

Monroe Street Reconstruction



Public Engagement Process

- Public Meetings
 - First meeting held in 2014
 - 6 meetings held in 2016 – specific topics
- Community survey – 2,779 responses
 - See handout with summary of results
- Engagement Resource Team
- Over 100 additional letters, emails & calls
- Future activities
 - Green Infrastructure
 - Placemaking
 - Final Design Open House
- Handout with more details

Community Priorities

- **Improve walkability and pedestrian safety, especially at intersections.**
- Create a destination street that is convenient and safe for all modes of transportation.
- Reduce traffic speeds.
- Maintain or improve existing parking.
- Ensure predictability in Metro service to improve access for all users.
- Introduce streetscape improvements and more inviting plant life to enhance the pedestrian experience and natural environment.



Community Priorities

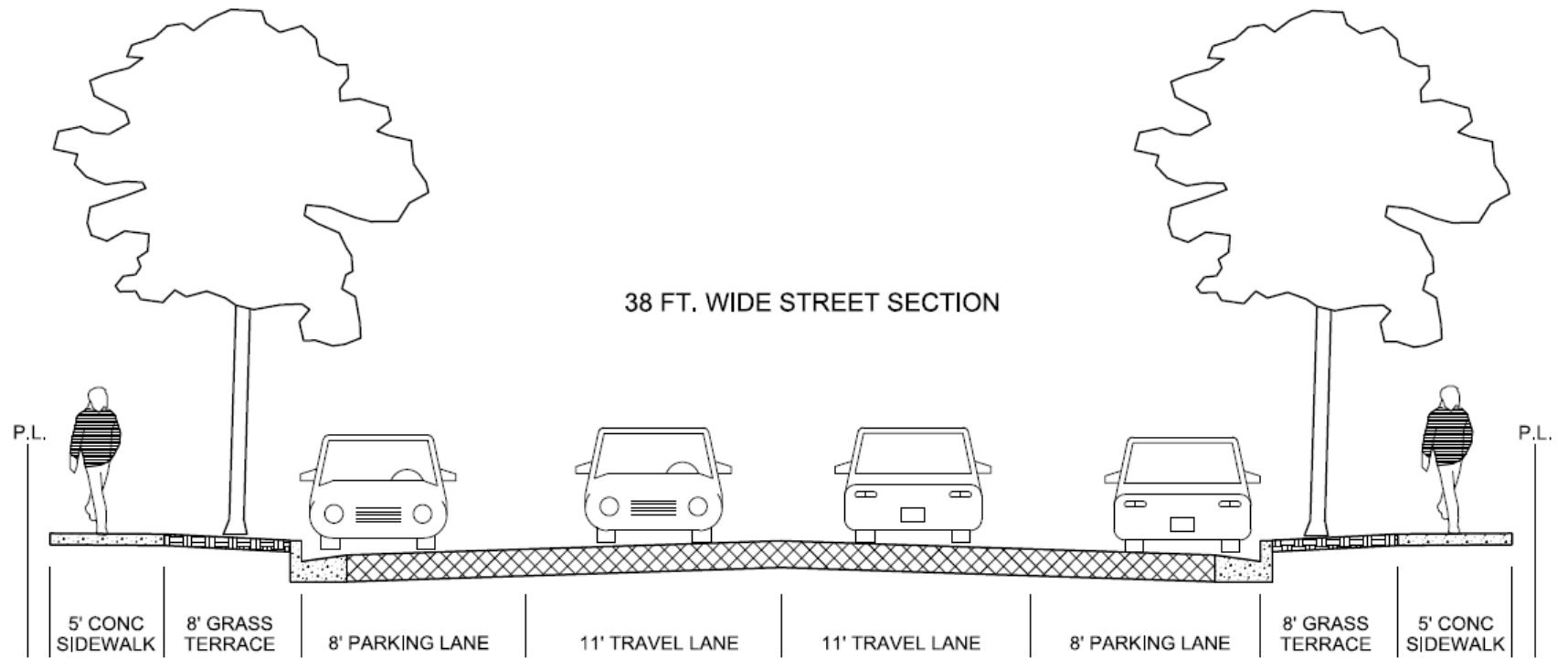
- Improve bicycle access by creating safe connections to adjacent paths and increasing bike parking.
- Maintain a comfortable route for commuters, including those accessing adjacent businesses, schools, and institutions.
- Enhance Monroe Street's commercial vibrancy and unique sense of place while retaining its neighborhood feel.



