk Transportation Planning Organization's 2030 Long-Range Transportation Plan, adopted in 2005, includes the following Multi-Use Trail Needs, including project limits and estimated project cost. The general regional corridors to be served by these trail facilities are depicted in Illustration III-19.

- **Fort Fraser Trail II** - SR 540 to Downtown Lakeland (including SR 570/Polk Parkway Crossing: \$5.1 million
- **Lakeland to Plant City Connector** – Lake Hunter Boulevard to Hillsborough County Line: \$3.7 million
- **Lake Hunter to Lake Hollingsworth Trail** – Lake Hunter Trail to Lake Hollingsworth Trail: \$556,740
- **Tenoroc Trail** – Lake-to-Lake Connector to TECO-Auburndale Trail near Braddock Road: \$5.5 million
- **Williams Trail** – SR 570 (Polk Parkway) to TECO-Auburndale Trail via Mt. Olive Road: \$1.1 million

- **Williams Trail** – SR 570 (Polk Parkway) to TECO-Auburndale Trail via Pace Road
- **Williams Trail** – SR 659 (Combee Road) to Alternate B Connector: \$1.8 million
- **Williams Trail** – Alt. B Connector to SR 570 (Polk Parkway): \$644,375
- **Williams Trail** – Tenoroc FMA to Williams DRI and Alternative B: \$1.3 million

Publicly-Funded Pathway Project Examples: Bicycle and pedestrian facilities are evaluated for inclusion in all new or expanded roadway projects implemented by the City of Lakeland. The City’s planned Edgewood Drive Extension project, between SR 37 (South Florida Avenue) and SR 563 (Harden Boulevard), will include Pathway Segment #5, providing an important connection between the Lake-to-Lake Network and southwestern trail corridors in the vicinity of Lakeside Village and employment centers around Lakeland-Linder Regional Airport.

The City also evaluates the feasibility of including pathways projects in resurfacing or other routine maintenance projects to be implemented by the Public Works Construction and Maintenance Division. For example, designation of bicycle lanes was made during the resurfacing projects on Lake Hunter Drive and Lake Wire Drive. Additional such improvements are expected to be evaluated for resurfacing projects on Lime Street, Lake Bonny Drive and Interlachen Parkway in order to improve the pathways connectivity between Lake Bonny Park and Lake Parker, identified as Pathway Segments #60, #9, and #56 in the Pathways Vision Plan.

Pathways Requirements for New Development Activity: In order to maximize neighborhood-neighborhood and neighborhood-activity center inter-connectivity, the City of Lakeland generally requires new residential and mixed-use developments to include dedicated bicycle and pedestrian facilities such as paved multi-use trails, bicycle lanes or natural trail facilities as conditions of Development of Regional Impact (DRI) or Planned Unit Development (PUD) approval. A few key examples are given below:

- **Williams DRI:** The amended Williams DRI Development Order approved in 2007 requires the construction of a 12-foot wide multi-use pathway adjacent to the SR 33-USF/Williams E-W Road which will traverse the area between SR 33 and the Polk Parkway (see Pathway Segment #12.) Additional multi-use trail corridors are required throughout the Williams DRI to provide connections to the USF Polytechnic campus and Tenoroc Fish Management Area. These general corridors are represented by Pathway Segments #22, #34 and #35. All of these corridors through the Williams DRI will provide critical connections between the Lake-to-Lake Network and Van Fleet/TECO-Auburndale regional trail corridors.
- **Lakeland Central Park DRI:** The Lakeland Central Park Development Order approved in 2008 requires the construction of an eight-foot wide multi-use pathway along the north side of its primary spine road, Flagler Park Boulevard, which traverses an area between SR 572 (Airport Road) and CR 542 (Old Tampa Highway). An additional paved pathway is required on SR 572 along the project

frontage. An unpaved trail connection through the center of the DRI is required between Flagler Park Boulevard and CR 542 (Old Tampa Highway). These corridors are represented by Pathway Segments #17 and #32 and are intended to provide connectivity options between Lakeland and Plant City as identified in the Polk TPO 2025 Long-Range Transportation Plan. These corridors could provide a more viable alternative routing to Pathway Segment #40, which is proposed in the TPO's 2030 Long-Range Transportation Plan.

- **Southwest Sector Plan:** The City's recently-completed Southwest Sector Plan includes the implementation of Pathway Segment #71, along Poley Creek south of SR 570 (Polk Parkway), adjacent to Wagner Elementary School and through the Towne Park and Hawthorne Mill residential communities. Alternative bicycle and pedestrian facility plans have been incorporated into the PUD regulations for both Towne Park and Hawthorne Mill and must be constructed during site development activity. This is another corridor that will improve connectivity between Polk County and Hillsborough County.

Parks Connectivity Plan: This sub-component of the Citywide Pathways Vision Plan included specific analyses of and recommendations to address access improvement needs in the vicinity of parks, recreation facilities and open spaces around Lakeland based on the following standards for each facility type.

- **Community Parks** – Community parks serve a larger population than neighborhood parks, and provide more intensive or major recreational services and activities. A community park is a land-based park and is, ideally, paired with one multi-use facility.
 - **Connectivity** – Community Parks should have dedicated pathway access to neighborhoods and other park facilities throughout the city via the Lake-to-Lake Greenway Connector Network. Since these types of parks draw from a larger geographical area, access and site design should accommodate automobiles, bicyclists, pedestrians and transit patrons.
- **Neighborhood Parks** – Neighborhood parks provide the basic recreational needs to neighborhoods. They are accessible and ideally within walking distance of the residents of each neighborhood.
 - **Connectivity** - Neighborhood Parks have a smaller service area than Community Parks and should have unobstructed access within a general ¼ to ½ mile radius of the park site. Access should be available via dedicated pathways or sidewalks adjacent to local streets. Internal site design should include connections to these external bicycle/pedestrian facilities and include bike/bus amenities where feasible.
- **Scenic Parks** – Scenic parks are primarily passive recreation oriented parks for lakeshores, greenways, scenic views, or historical sites. These areas are generally small and attract the pedestrian rather than the motorist.

