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Transportation Master Plan Proposed Solutions / FDOT Roadways

https://www.browardmpo.org/plans/city-of-wilton-manors





Agenda

1. Project Schedule / Current Status

Existing Conditions & Key Issues (recap) + Proposed Solutions:

- 2. Powerline Rd
- 3. Dixie Hwy
- 4. Wilton Dr
- 5. Next Steps

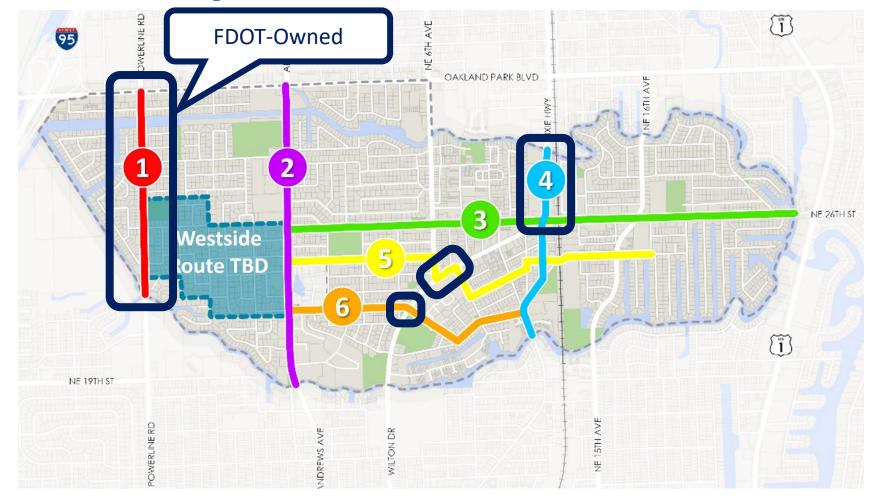
Meeting Goals:

- √ Keep FDOT informed on project status and next steps
- ✓ Provide brief recap of Existing Conditions and Significant Issues
- ✓ Present Potential Solutions for FDOT-owned roadways
- ✓ Hear from FDOT Staff: Feedback on Potential Solutions.
- ✓ Hear from FDOT Staff: Path forward for FDOT "approval" of TMP
- ✓ Hear from FDOT Staff: Status of FDOT projects in Wilton Manors

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Plan Study Area



Plan Study Area: Six roadways to be assessed for existing conditions / needs and have specific transportation projects identified.

- > Traverse the City (3 N/S roadways + 3 E/W roadways)
- ➤ Varying roadway classifications / intensities
- > Abut diverse land use categories / densities
- > Focus on both corridors and intersections

