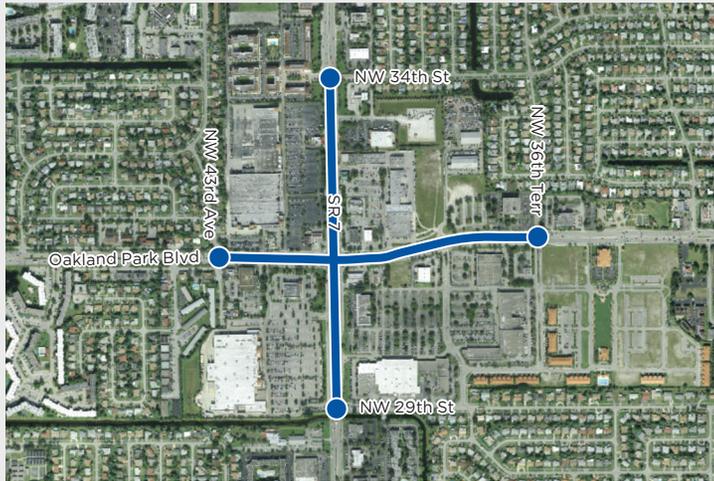


OAKLAND PARK BOULEVARD AND SR 7 SUMMARY

Lauderdale Lakes, FL

Maintaining Agency: FDOT

OAKLAND PARK BOULEVARD AND SR 7 | Intersection Study



CRASH DATA

46 Pedestrian

17 Bicycle

1 Fatal

49 Injury

13 Property Damage Only

32% Occurred in Non-Daylight Lighting Conditions

35% Occurred in January, February, or August

22% Occurred on Friday

Peak Crash Time Periods

13%



11%



8%

Involved Alcohol and/or Drugs

CALENDAR						
S	M	T	W	T	F	S
					X	
					X	
					X	
					X	

ROADWAY CHARACTERISTICS

Looking West



Oakland Park Boulevard and SR 7 are each 6 lane, divided roads with intermittent right- and left-turn lanes. At the intersection, each leg has dual left turn lanes and right turn lanes. The roads have cement or lightly vegetated medians and cobra style vehicular lighting. The corridor has 6' sidewalks and no marked bike lanes. The intersection is surrounded by large shopping centers with big box stores and out parcel development set behind expansive surface parking lots.

FIELD REVIEW OBSERVATIONS

- Illegal Mid-Block Crossings
- Inattentive Drivers (Especially at Driveways and Intersections)
- Vehicles Blocking Crosswalks
- ADA Noncompliant Sidewalks and Ramps
- No Bike Lanes
- Bicyclists Riding on Sidewalks
- Lack of Crossing Opportunities
- Objects Blocking Sidewalks
- Narrow Sidewalks
- Frequent Driveways
- Poorly Marked Driveway Crossings
- Poor Pedestrian Access to Adjacent Development
- Lack of Shade/Shelter
- Lack of Bicycle Markings at Conflict Areas
- Long Signal Times
- Buses Bunching and Stopped in Road
- Broken/Out of Date Pedestrian Signage and Signals



Transit Ridership & Land Use

Transit ridership is high study area. Ridership exceeds 250 riders per day at most of the bus stops around the intersection. Both Oakland Park Boulevard and SR 7 are designated for premium transit service in the future, and the intersection is intended to become a transit hub. People were regularly observed waiting at the stops during the field review, and some of the bus stops include shelters to provide shade and comfortable waiting areas for riders. Some of the stops are located far from signalized crossings and many people were observed crossing illegally mid-block at those locations.

The land uses around the intersection are auto-oriented. Big box stores, set far back from the road behind parking lots, surround the intersection. The land use pattern includes large superblocs with little internal roadway connectivity. The land uses are almost all commercial in nature, although Lauderdale Lakes is planning a mixed use town center on the south side of Oakland Park Boulevard east of NW 36th Terrace. Conceptual plans suggest that the whole area is intended to eventually be developed in a high density and mixed use manner. According to demographic data, residents in the study area also have a high propensity for traveling on foot, by bike, or on transit in comparison to the rest of the county.



Bus unloading on SR 7.