- **Connectivity** - Scenic Parks generally draw users from the proximate vicinity near the park but can also draw users from throughout the city and therefore should be connected by multiple modes, including sidewalks and dedicated pathways. Some Scenic Parks, by design, provide connections between other types of park facilities as components of the Lake-to-Lake Greenway Connector Network.
- **Conservation Areas** – Conservation/Preservation areas in some cases could support development with special conditions to reduce environmental impacts, while maintaining their natural functions typically including floodplain functions and wetland functions. The City has designated these areas due to environmental limitations for development and/or to maintain environmental integrity and quality, including habitat, water quality and filtration, flood control, recharge, well fields, and other related purposes. Consequently, these areas will most likely remain undeveloped and are not generally accessible by the public for recreation purposes although passive recreation, trail, boardwalk or other complementary recreational uses could be proposed.
 - **Connectivity** - Due to the undeveloped nature of most Conservation Areas, dedicated connections are not always feasible or desirable. Where appropriate, Conservation Areas could be served with at least unpaved pathways to provide a natural biking and hiking environment and paved pathways where feasible for other users such as seniors or the handicapped.
- **Special Use Facilities** – Special use parks and facilities (buildings) have been created to fulfill certain unique needs of the city, such as meeting facilities.
 - **Connectivity** – Main mode of access is typically by automobile, but alternative access should be accommodated for bicyclists, pedestrians and transit patrons who do not have access to personal automobiles.
- **Urban Parks** – Urban parks serve the entire City and are located primarily in the downtown area. These parks often contain public art such as sculptures.
 - **Connectivity** – Lakeland’s Urban Parks are generally located in or near the central business district. Where necessary, enhanced sidewalk and pathway connections should be made to these facilities, such as through the streetscape program for Downtown parks. It is recommended there be ¼ mile of unobstructed access to surrounding areas, containing significant numbers of residents and/or employees. Urban Parks draw from a large citywide geographical area, therefore connections should be made via the Lake-to-Lake Greenway Connector Network and be located in close proximity to transit routes.
- **Sport Complexes** – Sports complexes are specialized to primarily provide sports venues/field complexes, but may include other facilities such as a multi-purpose field and/or play equipment. A sports complex may include a stadium or clubhouse.
 - **Connectivity** – Sports Complexes provide major athletic facilities that draw patrons from throughout the city and region, or providing recreation facilities

for a more localized population in adjacent neighborhoods. While primary access is via the automobile, site access and design should accommodate bicyclists, pedestrians and transit patrons through sidewalks, pathways and/or on-road bicycle lanes and appropriate amenities.

The full Parks Connectivity Plan, found in TSD V-Two in the Technical Support Document, contains two sections and sets of recommendations for each of the 73 facilities evaluated, including the Fort Fraser Trail operated by Polk County:

- Section One: Individual park analysis and connectivity recommendations; and
- Section Two: Recommendations for promoting the park system.

Section One focused on the ability to reach parks and recreational facilities on foot or bicycle, which is crucial to achieving a truly livable community. This section of the Parks Connectivity Plan was developed with the following goals:

- Improving community and neighborhood connectivity to the City's park system;
- Identification of passive and active connections that address barriers or gaps that hinder park access, such as:
 - Missing sidewalk or bicycle network segments leading to a park facility;
 - Physical barriers such as fences, wall or ditches that preclude direct access;
 - Major highways that isolate park and recreation facilities from surrounding neighborhoods, employment centers;
 - Absence of handicap ramps along key access routes to a facility.
- Identification of specific projects to improve connectivity

Each of the 45 projects contained in the Parks Connectivity Plan fit into four general categories, also depicted in Illustration III-18:



Bicycle Lanes. Indicated when the addition of designated bicycle lanes is necessary to support a recommended connection.



Enhanced Pedestrian Crossing. Enhance an existing crossing to increase automobile and pedestrian visibility and to emphasize connections between communities and park facilities. Improvements for enhancement should include a textured pavement, painting the crossing beyond simple stripes, placing signage along the roadway to notify drivers of crossing and/or a median refuge.



Create Pedestrian Crossing. Defines where an existing crossing is identified, but should be enhanced to better convey the importance and connection to the park connectivity system.



Neighborhood Connector – Provides non-motorized connections between parks and neighborhoods, via select corridors. Connectors could include sidewalks, multi-use pathways and trails connections.

The City Parks and Recreation Department will be responsible for the periodic review and prioritization of these connectivity projects, which will be considered for incorporation into other Pathways Plan projects throughout Lakeland or as stand-alone projects to be programmed in the City's Capital Improvement Plan. City staff will also request that Parks Connectivity projects be included into any City, County or FDOT resurfacing or maintenance projects on adjacent streets including FDOT projects on US 92 (Memorial Boulevard), US 98 (North Florida Avenue) and SR 33 (Lakeland Hills Boulevard).

Section Two identified steps that can be taken to better promote the City's Parks facilities and the Lake-to-Lake Bikeway Greenway Connector network, such as through a dedicated Web page, increased wayfinding signage and maps of the parks and Lake-to-Lake network.

Safety: The City of Lakeland has addressed the issue of safety for bicyclists and pedestrians, and continues to promote safety-mindedness for bicyclists, pedestrians, and motorists. Bicycle routes are being designated and marked by means of bike lanes, sidewalks, "bikes sharing roadway" signs, Lake-to-Lake Bikeway signs, and maps. Flashing crosswalks (pedestrian-activated strobes located within a crosswalk that inform motorists of the pedestrian's intent to cross the street) were installed on Lime Street at the Lakeland Center, and along Ingraham Avenue on the Florida Southern College campus as part of a pilot project sponsored by FDOT.

Traffic Calming: The City has enacted a "Neighborhood Traffic Management Program" aimed at improving safety in its residential areas through the use of various traffic calming techniques. Since its inception in 1999, approximately 40 projects have been constructed by the City Public Works Department, including:

- Street Narrowing (Prado and Palencia Place)
- Traffic Island (Success Avenue)
- Road Closure (Edgewood Alley)
- Speed Tables (Eastway Drive)
- Speed Humps (Westover Street)



Traffic Island
on Success Avenue

The Public Works Department measures the effectiveness of each traffic calming project by conducting a before-and-after study, usually one year following implementation. In each instance evaluated, traffic speeds were lower following project implementation. Traffic volumes were also lower on all but three of the streets receiving a traffic calming treatment. The City has budgeted \$50,000 annually in its CIP for additional traffic calming projects