Cross Section Limitations & Tradeoffs

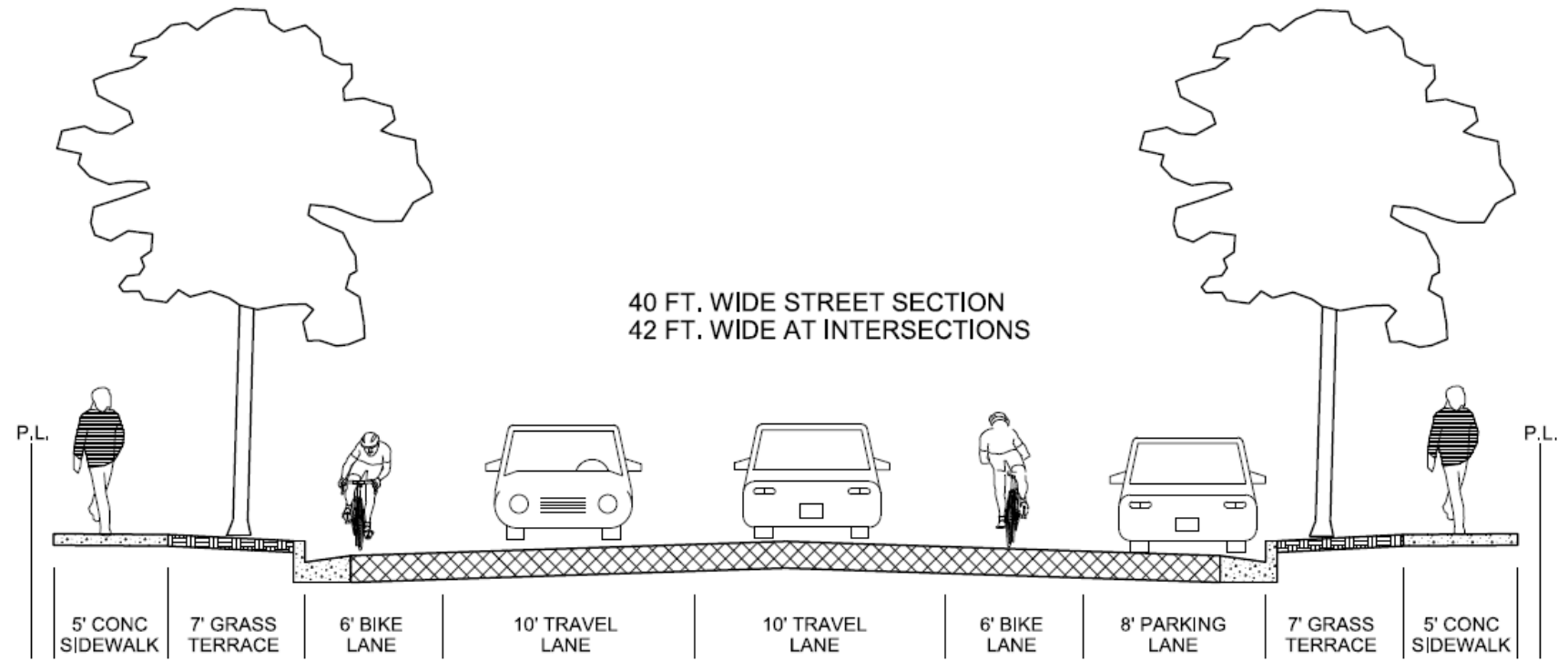
- Existing Right-of-Way of 66 ft.
 - Buildings on property line in many locations
- Maintain sidewalk of both sides of street
- Many existing terrace trees to preserve
- Limits maximum street width to existing
 - 42 ft. from Odana to Edgewood Ave.
 - 44 ft. to 46 ft. from Edgewood Ave. to Regent St.
- Several potential cross sections considered based on input from community
- Tradeoffs for each section considered