General Observations:

Throughout the study area, pedestrians tend to cross outside of marked crossings. This is especially true at or near bus stops when the bus stop is located across the street from a destination. Bicyclists also chose not to cross at intersections. However, there are long distances between signalized crossings and the signals are long, creating long wait times for pedestrians when they do reach signalized crossings. This may also lead to pedestrians crossing mid-block. In general, the pedestrian facilities do not comply with ADA requirements throughout the corridor. Other pedestrian and bicycling issues observed include: lack of any bicycle facilities, fixed objects mounted in sidewalks, missing or worn truncated domes at ramps, outdated signage at crosswalks, pedestrian signals that do not function, and vegetation obstructing the sidewalks. The median also does not prevent pedestrians from making mid-block crossings. However, drivers also tend to pull through crosswalks at red lights. There are high speed turn lanes into many businesses and few cues to cause the driver to slow down. Lighting is poor throughout the study area, except at the intersection of Oakland Park Boulevard and SR 7. There were also observed issues of buses stacking and buses parking in the street for several minutes.

FIGURE 2 | Study Area Transit Ridership

Legend

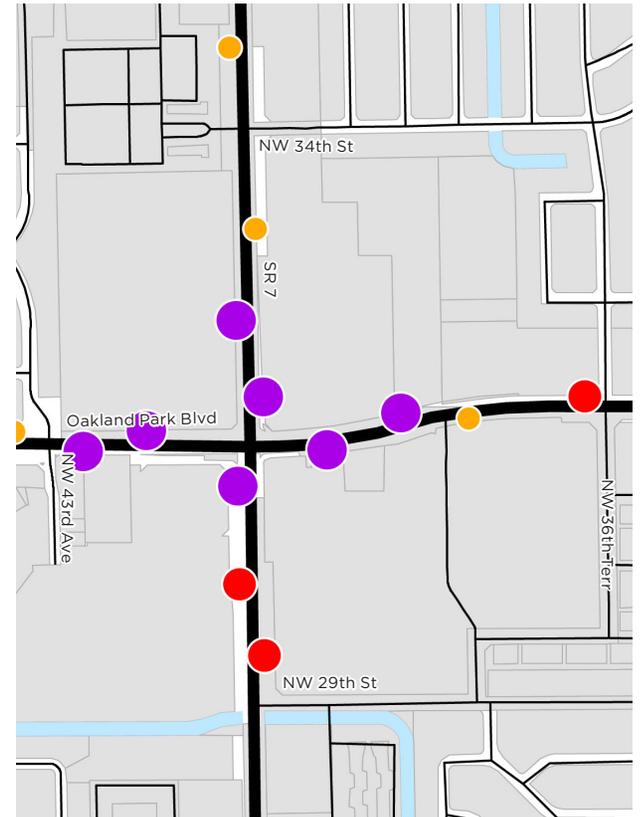
Daily Boardings + Alightings

- 1 - 25
- 26 - 50
- 51 - 100
- 101 - 250
- 250 +

Source: Broward County Transit, 2015



Typical Land Uses Around the Intersection



Issue: Mid-Block Crossings

Location: 7 (Whole Area)



General Observations:

- Mid-block crossings observed at bus stops and where there are destinations on either side of the street.
- The distances between signalized crossings is very long in most locations.
- The signal times are long, which can discourage people from waiting for the signal to cross.
- In some locations, “Do Not Cross” signs have been installed, however they do not seem to have much of an impact based on field observations.

Recommendations:

- Explore locations for safe mid-block crossings and consider bi-directional median opening crosswalks and TWLTL median refuge islands.
- Install thick shrubs in the median to physically prevent pedestrians from crossing medians mid-block.
- Consider relocating bus stops closer to crossings to create incentive for crossing at signals.
- Create a progressive enforcement campaign where officers educate, warn, and finally ticket pedestrians who cross mid-block.



Pedestrian crossing mid-block.



Pedestrian crossing mid-block at a gap in the shrubs.



Pedestrian crossing mid-block as a vehicle approaches.



Pedestrians crossing near a crosswalk against the signal.