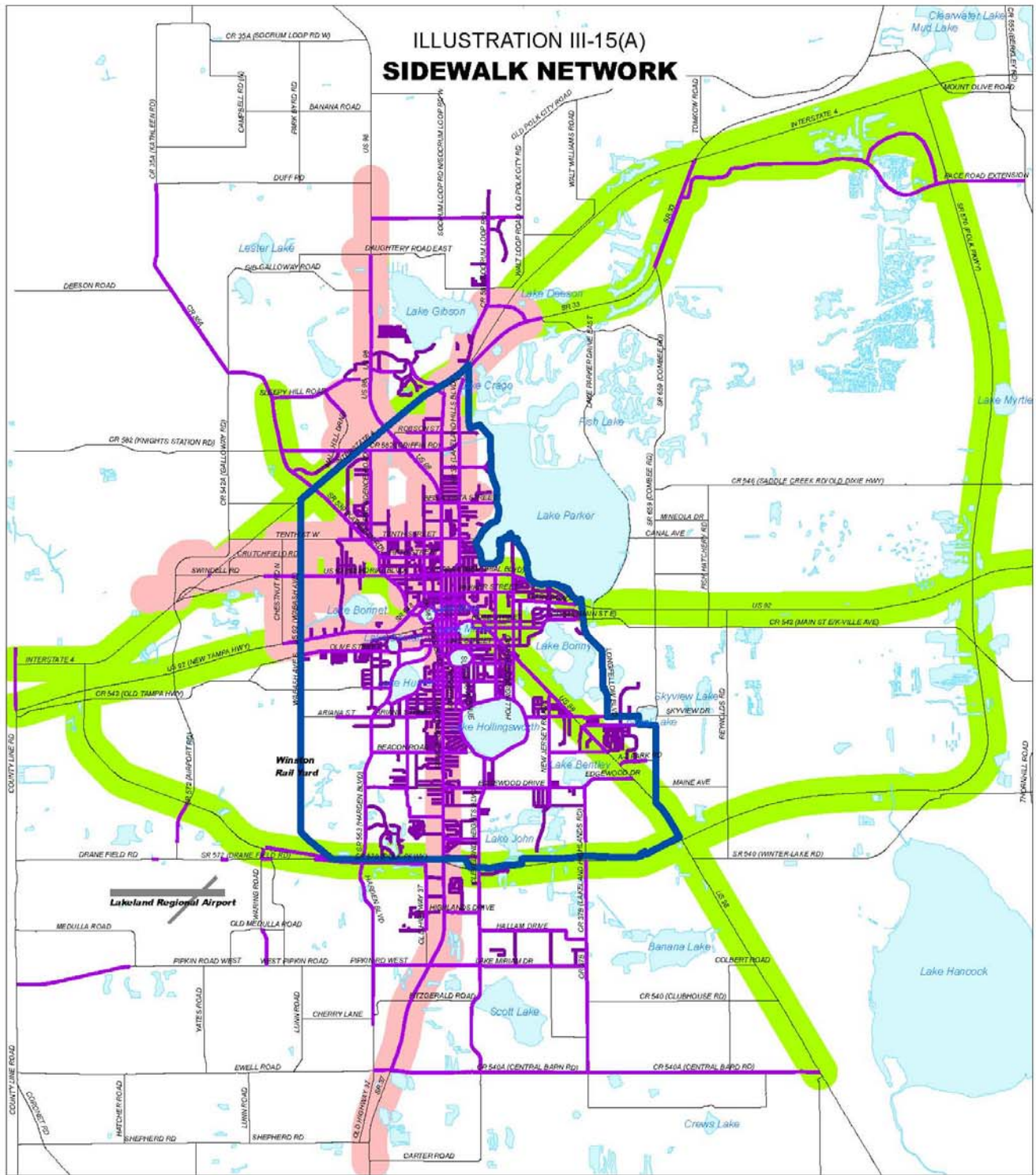
throughout Lakeland. Through these programs, Lakeland is actively seeking a more bicycle-friendly city, and promotes this through safety practices and safe design.

FUNDING OPTIONS

Since the 1990s, the City of Lakeland has been very successful in obtaining Federal Transportation Enhancement Program (TEP) funding for bicycle/pedestrian projects to complete Lake-to-Lake Bikeway Greenway network improvements within the City, such as the Johnson Avenue Streetscape project in the vicinity of Florida Southern College. The City has obtained approximately \$3.2 million in TEP funds between 1993 and 2008. Approximately \$400,000 per year is available to the Polk TPO for Enhancement Projects that are prioritized for funding and programmed in the FDOT Five-Year Work Program approximately two years prior to implementation. The Polk TPO has also established funding set-asides totaling \$4 million per year for “Congestion Management System” enhancement supplements to programmed FDOT resurfacing projects such as sidewalks, paved shoulders and transit stop improvements through the “Early and Continued Coordination on Road Projects” process. The TPO sets aside an additional \$1 million per year of its Federal funding allocation for multi-use trail projects that are on the regional network.

In terms of local funding, the City of Lakeland provides required local funding matches to Federal and State discretionary funding awards for pathways projects, as needed. The Dixieland, Downtown and Mid-Town Community Redevelopment Areas also provide funding for bicycle/pedestrian pathway enhancements on an as-needed basis in compliance with their redevelopment plans. The Mid-Town CRA has advanced the full \$800,000 cost to complete the Parker Street Multi-Modal Corridor Enhancement Project, with \$400,000 in TEP funding being reimbursed to the Mid-Town CRA in FY 2011/12.

The City has budgeted nearly \$9 million of local funds for sidewalk projects between FY 2010-2019, \$7.6 million of which is programmed for sidewalk repair, replacement and Americans with Disabilities Act (ADA) compliance upgrades. In addition, street improvements are programmed that will incorporate sidewalks into their designs. As explained in the Mass Transit section of this element, future sidewalk prioritization cycles will focus on linkages to transit routes, with headways of 30 minutes or less. The Polk County Board of County Commissioners has historically programmed about \$250,000 annually for sidewalk improvements on County roadways, some of which are in the Lakeland Area. Polk County places a high priority on safe connections to schools, based on such criteria as the volumes of the adjacent roads, speed of traffic and the project cost. The City must work with the County to include other considerations, such as connections to transit.