Cross Section Alternatives & Tradeoffs



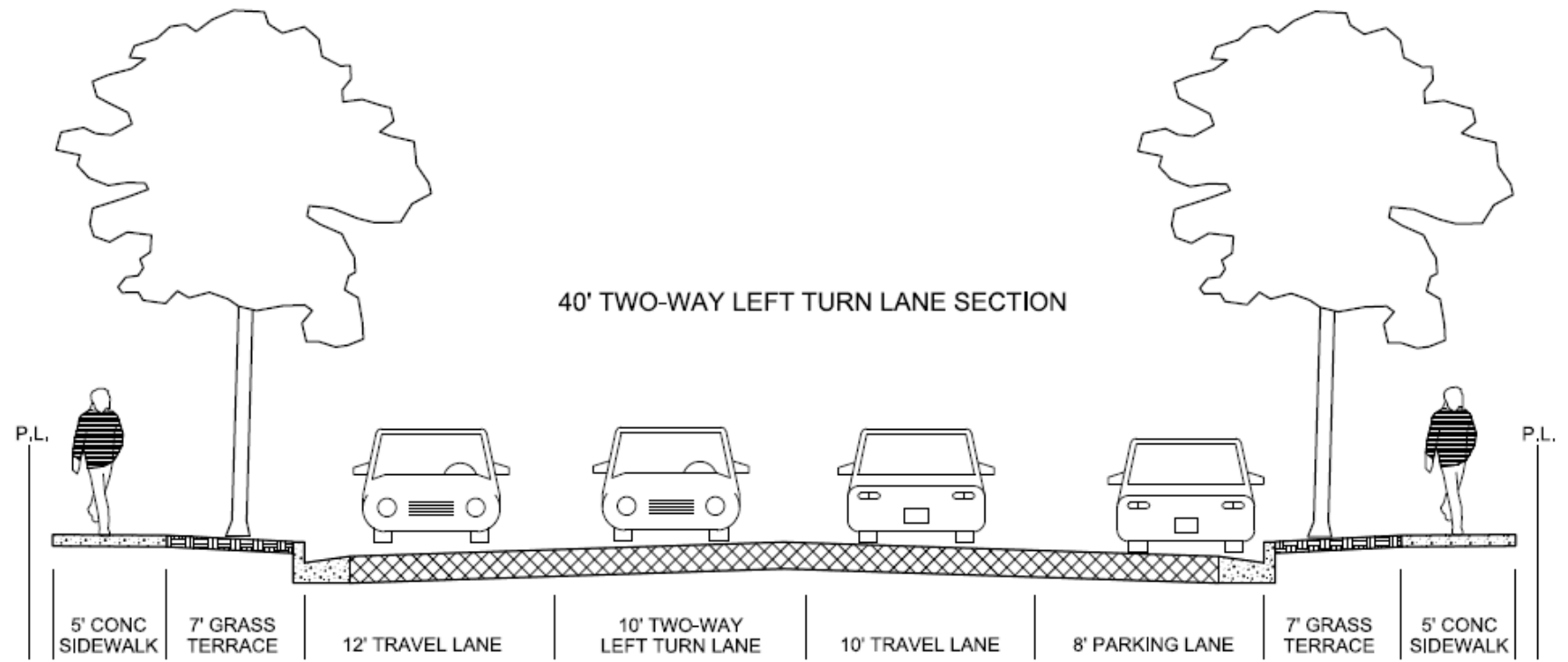
- Narrowed street width with dedicated parking
- Wider terrace & preservation of trees
- No bike lanes
- No peak hour travel lanes

Cross Section Alternatives & Tradeoffs



- Install bike lanes – several possible methods
 - Typical bike lanes (shown)
 - Protected, 2-way bike lane
 - Off-street, adjacent to the sidewalk
- Remove parking on one side
- No peak hour travel lanes

