Walk / Bike Safety Program: **Safety, Mobility, and Accessibility (S.A.M.) For All!!**

1.0 **Vision:**

The Traffic Operations and Parking Services Division strives to provide excellence in enhancing the safety, accessibility, and mobility of all roadway users; particularly vulnerable users such as persons with accessibility needs, children, and the elderly.

2.0 **The Team:**

It truly takes a village to provide a high level of transportation services to our citizens, visitors, and business partners. This “village” includes working with all the Public Works Department’s Divisions and partnering with many other City Departments, such as, Community Development, Lakeland Police, Lakeland Fire, Parks & Recreation, RP Funding Center, Finance, Utilities, Lakeland Electric, and Lakeland Linder International Airport. This village extends to our external partners such as: the Lakeland Downtown Development Authority, Polk County Traffic Operations, Polk County Sherriff’s Office, Polk County Transportation Planning Organization, the Florida Department of Transportation, and the Federal Highway Administration.

In this regard, this group of professionals (Traffic, Pedestrian & Bicycle Safety Team) meet approximately every month at TOPS to discuss these issues holistically.
3.0 Safety, Mobility, and Accessibility (S.A.M.):

The TOPS’ team of men and women are dedicated to maximize Safety, Mobility, and Accessibility (S.A.M.) for all transportation users. With five sections within the Division: Parking Services; Traffic Signal Systems Management; Traffic Signal Maintenance; Traffic Signage Operations; and Administration, the team truly works together to get things done – almost 100% in-house! This management approach generally reduces costs, increases efficiency, reduces time to implement, and maintains a higher standard of accomplishment.

4.0 Walk / Bike Safety Program Implemented/Planned Elements:

Below are examples of specific Walk / Bike Safety Program elements that have been implemented recently. Many of these applications cost less than $25,000 to implement.

4.1 Pedestrian Traffic Signal Operations:

➢ Partner with the FDOT D-1 on the installation of four mid-block pedestrian crossings on Memorial Boulevard from Lincoln to Ingraham. These crossings will be in the form of HAWK signals. Construction is expected to be completed in winter 2019.

➢ Crash reduction benefits continue with the implementation of a 5 second advance walk signal (pedestrians receive a 5-second head-start), Leading Pedestrian Interval (LPI) at all the 24 intersections in the Central Business District CBD. Up to 40% reduction in trendline injury crashes have been recorded, at virtually no cost to the City. This LPI feature is of benefit to persons with accessibility needs.

➢ All traffic signals within the City of Lakeland that have pedestrian movements (virtually all), are equipped with “Pedestrian Countdown” signals.

➢ To prioritize and enhance the pedestrian crossing experience in downtown Lakeland, several intersections have the cycle times reduced to minimize wait times and encourage pedestrian signal use.
➢ Working with FDOT D-1, on our Intersection Crash Avoidance Safety Program (iCASP) for motorists and pedestrians/bicyclists. This program predicts when a red-light run will occur and extends the “All-Red” phase and delays the “Green” signal/walk signal.

4.2 Rectangular Reflective Flashing Beacons (RRFB):

➢ The TOPS team has invested in RRFB’s through the City with a view of enhancing motorists’ awareness of pedestrians in crosswalks. National studies as well as our own studies have shown that yielding to pedestrians increased from about 5-10% without RRFB’s to about 80% or more with RRFB’s; making eye-contact with the motorists is also critical. The photo shows an example of “double-sided RRFB’s” under construction at the RP Funding Center with “Raised Crosswalks”. I have also attached a photo of the Edgewood Drive/Carolina Avenue (Cleveland Court Elem. School) RRFB system. Our local studies have revealed that over a five-month period (random days):

➢ 38 out of 39 (97.4%) motorists did not yield/stop when the RRFB system was not activated;
➢ 35 out of 41 (85.4%) motorists did yield/stop when the RRFB system was activated.