Source: Lakeland Public Works Department, 2010

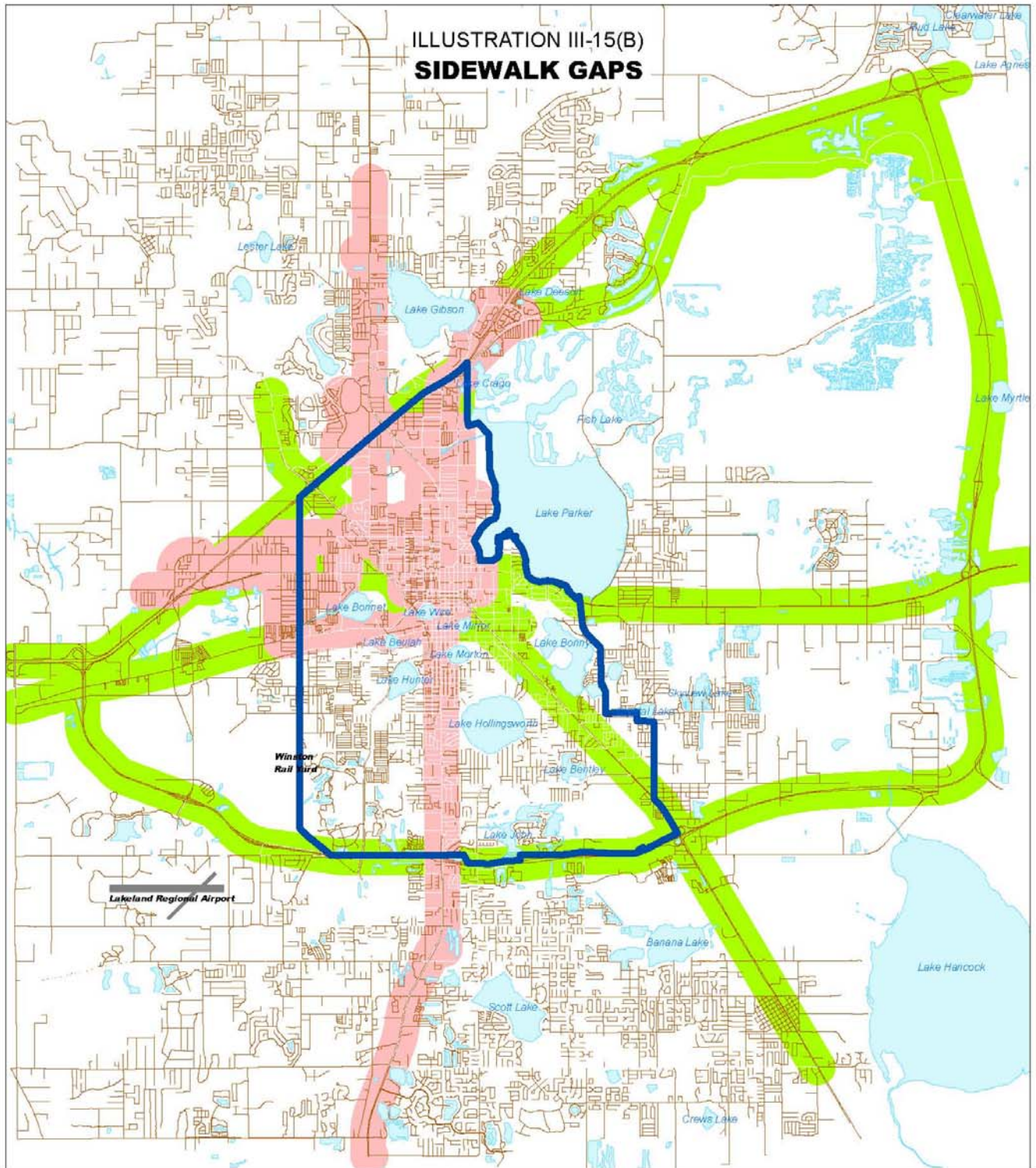


- Sidewalks
- 30 min Headway 1/4 buffer
- Transit Oriented Corridors 1/4 buffer
- Central City Transit Supportive Area



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ILLUSTRATION III-15(B)
SIDEWALK GAPS



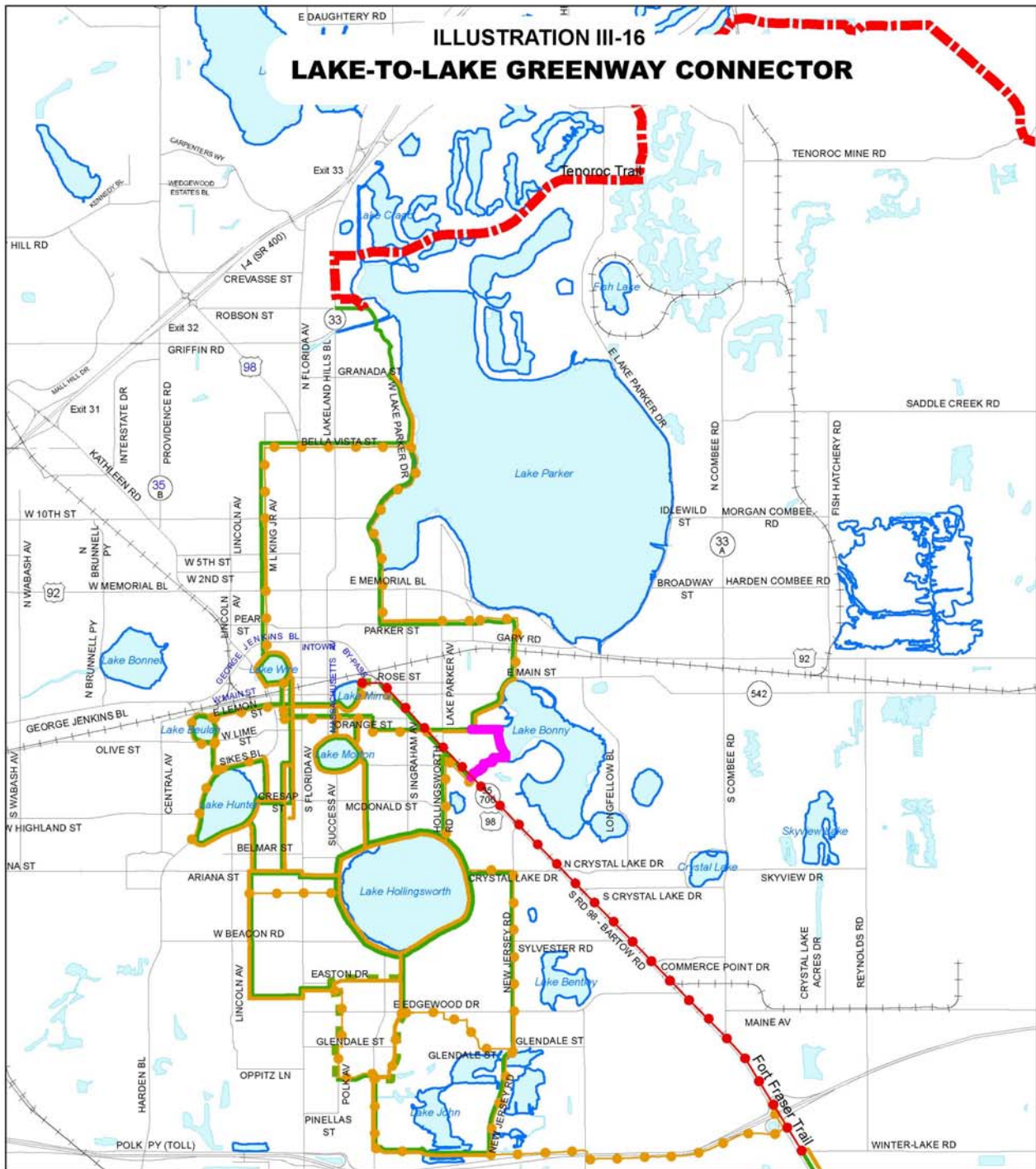
Source: Lakeland Public Works Department, 2010