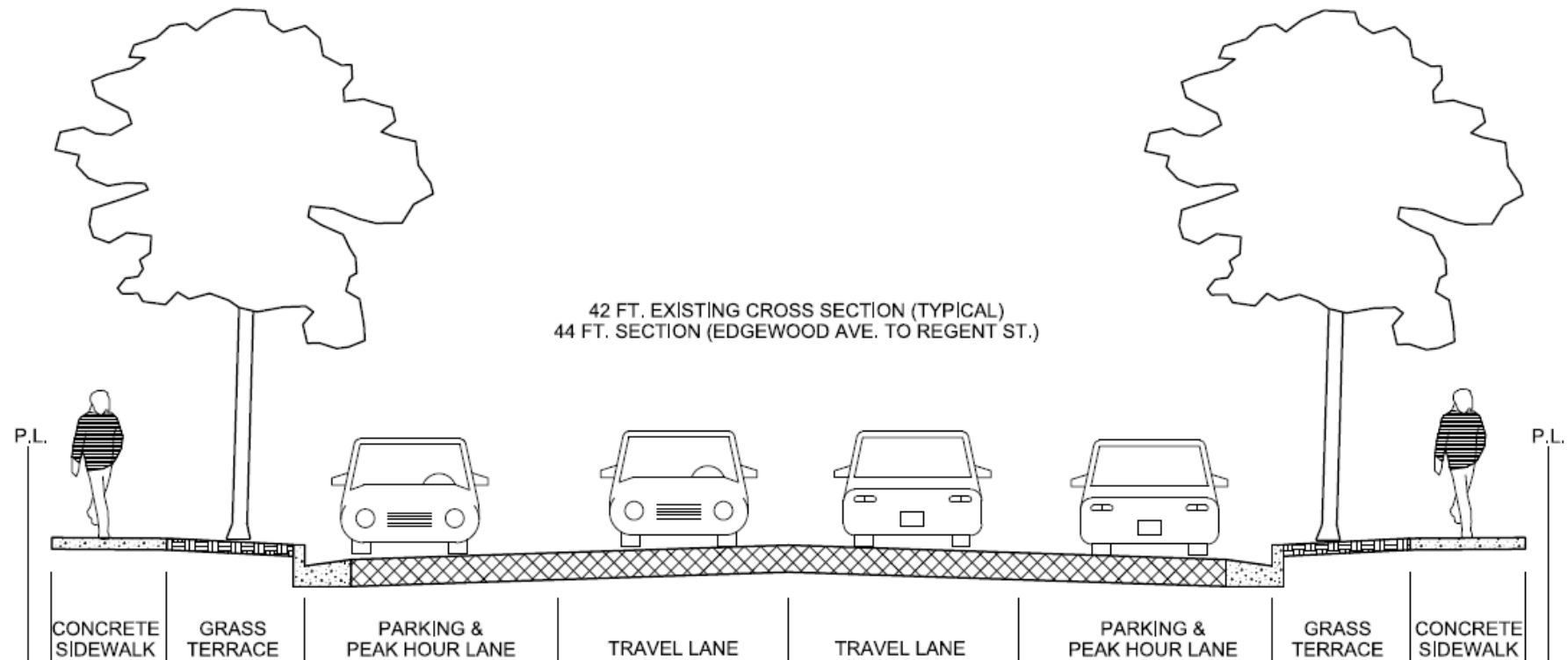
Cross Section Alternatives & Tradeoffs



- Two-way left turn lane
- Either one-side parking or bike lanes & no parking
- Capacity increase during off-peak times
- No peak hour travel lanes