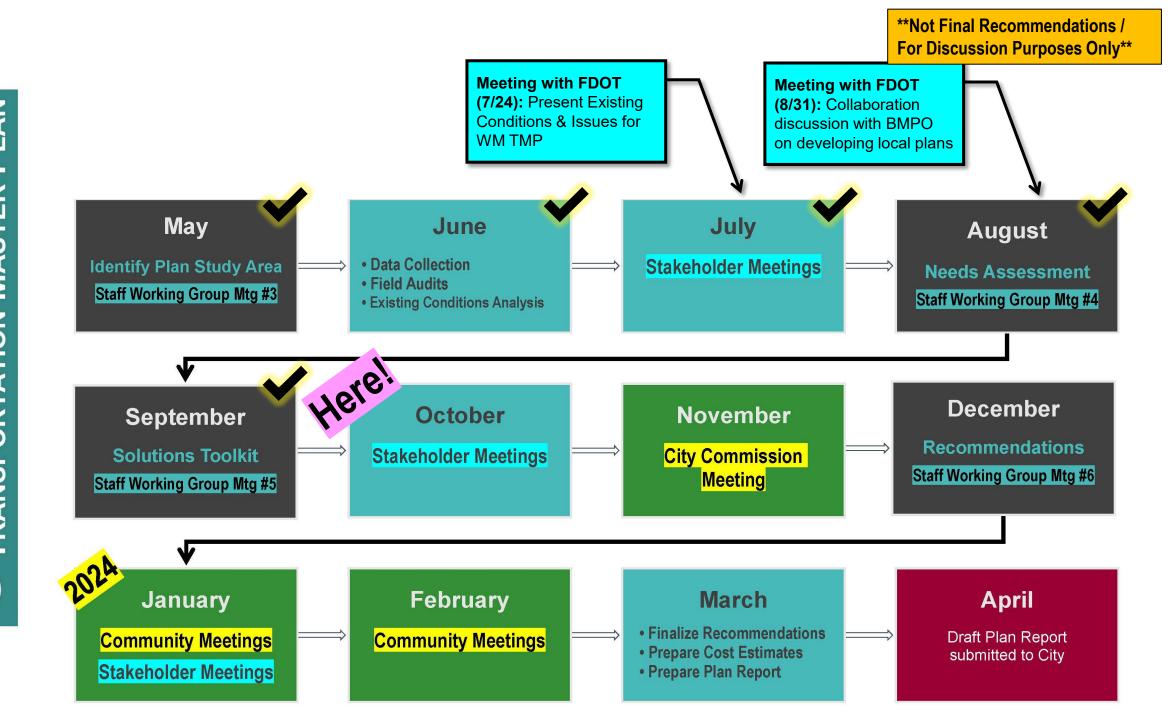
(1) Powerline Rd

(2) Andrews Av

(3) NE 26 St (4) N. Dixie Hwy (5) NE 24 St Route (6) NE 21 Ct Route (+ Future westside route)







Citywide Proposed Solutions: All Signalized Intersections

- ✓ **Signals should be retimed** to allow for pedestrians to cross at 3.5 ft / second; where senior housing is present, they should allow crossings at 2.8 ft / second
- Leading pedestrian interval treatments will be considered
- Protected left turn phases will be considered
- **Left turn calming treatments** like hardened centerlines will be considered
- Pedestrian refuge islands or treatments to reduce crossing distance will be evaluated and included as space permits
- **Lighting** should be evaluated for both drivers and pedestrians
- Signals will be evaluated for **no right turn on red** treatments



Citywide Proposed Solutions: All Mid-block Crossion

- ✓ All mid-block crossings are intended to include Rectangular Rapid Flashing Beacons (RRFBs)
- ✓ Prior to installation, all identified mid-block crossing locations should be evaluated to see if they meet MUTCD warrants for Pedestrian Hybrid Beacons (PHBs) or signals.*
- ✓ On 2-Lane roads, mid-block crossings should also be raised
- ✓ On roads with 3 or more lanes, pedestrian refuge islands should be included where space permits
- ✓ Lighting should be evaluated for both drivers and pedestrians



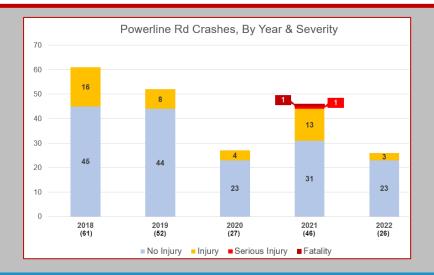
Powerline Rd

- Biking LTS = 4
- Ped LTS = 4

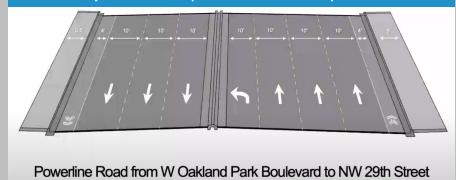


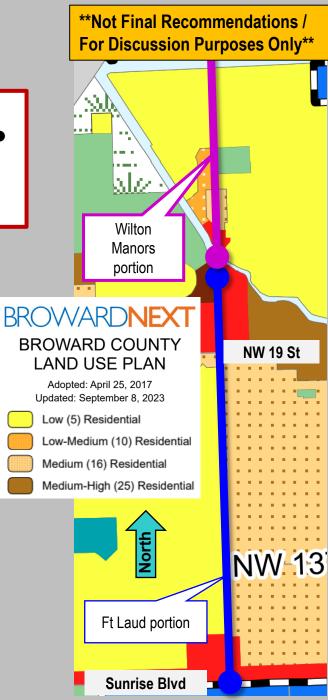
212 Total Crashes (2018 to 2022) excluding OP Blvd