Issue: Pedestrian Facility Deficiencies

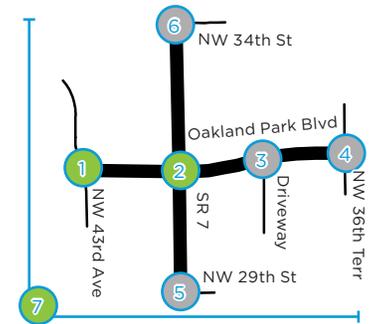
Location: 1, 2, 7 (Whole Area)

General Observations:

- Sidewalks are directly adjacent to travel lanes without any separation from vehicles.
- Sidewalk does not follow desire line from NW 43rd Avenue to the Walmart Driveway. There is a worn footpath between the Superstar K and Walmart.
- The sidewalk is broken in some locations, such as the NE corner of the intersection where a sandbag is placed to help fix the issue.
- Signal cabinets are located very close to the sidewalk. The cabinets can get very hot (up to 200* F) and can pose a danger to pedestrians.

Recommendations:

- Use lush landscaping to close off the medians to prevent pedestrians from making illegal mid-block crossings.
- Consider adding a landscaped buffer between the sidewalk and the street.
- Look at where pedestrians are crossing and create better connectivity to and between destinations.
- Consider wrapping signal cabinets or moving them away from pedestrians/sidewalks.



Pedestrian utilizing a worn path where a desire line exists between Superstar K and Walgreens/Walmart.



Worn path between showing a pedestrian desire line between the Superstar K and Walgreens/Walmart.



Lack of buffer between sidewalk and street and bench blocking portion of the sidewalk.



Broken sidewalk on the NE corner of the SR 7 intersection.

Issue: No Bike Lanes
Location: 7 (Whole Area)



General Observations:

- There are no bike lanes in the study area.
- Bicyclists ride on the narrow sidewalks, creating conflicts between bicyclists and pedestrians.
- Bicyclists were also observed riding on the sidewalk in the opposite direction of vehicles.
- These conditions create safety issues for bicyclists, especially at intersection and driveway crossings.
- Bicyclists cross mid block.

Recommendations:

- Evaluate the addition of bike lanes throughout the corridor. Ensure that the bike lanes are designed to have sufficient width to safely separate bikes from the high-speed and high-volume vehicular traffic in the study area in order to promote use of the bike lanes rather than the sidewalks. The high volumes and speeds suggest the need for protected or separated bike lanes to accommodate the needs of riders.
- Provide additional visual separation of bike lanes through buffers.
- Use green paint at intersections, driveways, or other conflict points to highlight to drivers that bicyclists may be crossing.
- Create an outreach campaign to alert bicyclists of the dangers of riding on the sidewalks and to alert drivers of the need to look for bicyclists when turning in to and out of driveways.
- Create a progressive enforcement campaign where officers educate, warn, and finally ticket drivers who drive in bike lanes and bike riders who cross the street against the signal.
- Install thick shrubs in the median to physically prevent bicyclists to from crossing medians mid-block.
- Create a progressive enforcement campaign where officers educate, warn, and finally ticket bicyclists who cross mid-block.



Bicyclist crossing in a crosswalk.



Bicyclist crossing in a crosswalk.



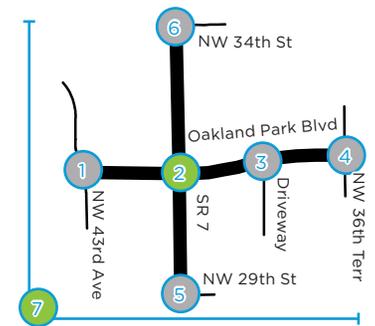
Bicyclist waiting at a signal to cross.



Bicyclists crossing mid block.

Issue: Transit Scheduling & Education, & Locations

Location: 2, 7 (Whole Area)



General Observations:

- The Lauderhill shuttle bus (operated by LSF Shuttle)'s driver was observed exiting the shuttle on the left side into the travel lane to help a wheelchair-bound passenger. Several vehicles had to stop for the bus.
- Three buses were observed to be bunched, blocking the travel lanes for the southbound through and westbound right-turn vehicles.
- One bus stopped in the travel lane for five minutes at the northwest corner of Oakland Park Boulevard at SR 7.
- Mid-block pedestrian crossing is a critical safety concern throughout the corridor. Many, but not all, of the observed illegal mid-block crossings result from bus stops that are not conveniently located near existing crosswalks. Alternatively, crosswalks are not conveniently located near the bus stops.