To date the City has installed 13 RRFB’s with three additional systems planned for April 2019. We also have a “high (12) / medium (12) / low (7)” candidate list for future consideration.
4.3 Pedestrian High Visibility, Diagonal Crosswalks and Signage:

➢ It is the policy of the Public Works Department to install all pedestrian crossings utilizing the “high visibility ladder” style crossing. This crosswalk style delineates the crossing more effectively for pedestrians and increases the presence of the crossing for motorists.

Where cost feasible, a “herring bone brick” accent is installed in between the crossing bars.

Double-sided Fluorescent Green “Pedestrian” signs are the new standard; median “Pedestrian Paddle” signs are installed where feasible.

The City has also invested in “Diagonal Pedestrian” crosswalks at Lake Miriam Drive and Cleveland Heights Boulevard. This “push button” activation configuration coupled with an “Exclusive Pedestrian” phase and “No Right-Turn on Red” phase, provides added safety for the students of Lakeland Highlands Middle School and the public.
4.4 Digital Analysis/Maintenance of School Zones & WAZE Operations:

➢ Digital “School Zone” electronic “Clock System”

The technical team has full remote access to all 44 locations in terms of school release timing changes and overnight electronic report on potential and actual failures.

➢ Walk / Bike Educational Programs – Public Works Week for First Friday Downtown
4.5 Bicycle Transportation Infrastructure:

➢ New York Avenue Cycle Track;

➢ Lake Hollingsworth Modified Cycle Track;

Lake Hollingsworth Drive / Ingraham Avenue - Construction of a modified “Cycle Track” that separates motor vehicle traffic from Bicycle traffic and

➢ Interlachen Parkway Bicycle Boulevard
4.6 Walk/Bike Automatic Data Collection:

➢ The City has invested in the “eco-counter” pedestrian/bicycle counting system and deployed the counters on the Lake Hollingsworth Trail as well as the Three Parks Trail. Almost 400,000 walkers/bikers have used these two trail systems in 2019. Further, we are investing in traffic signal video detectors (instead of loops) which detect motor vehicles as well as bicyclists and count them!

4.7 Roadway Right-Sizing Program:

➢ Dr. Martin Luther King Avenue - Pedestrian crossings exposure reduced, Bicycle lanes, and landscaping.

➢ E. Parker Street – Pedestrian refuge crossings and reduced exposure, Bicycle lanes, and landscaping.

➢ S. Ingraham Avenue – Pedestrian crossings and reduced exposure, Bicycle lanes, and landscaping.

➢ Massachusetts Avenue. An additional 60 on-street parking spaces were created, equivalent to a $900,000 virtual garage. Year/year studies indicate that crashes are down by about 40-50% and pedestrian walking distances (exposure to traffic) have reduced by 25%.
S. Florida Avenue – Dixieland: Proposed “Right-Sizing” of Florida Avenue.

Reduced pedestrian crossing exposure, increased sidewalk width, and enhanced travel lane operation.

4.8 Traffic Speed Reduction / Traffic Calming Program:

The City of Lakeland understands that to make a Great Place, it should be a walkable place. On the road of eliminating fatal crashes, reducing operating speeds is critical – speed kills! We have enhanced our Traffic Calming Program to include more streets with more flexibility in speed reduction. **Further, we have experimented with speed reductions on collector roads.** One example of such an application is Lake Morton Drive.

The Swan population around Lake Morton has increased over the last few years. The predictability of this interaction is now at a point where a collision between the Swans and motorists and all roadway users, can be deemed inevitable. An average of 5-10 Swans (including baby Swans) have been killed each year around Lake Morton Drive; about 5-10 Swans have also been injured each year; a pedestrian was also seriously injured.

Reducing the speed limit from 25 to 20 MPH and installing “parking boxes” reduced operating speeds by over 15%.
Parking Services:

To provide safe, convenient, and available parking facilities (on and off-street) and assist businesses within the Central Business District (CBD) by reducing parking issues through consistent enforcement and clear communication.