46% of Injury Crashes caused by Rear End collisions
 3 Bike crashes (all Injury)
 1 Ped crash (fatality)
 All Ped & Bike crash occurred during daytime
 29% of crashes at NW 29 St resulted in Injuries



Recent Improvements (North of NW 29 St)





Powerline Rd Summary of Key Findings

Buffered Bike Lane
Bike Lane
Mid-Block Crossing (RRFB)

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Not within 250' of Signalized Crossing







bike lanes are too wide (12') & drivers drive / park in them Fatal crash: driver killed two children on sidewalk passing a bus No crossing at pedestrian only entrance to Mickel Park

Long distances between ped. crossings & bus stops far from crossings; encourages people to cross outside of crosswalks

Signal

Signal timing is too short to allow a person walking at an average speed (3.5 ft / sec) to fully cross Powerline Road and left turns are not protected

Other General Issues

Drivers observed speeding

Limited lighting at night

Buses stop in bike lane

Bus stops missing amenities

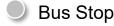
Driveways & back out parking onto Powerline Rd creates conflict points (generally on the west side) Bike facilities are not comfortable for all ages and abilities

Powerline Rd

Summary of Potential Corridor Treatments

 Redesigning Road for 30 MPH to Better Match Context Existing/Committed **Not Final Recommendations / For Discussion Purposes Only**









Redesign Road to Lower Speed to 30 MPH

- Realigns road to context
- Addresses speed & crashes

New <u>Raised</u> Crossing with RRFB (Evaluate for PHB / Signal)*

- Access to bus stops, Mickel Park, & across Powerline Rd
- Encourages crossing at designated locations

Can only be implemented with speed reduction; near term: at grade crossing

Convert to Raised Bike Lane or Shared Use Path

- Deters parking in bike lane
- Slows traffic
- Improves comfort

Near term: protected bike lanes on east side, bollards at intersections on west side.

Evaluate Lane Repurposing

 Allows for protected bike lanes and bus islands

Close Median Access

- Limits turning conflicts
- NW 28th Ct becomes right in / right out

Evaluate Relocating Stop

 Far side stops preferred for bus operations

Convert to Bus Bulb

- Improves stop comfort
- Bikeway goes behind stop
- Reduces bus / bike conflict

Corridor Wide Strategies

Paint Conflict Markings at Intersections & Driveways

- Limits turning conflicts
- Alerts drivers and bicyclists to potential for conflict

Evaluate Lighting at Crossings

Address nighttime crashes

Narrow Side Street Curb Radii

- Slows drivers
- Limits turning conflicts

Construct Turning Wedges at Unsignalized Left Turns

- Slows drivers
- Limits turning conflicts

*FDM allows raised crosswalks at 30 MPH or lower design speed. Roadway redesign would support existing and future residential land use context.