Proposed Cross Section

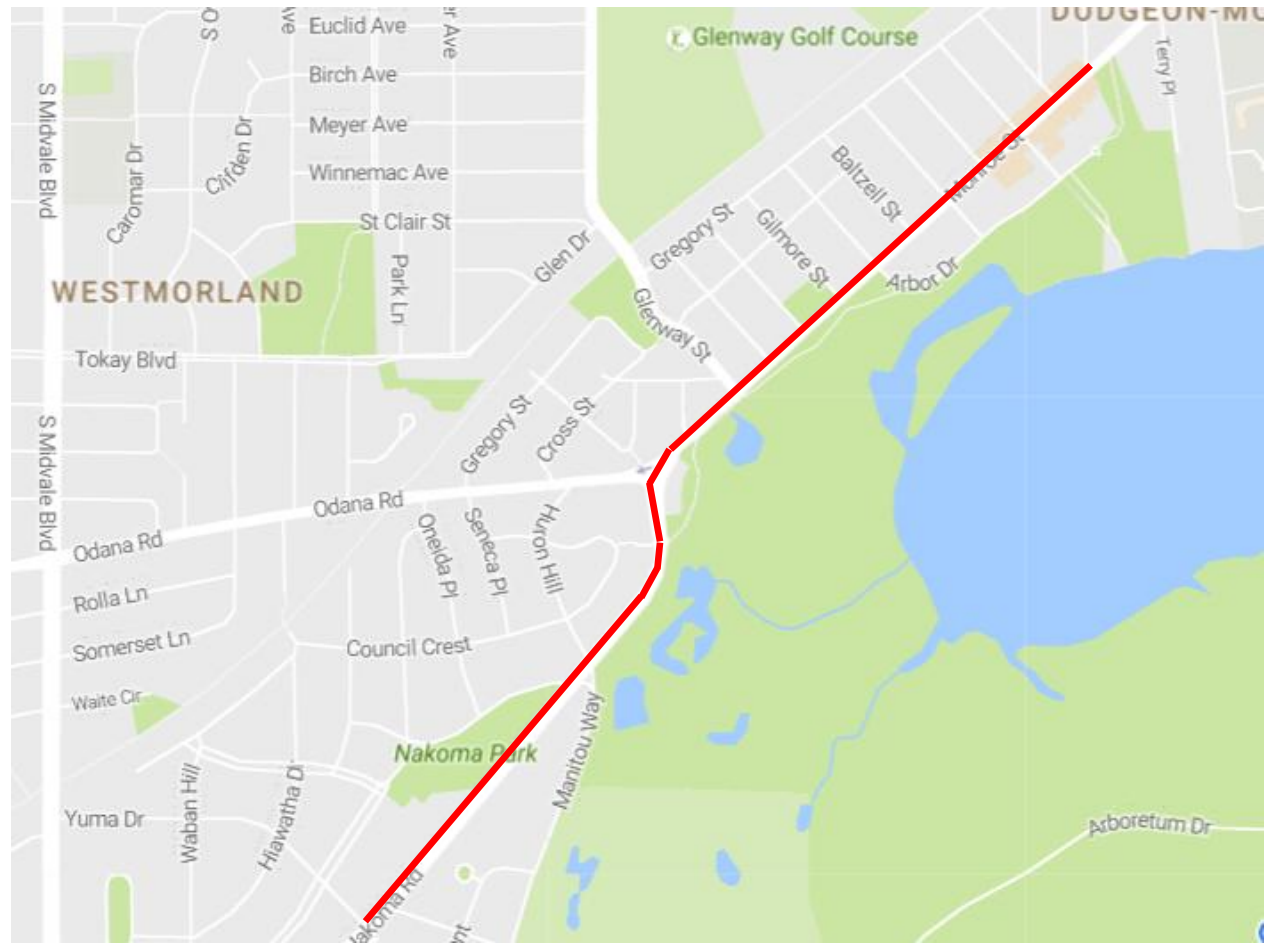
- Match existing lane configuration & typical width
 - Travel lane in either direction
 - Off-peak parking both sides, peak hour travel lane
- **Includes a number of modifications**



Traffic Modeling

- Modeled 4 different sections
- Existing cross section – peak hour travel lanes
- One lane each direction, no turn lanes
- Section without peak hour lane & only left/right turn lane at intersections
 - Dedicated parking lanes throughout day
- Two-Way Left Turn Lane: results similar to the previous cross section
 - Turn volumes not high enough to make a large difference

Traffic Modeling Results



- Models without peak hour travel lanes resulted in significant back-ups during peak times
- Example: During AM peak, queues extended from Commonwealth through Yuma/Seminole

Traffic Modeling Results

- Models were based on existing traffic volumes
 - 14,000 to 23,000 vehicles per day
- Including turn lanes or TWLTL only improved back-ups slightly
 - Not many high volume turn locations
- Consider consequences of these back-ups

Impacts of Congestion

- Monroe St. is vital corridor in the City's transportation network & a destination
- Unique geography & layout limit available corridors



Impacts of Congestion

- Additional congestion on Monroe will divert some traffic to other corridors
 - Regent St.
 - Park St. & Fish Hatchery Road
 - Gregory St./Commonwealth/WestLawn/Keyes
 - Other neighborhood streets
- Severe impacts to Metro schedules (equity impacts)
- Environmental impacts including increased fuel consumption & emissions
- Access to Monroe St. driveways, parking & side streets becomes difficult

Impacts of Congestion

- Congestion can create safety issues
- Increase in crashes, especially rear-end
- Frustrated drivers more likely to take more risks
 - Accept smaller gaps when making turns
 - Run red lights
 - Less likely to obey beacons, yield to peds
 - Pay less attention to surroundings, including pedestrians
- Forces pedestrians to cross through queues



Business Considerations

- Business districts are a big part of what makes Monroe unique & vibrant
- Main concerns from Business Focus Group
 - **Maintain or increase parking availability**
 - Pedestrian safety & slower traffic
 - Maintain flow of traffic & Metro schedules
 - Make Monroe St. destination
 - Placemaking discussions later