Driver helps wheelchair-bound passenger onto bus.



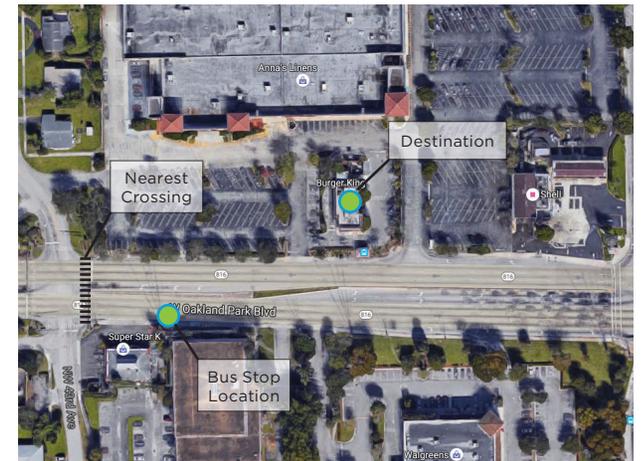
The bus stops are heavily utilized in the corridor.

Recommendations:

- Bus driver education regarding how to safely assist passengers.
- Review bus schedules to reduce bus bunching.
- Evaluate the bus stop locations and potential mid-block crosswalk locations.
- Design mid-block crosswalks with enhanced visibility features, such as Rectangular Rapid Flash Beacons (RRFBs), to encourage use and to improve safety.



Buses bunching south of Oakland Park Boulevard on SR 7.



This bus stop is located closer to the destination than the nearest crossing. Many pedestrians were observed crossing mid-block to access the Burger King. Relocating it to the other side of the crosswalk could help to encourage pedestrians to use the crosswalk.

Issue: Driveway Frequency & Design

Location: 3, 7 (Whole Area)



General Observations:

- There are a number of driveways between intersections in the study area. Many of these driveways have poorly marked crosswalks.
- Many driveways along the corridor are very wide and allow drivers to turn in and out without slowing down. Some also have right turn lanes that allow for this.
- Many drivers were observed turning out of driveways without looking for or yielding to pedestrians.
- The stop bar at some driveways is set back far from the street. Drivers pull past the stop bar and in to the crosswalk for a better view of traffic, which causes conflicts with bicyclists and pedestrians.



Wide driveway with a vehicle turning in front of crossing pedestrians. This vehicle did not slow down when turning.



Wide driveway.

Recommendations:

- Refresh pavement markings to emphasize crosswalks across driveways.
- Create an outreach campaign to alert bicyclists of the dangers of riding on the sidewalks and to alert drivers of the need to look for bicyclists when turning in to and out of driveways.
- Encourage cross access agreements between developments to limit the number of driveways approved along the corridor.
- Consider narrowing driveways where possible and ensure that driveway width is considered in development review for new developments.
- Consider whether right turn lanes are needed at every development. If not, consider where they might be able to be removed.
- Install warning signs at intersections and driveways, such as "Stop Here on Red".
- Consider redesigning the location of the stop bar and crosswalk.

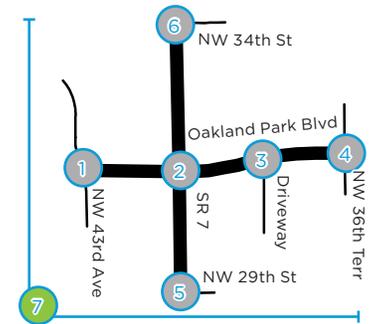


Channelized, high speed driveway.



Vehicle pulling past stop bar because it is too far back.

Issue: Driver Behavior
Location: 7 (Whole Area)



General Observations:

- Drivers turning right on red do not always look for pedestrians in crosswalks before turning.
- During field observations, several drivers almost hit pedestrians or bicyclists in the crosswalks and at driveways.
- Drivers exiting driveways do not always yield or look for pedestrians or bicyclists.
- Drivers stop in the crosswalk and block access to the sidewalks. This is sometimes due vehicles pulling through the stop bars in order to see oncoming traffic because the stop bar is set back.