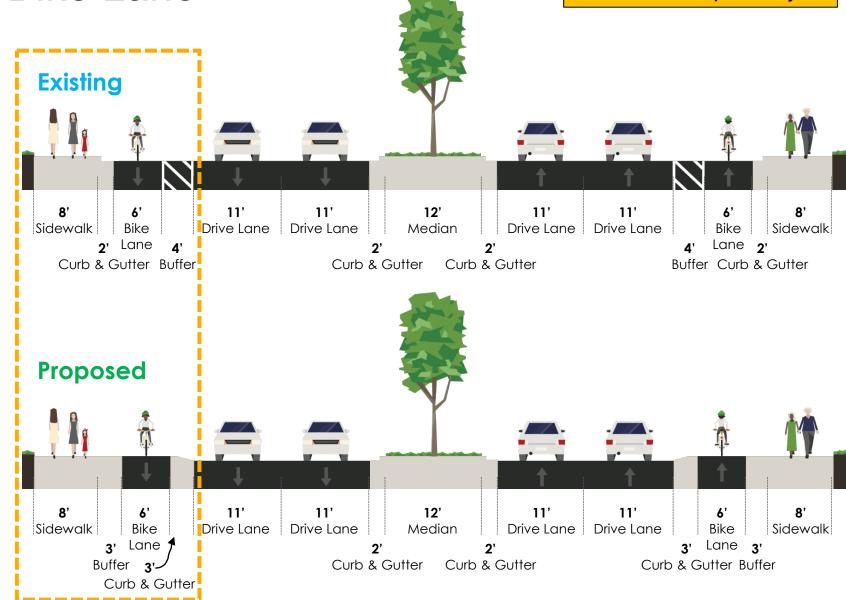
Powerline Rd: Raised Bike Lane

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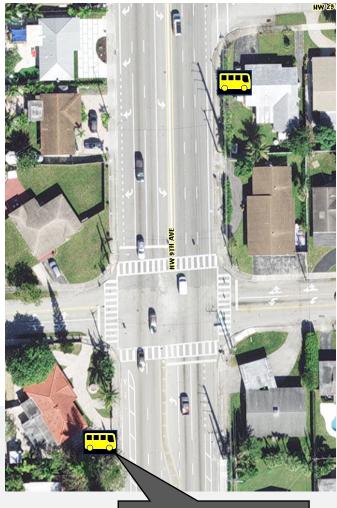
Recommendations

- Redesign Powerline Road to reduce vehicle speeds to 30 MPH.
- Better match low-density residential context from New River to Oakland Park Blvd.
- Sample treatments: raised crossings, narrowed roadways with vertical elements, defined space for nonmotorized users.





Powerline Rd @ NW 29 St



Existing BCT Stop location

Addressing Traffic Speed

- Evaluate lane repurposing
- Implement protected left turn signal phase
- > Consider removing SB right turn lane
- Add hardened centerlines on Powerline Rd

Biking Improvements

- Add green conflict paint in bike lanes at intersections and driveways
- Construct protected intersection or install bend outs and bike boxes

Supporting Transit Riders

- Consider relocating stops (to allow for bus bulbs)
- Construct bus bulbs (shared bus stop option or conflict striping at bus stop options for constrained areas)

Walking Improvements

- Restripe crosswalks
- Lengthen signal for pedestrian crossing
- Add leading pedestrian intervals
- Upgrade to directional curb ramps
- Construct median refuge islands (as space permits)



Powerline Rd @ NW 28 Ct



Dixie Hwy

- Biking LTS = 3
- Ped LTS = 3



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134 Total Crashes (2018 to 2022) including City-owned roadway

◆ 4 Serious Injury (3 Ped's)
 ◆ 20% of crashes involved pedestrians
 ◆ 1 ped (Serious Injury)
 & 1 Bike (Injury) crash occurred at entrance to Dunkin Donuts parking lot
 ◆ Lower than average nighttime crashes





Dixie HWY Summary of Key Findings

Within 250' of Signalized Crossing

Not within 250' of Signalized Crossing

Bus Stops

Not Final Recommendations / Raised In For Discussion Purposes Only

Bike Lane



Block Length to cross



Other General Issues

- Senior housing suggests need to meet the needs of slower pedestrians
- Driveways & back out parking onto Dixie Hwy creates conflict points

RRFBs only have beacons on one side of road

Signal timing is too short to allow a person walking at an average speed (3.5 ft / sec) to fully cross Dixie Hwy

Bike facilities LTS 4 (north of 5 Points)

Long distances between ped. crossings & bus stops far from crossings; encourages people to cross outside of crosswalks

Missing sidewalk

Undefined roadway space

Bus stops missing amenities

Buses stop in bike lane (SB / West ROW)

3 serious injury crashes involving people walking south of 5 Points

No center median / undefined turn locations

Drivers observed speeding (especially on curves)

Limited lighting at night

Dixie Hwy North of 5 Points

Existing/Committed **Not Final Recommendations / Bike Lane For Discussion Purposes Only**