Business Considerations

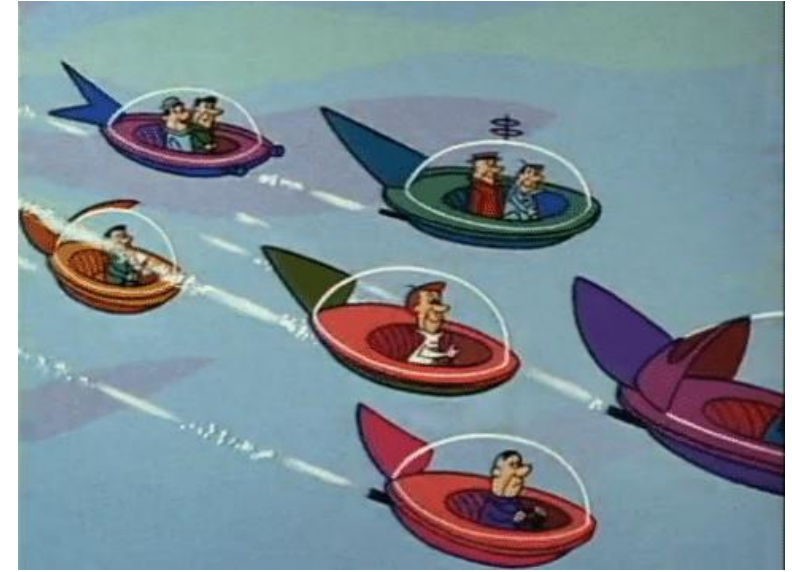
- The population of the 1/2 mile pedestrian market for Monroe Street is just over 2,500.
 - The additional 1/2 mile pedestrian employee market adds just over 1,000 during the day.
- The population of a typical 1/2- mile urban markets that relies primarily on pedestrian traffic is 15,000-20,000 people.
- Many business on Monroe are specialty and regional destination retailers that depend on patronage from outside the neighborhood.
- Loss of parking on Monroe impacts ability of some customers to get to businesses
 - Would also force more parking to take place into the neighborhood

Proposed Section Summary

- Maintains peak hour travel lanes to limit congestion to existing condition & limit additional congestion on other corridors and increased traffic through neighborhood
- Existing parking situation remains, with parking on both sides for most of the day
- Propose other pedestrian & bike improvements to be included with project or as additional projects

Flexibility for the Future

- Unknown future transportation needs
- Vehicle technology changes
- Higher density developments continue to be constructed along Monroe St.
- Population trends toward alternatives to driving
- Section provides flexibility
 - Modifications to parking restrictions, adding bike lanes, etc. can be made by simply changing paint & signs
 - No need for major infrastructure replacement



Pedestrian Improvements

- Propose a number of pedestrian improvements
 - Top priority of neighborhood, along with speed reduction
- Some features have been researched for FHWA and have crash reduction factors (CRF)
www.cmfclearinghouse.org
- Installed Rectangular Rapid Flashing Beacons (RRFBs)
 - Improve visibility & expectation
 - Installed at 6 intersections
 - Will remain following project
 - Continue to receive feedback