- Sidewalk Gaps
- 30 min Headway 1/4 buffer
- Transit Oriented Corridors 1/4 buffer
- Central City Transit Supportive Area



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Source: Lakeland Community Development Department, 2012

Planned Regional Trails

- - - Tenoroc Trail (proposed)
- - ● Fort Fraser Trail (proposed)
- Future Alternate Corridors

Greenway Pedestrian Connector

- Existing
- - - Proposed

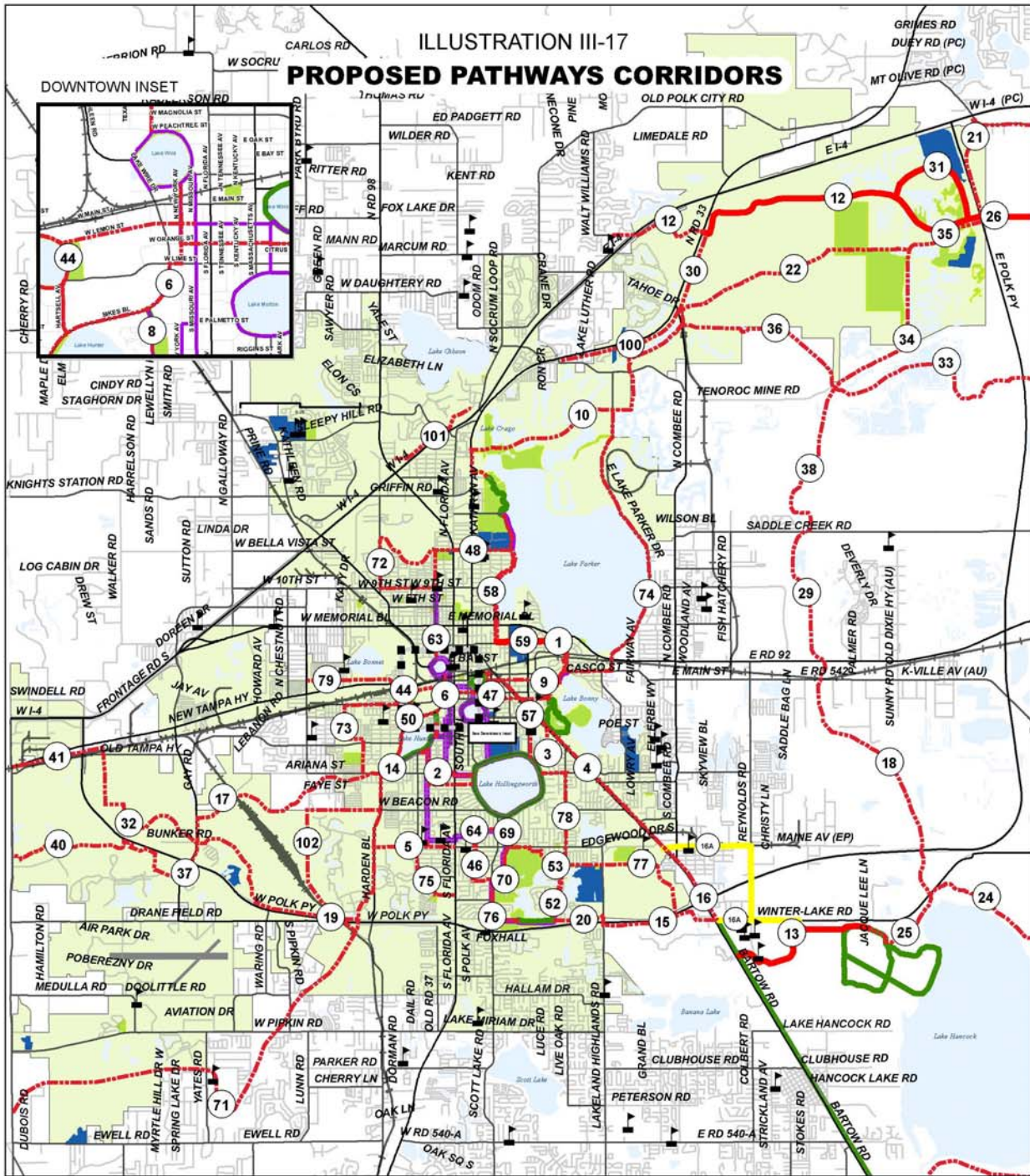
Lake-to-Lake Bicycle Connector

- Existing
- - ● Proposed

Ordinance # 5312
Adopted 05/21/12



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Source: Lakeland Community Development Department, 2012

Proposed Pathways Status

- Completed since 2009
- Planned

Potential Corridor ReAlignments

- Alignment

- Local Street
- Collector Roadway
- Arterial Roadway
- Limited Access Arterial
- Public Schools

- Recreational
- Public and Institutional
- Existing Lake to Lake Network
- Existing Multiuse Trail

Ordinance # 5312
Adopted 05/21/12



Note: Priority Scoring found in attached table

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TABLE III-17
CITYWIDE PATHWAYS PLAN
PATHWAYS CORRIDORS
(ALTHO REFERENCE ASSOCIATED ILLUSTRATION)