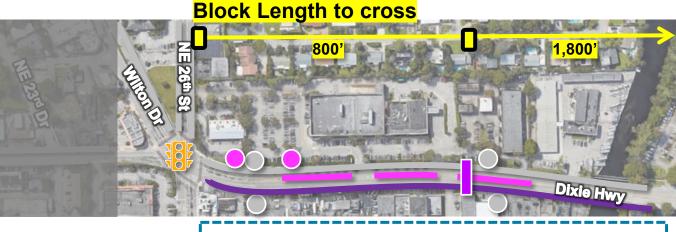


Bus Stop



Summary of Potential Corridor Treatments

Adding Medians and Lane Definition to Improve User Experience



Add Lane Definition

- Slow traffic & increase driver alertness
- Utilize profiled thermoplastic to define space

Construct Median +

Convert to Right in / Right Out

- Slow traffic
- Direct crossings to desired locations

New Mid-Block Crossing with PHB

- RRFB if does not meet warrant
- Improves access to bus stops and across Dixie Hwy
- Encourages crossing at designated locations



Increase Pedestrian Phase

Allow enough time for average and slower users to cross Dixie Hwy

Corridor Wide Strategies

Underground Utilities

Limits sidewalk obstructions

Evaluate Lighting

Address nighttime crashes & visibility

Add Wayfinding

Direct pedestrians to use sidewalk on east side

Long Term Strategies

As Redevelopment Occurs...

- Require developers to provide parking on site with designated driveway access
- Construct sidewalk on east side
- Construct sidewalk level separated bike lanes with conflict markings
- Construct new marked crossings with PHBs at additional locations south of the bridge and at main entrance to Publix Shopping center
- Construct Bus Islands
- Redesign road to 30 MPH design speed and add raised crosswalks

Dixie Hwy @ Spot Medians at Publix & Dunkin Donuts parking lots

Parking Lot entrances to continue to allow LT In & out

Publix

Spot Median / Prohibit LT in & out

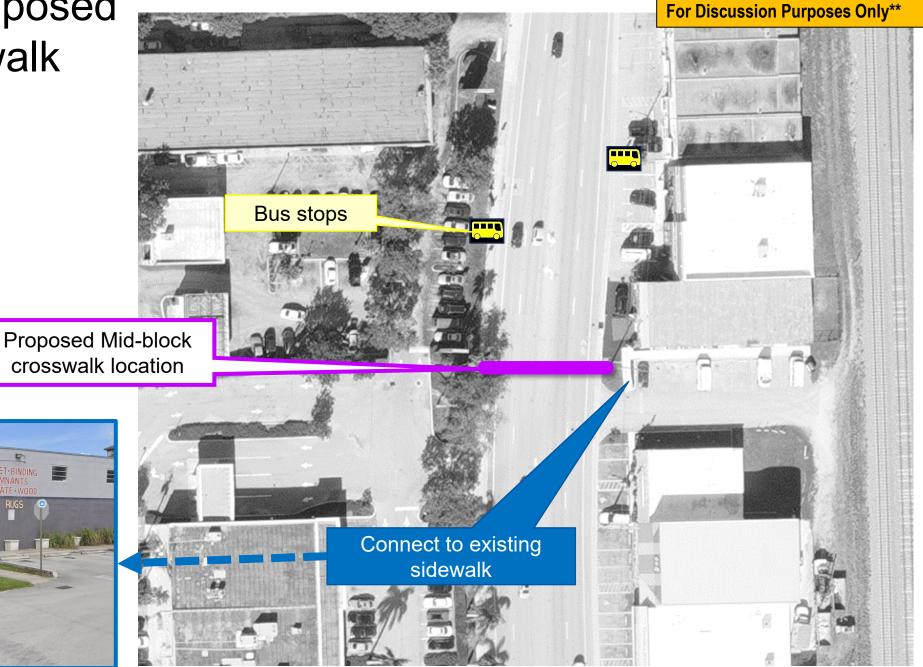
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Parking Lot entrances converted to right in / right out only

Drivers leaving Dunkin Donuts who want to go NB on Dixie Hwy can drive through parking lot to access LT