Recommendations:

- Install warning signs at intersections and driveways, such as “Stop Here on Red”.
- Consider implementing “No Right Turn on Red.”
- Educate drivers on safe driving behavior through programs such as best foot forward, alert today, alive tomorrow and by working with Google and Waze.
- Create a progressive enforcement campaign where officers educate, warn, and finally ticket drivers who block crosswalks.
- Consider redesigning the location of the stop bar and crosswalk.



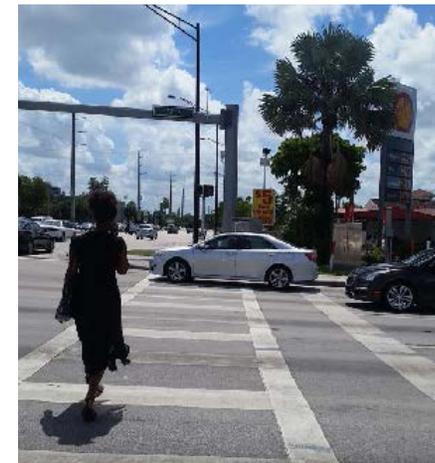
Vehicle waiting to turn right on red in the crosswalk while pedestrians have a the walk signal.



Vehicle pulling past stop bar because it is too far back.



Vehicle waiting to turn right on red in the crosswalk while pedestrians have a the walk signal.



Vehicle waiting to turn right on red in the crosswalk while pedestrian walks with the walk signal.

Issue: Pedestrian Signage Deficiencies

Location: 1, 2, 5, 6

General Observations:

- Pedestrian signals are not functioning or the countdown signal is not working at multiple intersections (1, 5, 6).
- Many of the pedestrian signal push button signs do not provide the street names.
- Many people do not know state road numbers if streets have other names, and some push buttons still refer to state road numbers.

Recommendations:

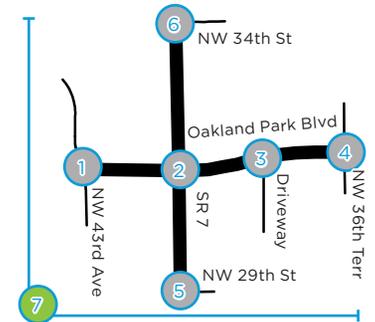
- Replace or fix pedestrian signals/controllers.
- Update pedestrian signal push button signs as necessary to meet standards.



Signs are out of date and either do not state which street they are referring to or utilize state road number as opposed to common name.



Pedestrian signals are not working at NW 34th Street.



Issue: Signal Timing

Location: 7 (Whole Area)

General Observations:

- Signal times are long, which causes long wait times for pedestrians when crossing the street at intersections.
- It was observed that pedestrians cross the street against the signal even in crosswalks instead of waiting for the Walk signals.

Recommendations:

- Consider retiming signals with a focus on pedestrian and bicycle mobility.



Pedestrians crossing against the signal.

Issue: Roadway Striping Utilization

Location: 2 (northeast segment)

General Observations:

- The southbound turn lane is striped out north of the intersection of Oakland Park and SR 7, however people drive through it.

Recommendations:

- Consider creating a bulb out/transit stop so that transit can stop on the street for better loading and unloading at this high volume stop. This could be done permanently with curb or temporarily with plastic bollards.



Driver driving in striped out area.



Striped out area that could become a transit bulb out.



Issue: Lighting

Location: 1, 3, 4, 5, 6, 7 (Whole Area, Excluding 2)

General Observations:

- Lighting is poor outside of the intersection of Oakland Park Boulevard and SR 7. That intersection was updated recently. The transition between lower and higher lighting levels is difficult at night.
- Lighting is present on only one side of the roadway between intersections.

Recommendations:

- Complete a lighting study with a focus on pedestrian lighting.
- Create an outreach campaign to alert pedestrians and bicyclists of the need to wear bright clothing at night and to use lighting.



Lighting is poor outside of signalized intersections and present only on one side of the street.



Lighting is good within the intersection of Oakland Park Boulevard and SR 7.