ID	Pathway Corridor Name	From	To	Jur.	Length	Score
1	Ft. Fraser to Lake Parker Connector	L Bonny Trail @ E Lime St.	L Parker Trail @ W Lake Parker Dr.	C/M	3.93	11.00
2	Lake Hunter-to-Lake Hollingsworth Trail	Lake Hunter Trail	Lake Hollingsworth Trail	C/M	1.08	10.00
3	Lake Bonny Trail Connection South	Lake Hollingsworth Drive	US 98 (Bartow Road)	C/M	0.53	9.00
4	Fort Fraser Trail	North of SR 570 (Polk Parkway)	Downtown Lakeland Lake Mirror Promenade	C/M	4.07	11.00
5	Edgewood Drive Ext. Trail	SR 37 (Florida Ave)	SR 563 (Harden Blvd)	C/M	1.12	8.50
6	New York Avenue Cycle Track	Lime Street @ Sikes Blvd.	Lake Wire Drive	C/M	0.37	8.00
8	Lake Hunter Trail	Cresap Street	Waverly Place	C	0.26	7.50
9	Lake Bonny Park Connection North	Lake Bonny Park	Lake Bonny Shore	C	0.61	6.50
10	Tenoroc Trail	Lake Parker Park near SR 33	SR 659 Combee Rd south of SR 33	C/M	4.49	5.50
11	Lake Beulah - Lake Hunter Connector	Lemon St	SR 563 (Sikes Blvd)	C	0.88	8.00
12	Williams Trail Alternative 1 (Bridgewater – Williams Trail***)	Walt Williams Road	SR 570 (Polk Parkway)	C/M	5.78	6.50
13	Circle B Bar Connector**	Fort Fraser Trail @ PCC Entrance Rd	Circle B Bar Reserve	NC	2.27	Complete
14	Lakeland-to-Plant City Connector Alt. 2	SR 563 (Harden Blvd)	Lake Hunter Blvd	C/M	0.37	7.00
15	Lakeland Highlands Trail	US 98	Lakeland Highlands Road	M	1.68	6.50
16	Fort Fraser Trail Bridge*	SR 540 (Winter Lake Rd)	North of SR 570 (Polk Parkway)	NC	0.54	8.50

ID	Pathway Corridor Name	From	To	Jur.	Length	Score
17	Lakeland-to-Plant City Connector Alt. 2	SR 572 (Airport Rd) @ SR 570 (Polk Pkwy)	SR 563 (Harden Blvd)	C/M	3.55	7.00
18	Peace River Greenway*	SR 540 (Winter Lake Rd)	US 92	NC	3.90	4.00
19	Lakeland-to-Plant City Connector Alt. 1	SR 563 (Harden Blvd)	SR 572 (Airport Rd)	C/M	4.04	7.00
20	Turtle Rock – Lakeland Marketplace Connector	Lakeland Highlands Road	New Jersey Road	C	0.78	4.50
21	Williams Trail Alternative 2	SR 570 (Polk Parkway)	TECO-Auburndale Trail via Mt. Olive Road	C/M	2.23	2.50
22	Williams Trail Alternative 2	SR 659	Alt B Connector	C/M	3.54	2.50
23	Auburndale Trail*	Old Dixie Highway	Lake Myrtle Drive (southern terminus of Auburndale*)	NC	0.93	2.50
24	Cypress Trail*	Ft. Fraser Trail	Peace River Greenway	NC	8.68	3.00
25	Peace River Greenway*	Circle-B-Bar Reserve	SR 540 (Winter Lake Rd)	NC	1.30	2.50
26	Williams Trail Alternative 1 (Pace Road Trail Segment**)	SR 570 (Polk Parkway)	TECO-Auburndale Trail & CR 655 (Berkley Road)	NC	1.17	1.50
27	Auburndale Trail Bridge*	West of CR 655	East of CR 655	NC	0.09	1.50
28	Van Fleet Extension**	Post Road	SR 33 (southern terminus of Van Fleet Nat. Rec. Trail)	NC	0.92	Complete
29	Peace River Greenway*	US 92	CR 546 (Saddle Creek Rd)	NC	2.05	2.50
30	Williams Trail Alt. 1 Connector West	Tenoroc Trail	Williams Trail Alternative 1 (Bridgewater –Williams Trail)	C/M	1.09	1.50
31	Williams Trail Alternative 1 Connector East (Research Way Trail**)	Bridgewater-Williams Trail West	Bridgewater-Williams Trail East via Town Center-USFP	C	1.67	Complete
32	Lakeland-to-Plant City Connector Alt. 1	SR 572 (Airport Rd)	CR 542 (Old Tampa Hwy)	C	2.30	1.50

ID	Pathway Corridor Name	From	To	Jur.	Length	Score
33	Tenoroc Trail*	Tenoroc Mine Rd	Auburndale Trail at Braddock Rd	NC	3.66	1.00
34	Williams Trail Alternative 2 Connector	Tenoroc FMA	Williams DRI and Alt. B	C/M	2.45	1.00
35	Williams Trail Alternative 2	Alt B Connector	SR 570 (Polk Parkway)	C/M	1.25	1.00
36	Tenoroc Trail	SR 659 (Combee Rd) south of SR 33	Tenoroc Mine Rd	C/M	2.49	1.00
37	Lakeland-to-Plant City Connector Alt. 2	SR 572 (Airport Rd)	SR 572 (Airport Rd) @ SR 570 (Polk Parkway)	C/M	0.40	2.00
38	Peace River Greenway*	CR 546 (Saddle Creek Rd)	Tenoroc State Reserve	NC	2.34	.50
39	Ft Fraser Trail to Bartow Eagle Lake Trail*	Cypress Trail	Bartow Eagle Lake Trail	NC	2.09	.50
40	Lakeland-to-Plant City Connector Alt. 2	Hillsborough County Line	SR 572 (Airport Rd)	C/M	2.83	1.50
41	Lakeland-to-Plant City Connector Alt. 1	Hillsborough County Line	CR 542 (Old Tampa Hwy)	C/M	1.36	1.50
42	Lake to Lake Bike-Orange St	Iowa Ave	New York Ave	C	0.37	3.00
43	Lake to Lake Bike-Lemon St	Missouri Ave	Lake Beulah Dr	C/M	0.57	10.00
44	Lake to Lake Bike-Lake Beulah Dr	Lake Beulah Dr Loop	Lake Beulah Dr Loop	C/M	0.68	8.00
45	Lake to Lake Bike-Belvedere St	Lake Hollingsworth Dr	Camphor Dr	C/M	0.64	9.00
46	Lake to Lake Bike-Woodland Hills Ave	Cleveland Hts Blvd	Carolina Ave	C	0.97	8.50
47	Lake to Lake Bike-Orange/Lime St	Lime St. @ North Lake Parker Ave	Iowa Ave @ Orange St.	C/M	0.84	9.00
48	Lake to Lake Bike-Bella Vista St	Lake Parker	W 10th St	C/M	1.55	10.00
49	Lake to Lake Bike-Main St	US 98 (Bartow Rd)	Lake Mirror Promenade	C/M	0.20	7.00
50	Lake to Lake Bike-Hartsell Ave	Lake Beulah Dr	SR 563 (Sikes Blvd)	C/M	0.21	7.00