Dixie Hwy @ Proposed Mid-block crosswalk

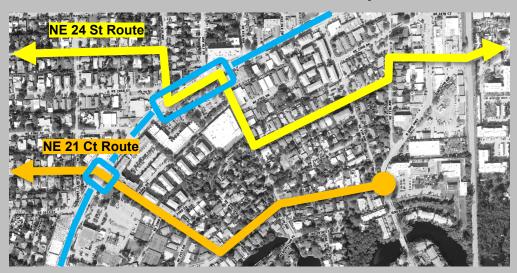


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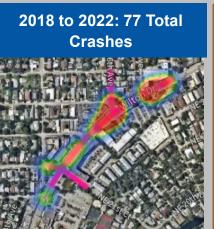
Wilton Dr: NE 6 Av to NE 7 Av & NE 21 Ct

- Biking LTS = 1Ped LTS = 2
- **Not Final Recommendations /
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Wilton Dr connects two east-west citywide routes

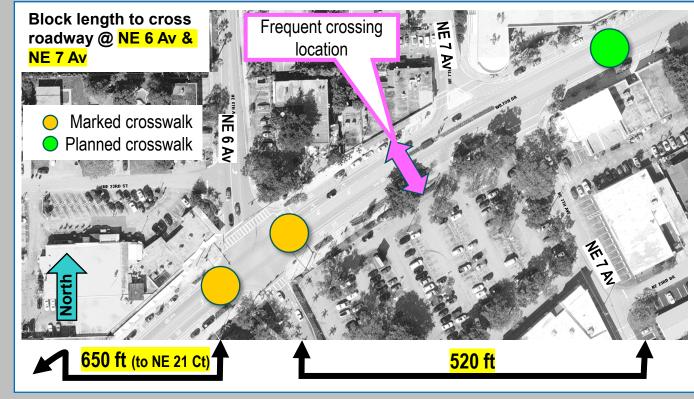












Wilton Dr @ NE 6 Av

- Calm Left and Right turns
- Reduce Crossing Distance
- Improve Bicycle Mobility



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Addressing Left Turns

 Utilize hardened centerline to guide left turning drivers



Addressing Right Turns

- Shift SB bus stop north to provide space for curb extension
- Realign intersection and Install curb extension and reduce curb radius on SW, NE, and NW corner to slow drivers and prevent drivers from using bus lane as turn lane

Walking Improvements

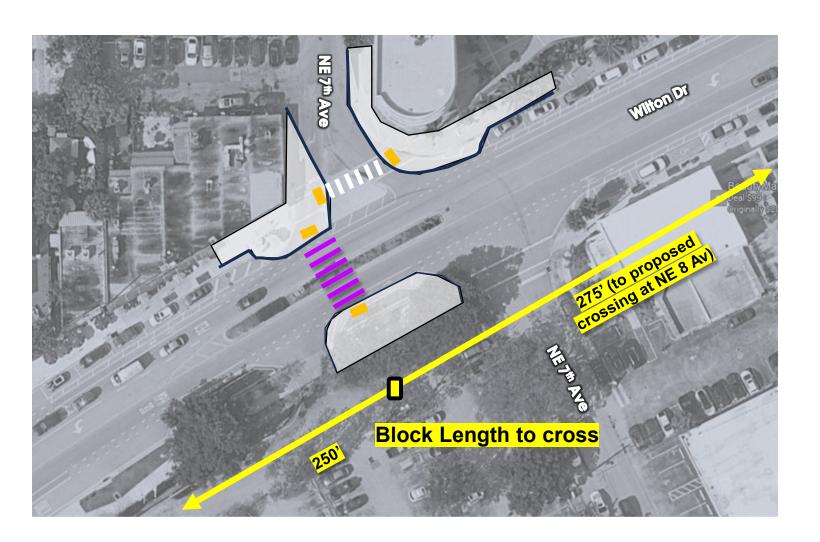
- Implement all pedestrian phase
- Build curb extensions to reduce pedestrian crossing distance

Biking Improvements

- Allow bikes to use all pedestrian phase
- Install bike boxes on all legs of intersection or construct protected intersection