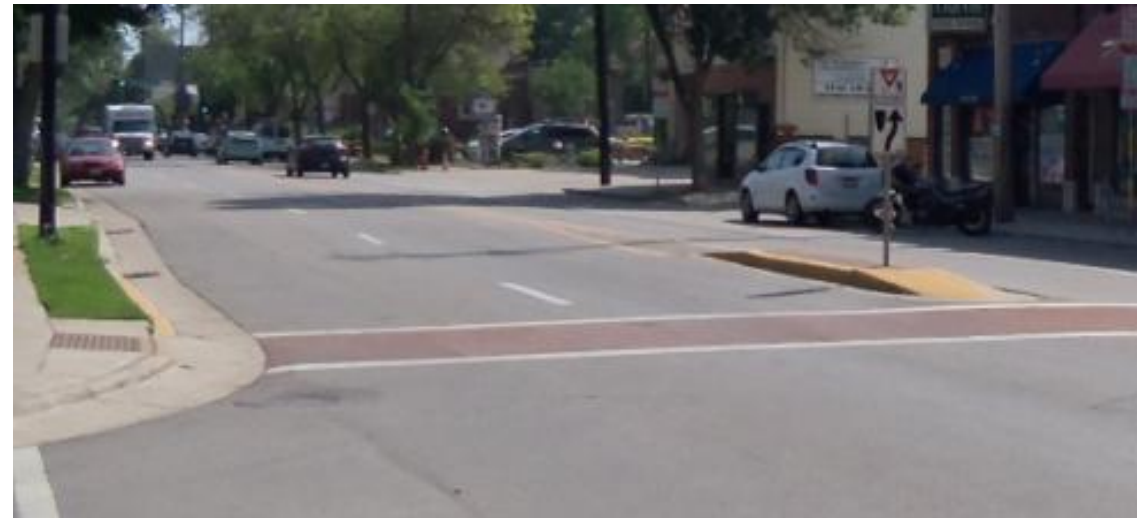
Pedestrian Improvements

- Install 3 raised intersections
 - Glenway
 - Knickerbocker
 - Harrison
- Include highly-visible, colored cross walks
- Speed reduction (large speed hump)



Pedestrian Improvements

- Install additional Pedestrian Islands
 - Coordinate locations with bus stops, RRFBs, bike connections, etc.
- Improve safety of crossing
 - Allow for 2-stage crossing
 - Improve visibility & include yield signage
 - Crash reduction up to 46%
- Can also include colored crosswalk
 - High-visibility crossings can reduce crashes up to 40%
- Also provide for some traffic calming



Pedestrian Improvements

- Modify traffic signals to improve pedestrian safety
- Include pedestrian countdown timers
 - Crash reduction up to 70%
- Leading pedestrian interval
 - Signal phasing starts with “walk” signal before green
 - Crash reduction up to 45%
 - Already in at Grant St.



Pedestrian Improvements

- Narrow between Harrison & Regent from 46' to 44'
 - Constrict lanes further to slow speeds
 - Shorten crossings
- Additional high-visibility cross walks
 - Crash reduction up to 40%
- On-street parking during non-peak constricts street, slowing speeds and buffering pedestrians
 - TWLTL or bike lanes can create more open feeling that leads to higher speeds



Proposed Plan

- 42' wide Odana to Leonard (Resurfacing)
- 44' wide Edgewood to Regent
 - Narrowed between Harrison & Regent
- Pedestrian enhancements
- Plan