ID	Pathway Corridor Name	From	To	Jur.	Length	Score
51	Lake to Lake Bike-West Lake Hunter Trail	Lake Hunter Dr	Lime St.	C/M	1.09	9.00
52	Lake to Lake Bike-New Jersey Rd	SR 570 (Polk Pkwy)	Willow Ave	C/M	0.93	4.00
53	Three Parks Trail - North	Glendale St. @ New Jersey Rd.	Edgewood Dr. @ Buckingham Ave	C/M	0.95	7.50
54	Lake to Lake Bike-New Jersey Trail I	Easton Dr	Glendale St	C	0.50	4.00
55	Lake to Lake Bike-Lake Bonny Dr	Main St	Montgomery St	C	0.26	6.50
56	Lake to Lake Bike-East Lime Street	Montgomery St	Lime St @ N. Lake Parker Ave.	C	0.20	Complete
57	Lake to Lake Bike-Lake Bonny Trail	Lake Bonny Dr W	Lake Hollingsworth Dr	C/M	1.18	10.00
58	Lake to Lake Bike-Lake Parker Dr	Bella Vista St	Parker St	C/M	1.43	9.00
59	Lake to Lake Bike-Parker St**	Lakeshore Dr	Gary Rd	C/M	0.69	Complete
60	Lake to Lake Bike-Interlachen Pky	Main St	Holly Rd	C/M	0.32	6.00
61	Lake to Lake Bike-Shore Acres Dr	Holly Rd	Gary Rd	C/M	0.40	6.00
62	Lake to Lake Bike-Rose St	Lake Av	Lake Mirror Dr	C	0.06	7.00
63	Lake to Lake Bike-MLK JR Ave	US 92 (Memorial Blvd)	Peachtree St	C/M	0.45	10.00
64	Lake to Lake Ped-Woodland Hills Ave	Carolina Ave		C	0.72	8.00
65	Lake to Lake Ped-Easton Dr	Buckingham Ave	Kerneywood St	C	0.55	8.00
66	Lake to Lake Ped-Carolina Ave	Kerneywood St	Carolina Ave	C	0.04	7.00
67	Lake to Lake Ped-Hollingsworth Rd	US 98 (Bartow Rd)	Lake Hollingsworth Drive	C	0.64	8.00
68	Lake to Lake Ped-Rose St	Lake Av	Lake Mirror Dr	C/M	0.08	6.50
69	Lake to Lake Ped-Buckingham Ave	Lake Hollingsworth Dr	Edgewood Drive	C/M	0.39	5.00
70	Lake to Lake Ped-Buckingham Ave	Cleveland Heights Blvd	Edgewood Drive	C/M	0.62	6.50
71	Southwest Corridor	SR 570 (Polk Parkway)	County Line Rd	C/M	6.78	6.50

ID	Pathway Corridor Name	From	To	Jur.	Length	Score
74	East Lake Parker Trail	Lake Mirror Promenade	Tenoroc Trail	C/M	5.47	9.00
73	Westgate – Central Trail	Lake Beulah	Ariana Street at Harden Boulevard	C	2.31	7.00
72	Paul A. Diggs - Webster Park Loop	Tenth St. at Martin Luther King, Jr. Ave.	Martin Luther King, Jr. Ave. at Bella Vista Street	C	2.44	7.00
75	Lincoln-Imperial Canal Trail	Lincoln Avenue at Edgewood Dr	Imperial Boulevard at Florida Ave	C	0.51	9.00
76	Three Parks Trail - South	Cleveland Hts Bl. @ Carleton St	Peterson Park	C/M	0.97	6.00
77	Holloway Park Trail	Lkld Highlands Trail @ US 98	Glendale St. @ New Jersey Rd.	M	2.75	7.00
78	Lake to Lake Bike - New Jersey Trail II	Easton Dr.	Crystal Lake Dr. @ Lake Hollingsworth Dr.	C/M	1.08	6.00
79	Chase Street Trail	US 92 (Wabash Avenue)	Hodges Road @ George Jenkins Blvd.	C/M	1.21	7.00
100	Long Lake/SR 33 Trail	SR 33 @ SR 659 (Combee Rd.)	Old Combee Road	NC	1.84	N/A ¹
101	Lakeland Park Trail	Hopewell Avenue	Lakeland Park Dr. @ Existing Terminus	M	1.27	N/A ¹
102	Wabash/Beacon Trail	Harden Blvd. @ Beacon Rd.	Beaker Blvd. @ Harden Blvd.	M	3.08	N/A ¹

Source: Renaissance Planning Group, City of Lakeland, & Polk TPO, 2009; City of Lakeland, 2012.

* Regional funding required

** Project completed after 2009.

*** Trail is completed east of SR 33, constructed as part of University Boulevard roadway project.

¹ Trails would be incorporated into design and implemented as part of road improvement projects.