Wilton Dr @ NE 7 Av

- Calm Right turns
- Reduce Crossing Distance



Addressing Right Turns

- Realign northern leg of NE 7th Ave intersection to a T intersection
- Remove porkchop and high speed Right turn lanes

Walking Improvements

- Consider <u>raised</u> crosswalk along northern leg of intersection
- Evaluate pedestrian lighting
- New <u>raised</u> crosswalk to line south of NE 7th Av (or move proposed crosswalk to pedestrian desire line south of NE 7th Av)
- Convert proposed crosswalk with RRFB and median refuge to raised crosswalk with RRFB and median refuge

Wilton Dr @ NE 21 Ct

- Calm Left and Right turnsReduce Crossing Distance
- Improve Bicycle Mobility



Addressing Left Turns

 Utilize hardened centerline to guide left turning drivers

Addressing Right Turns

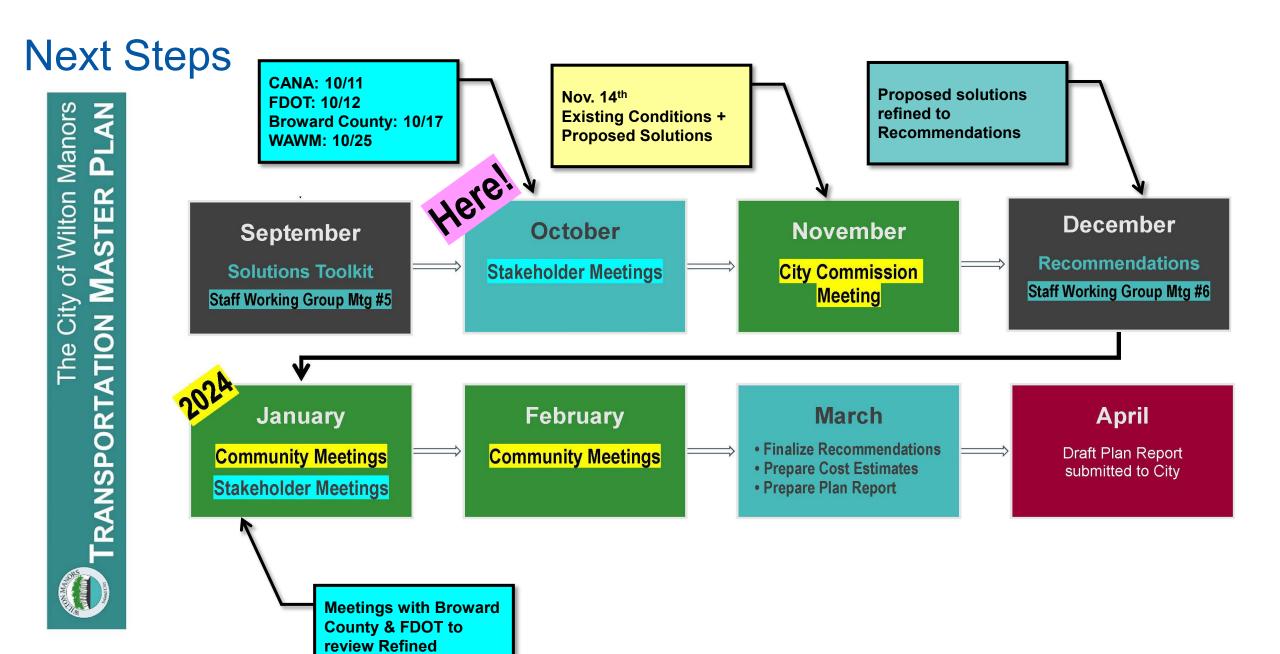
- Install curb extension and reduce curb radius on NW corner to slow drivers and reduce pedestrian crossing distance
- Realign NE 21st Ct approach to a right angle

Walking Improvements

- Implement all pedestrian phase
- Widen sidewalk on north side on NE 21st Ct

Biking Improvements

- Allow bikes to use all pedestrian phase
- Install bike boxes on all legs of intersection



Recommendations