Core Services
Parking Services maintains three city-owned parking garages, six leased lots, and three metered lots in addition to on-street parking within the City. These parking facilities enhance the downtown economic climate by ensuring turnover in customer parking spaces. Zone 2705 and zone 2725, the on-street parking spaces, feature a 2-hour free session once per day to assist with offsetting the cost of parking for consumers visiting downtown area. These zones continue to be supported by the customers to the downtown area as well as supported by the Lakeland Downtown Development Authority and many other business owners within the CBA.

Parking Enforcement
Parking Enforcement provides a better “Quality of Life” by providing improved public space and supports safe areas for public to park and safe areas for the walking and biking public. Parking Services encourages “Economic Opportunity” by providing businesses with areas to park and ensures the access to parking by their customers by enforcing both state law and city ordinance, as it pertains to parking services.

Parking Garage Operations
Parking Services provides operation and maintenance of the City owned parking garages and lots providing a clean and safe environment. Garages and public parking areas are maintained for cleanliness and structural integrity is kept to high standards. Video security
is utilized in Main Street Garage, Iowa Street Garage and assists with reducing and reporting vandalism, capturing accidents, and ensuring safety of the public while in these facilities.

Changes and Accomplishments Fiscal Year 2018

- Implementation of new parking permit system City wide.
- Completed landscaping improvements in Lot C (100 block N. Tennessee).
- Implementation of new “van accessible” ADA space in Munn Park Lot.
- Creation of “Zone 2725” reduced price parking for peripheral areas.
- Implementation of “Free After Three” program in Cedar Street Public Parking.
- Addition of new “Commercial Loading Zones” throughout city.
- Provided after hours security and assistance for 1st Fridays and Special events.

<table>
<thead>
<tr>
<th>Item Measured</th>
<th>Collection Frequency</th>
<th>2016 Actual</th>
<th>2017 Actual</th>
<th>2018 To Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Enforcement-</td>
<td>Annually</td>
<td>1348 or 23.96%</td>
<td>702 or 12.57%</td>
<td>1003 or 15%</td>
</tr>
<tr>
<td>Percentage Reduction of Citations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leased parking spaces</td>
<td>Quarterly</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Revenue generated by Leases</td>
<td>Quarterly</td>
<td>$594,748</td>
<td>$616,652</td>
<td>$615,233</td>
</tr>
</tbody>
</table>

- Downtown NEW Parking Garage (P3) partnership negotiation: Heritage Plaza Property - “Condominium Approach” to partnership – Minimum of two floors for City use; about 399 of the 824 proposed parking spaces. Encourage potential developers/employers to relocate downtown Encourage Public/Private Partnerships (P3); Create a “Blueprint” to attract new investment; Shift from existing City assets, opening opportunities for other potential uses

- Continue to provide after hours’ assistance/security for 1st Friday’s, Food Truck Rallies, and other special events downtown

- Implemented “Free After 3” parking opportunities for persons utilizing the lower level of the Main Street garage: frees-up more spaces on-street.

- Implemented new on-street parking Zone “2725” for $0.25 per hour (unlimited) to provide long-term parking outside the downtown core (about $450.00 revenue in first four months of 2018).

- Kentucky Avenue Commercial loading zone (5a-10a) – mixed use sharing parking opportunity.

- Implemented Public Private Partnership (P3) with the Trinity Presbyterian Church, utilizing 70 parking lot spaces for public use. Approximately 40 parkers per month at this time.

- Orange Street garage ADA changes resulting in overall capacity implications - To CC on 4/2/2018 - APPROVED (4-3). Revised draft agreement sent to FedEx on 4/6/2018.

- Continue to see increased use in ParkMobile activity. In calendar 2017, had a utilization rate of approximately $22,000 in ParkMobile revenues.

- Implemented License Plate Recognition hardware and software for more parking operations.

- Implement “Universal Valet” fully electronic program with the CRA & LDDA 100% funded:
  - December 2018
  - Wed/Thurs./Fri 11 am to 3 pm
  - Fri/Sat evening