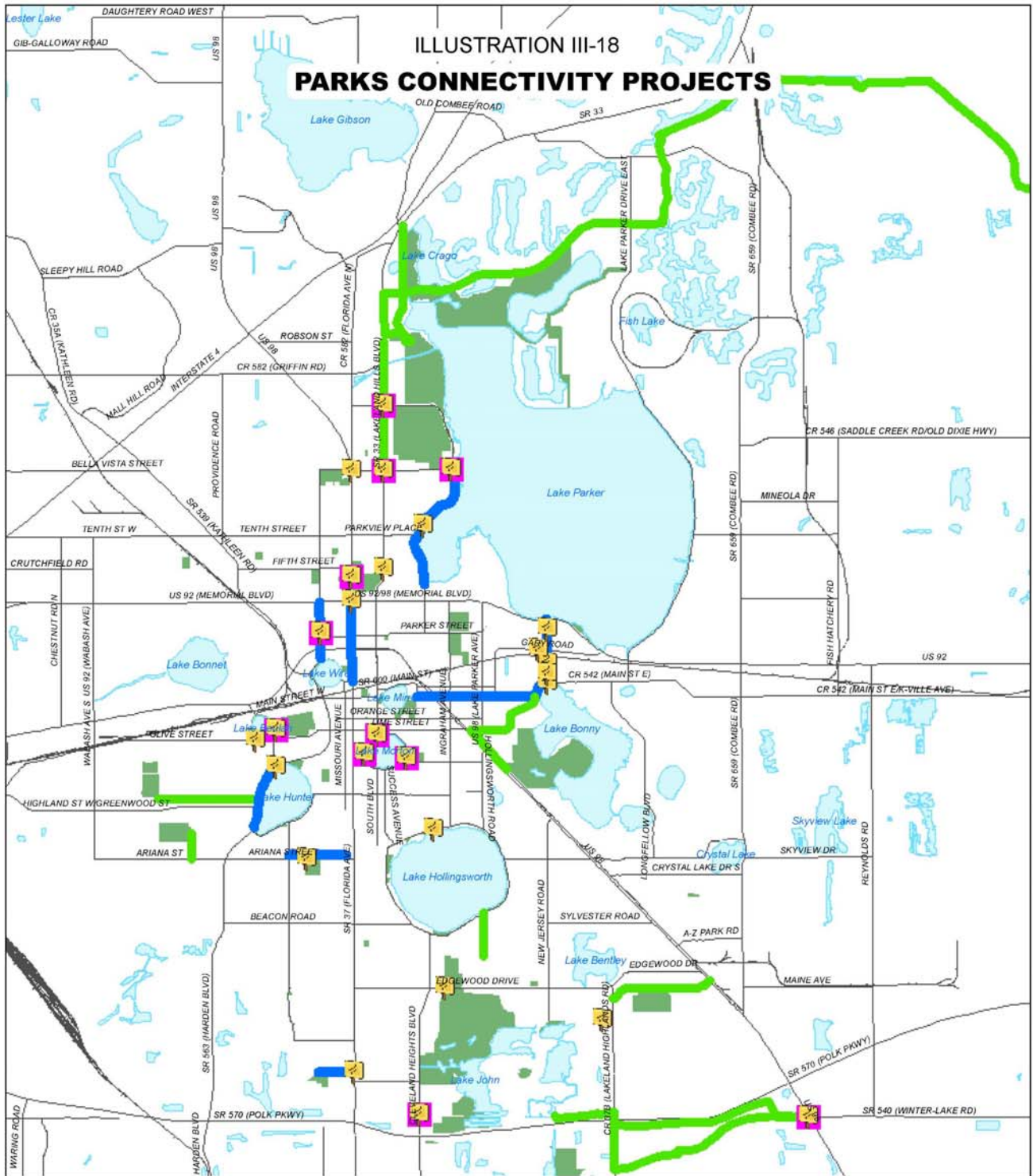
Jurisdiction

C – City****

NC – Not City

M – Multiple

**** City Jurisdiction could result in direct CIP funding for construction/maintenance, city management using State/Federal funds or privately-funded/maintained as a condition of development approval.



Source: Lakeland Community Development Department, 2010

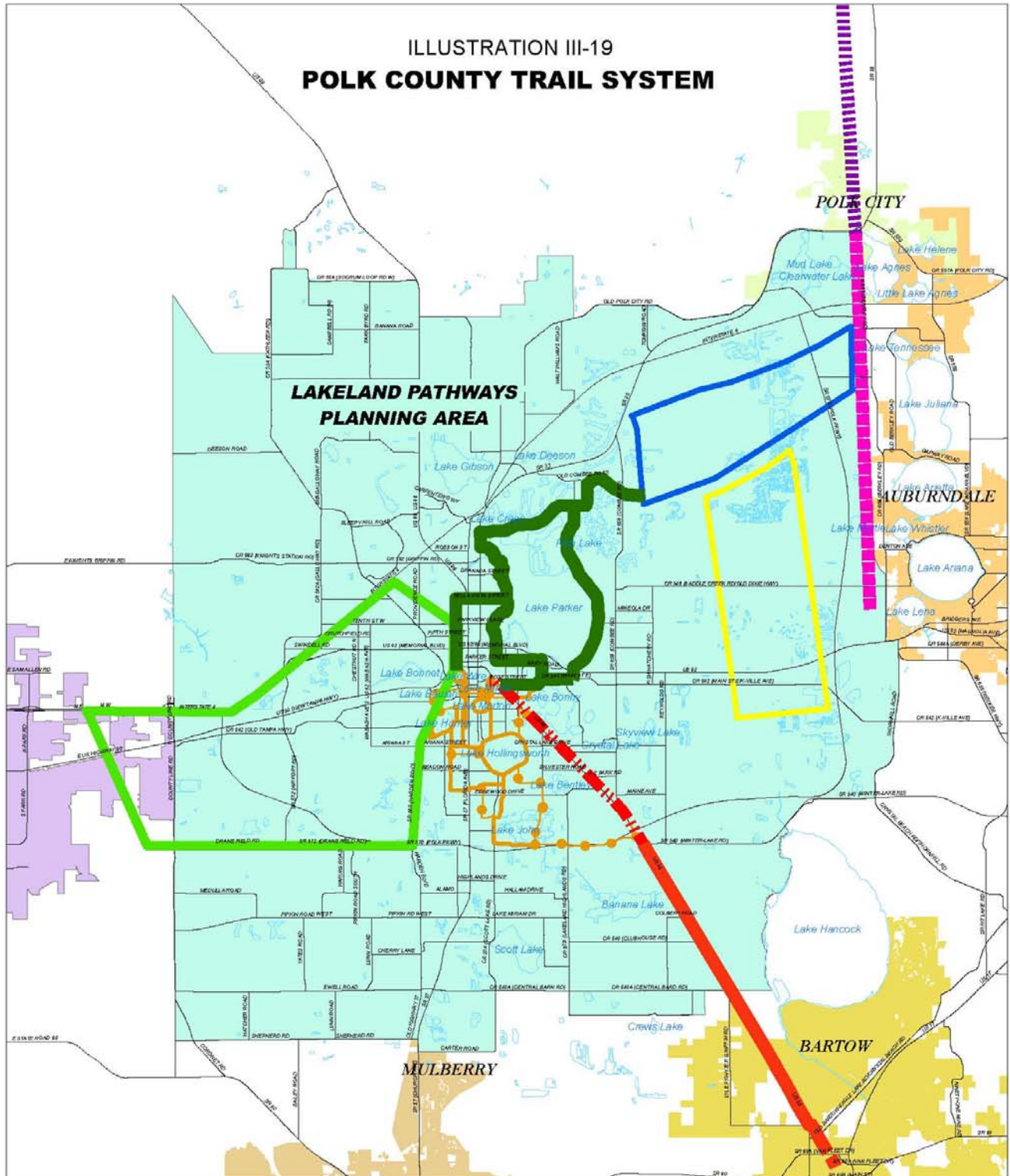


- Pedestrian Crossing
- Enhanced Pedestrian Crossing
- Bicycle Lane
- Neighborhood Connector
- Existing Parks



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ILLUSTRATION III-19 POLK COUNTY TRAIL SYSTEM



Source: Lakeland Community Development Department, 2010



- Lake-to-Lake Greenway Connectors
- Lakeland to Plant City Connector Corridor (Proposed)
- Tenoroc Trail (Proposed)
- Saddle Creek/ Peace River Greenway (Proposed)
- Fort Fraser Trail
- Lake-to-Lake Bicycle Connector
- Van Fleet Trail (completed 1994)
- Van Fleet Trail Southern Extension (completed 2009)
- Existing
- Proposed



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