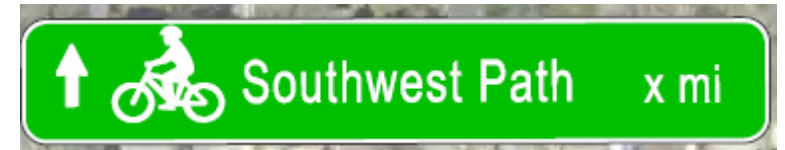
Existing Bike Route Map



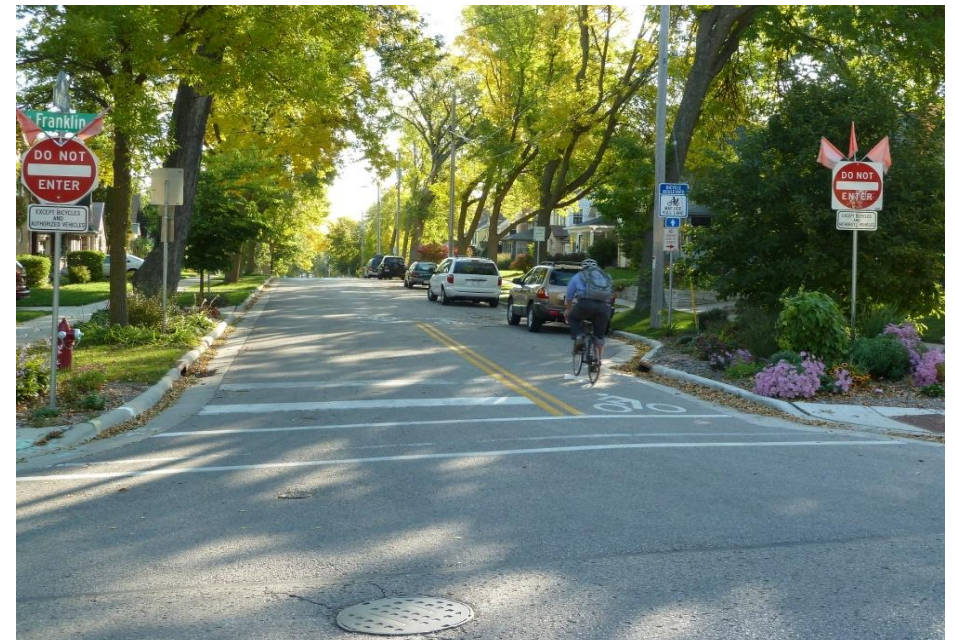
Bike Connectivity



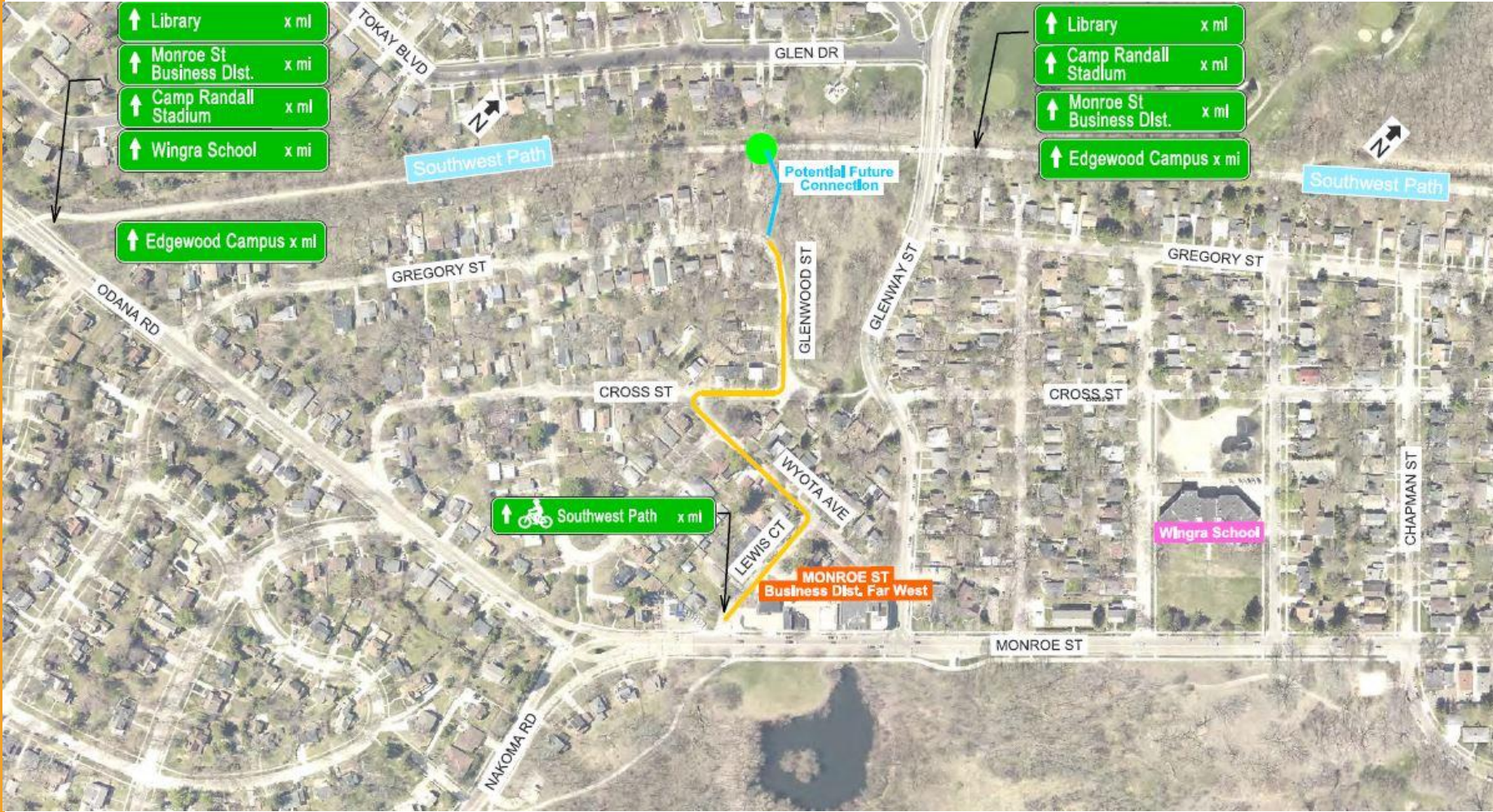
- Improved signage
 - Way-finding
 - Bike route signs
- Pavement markings



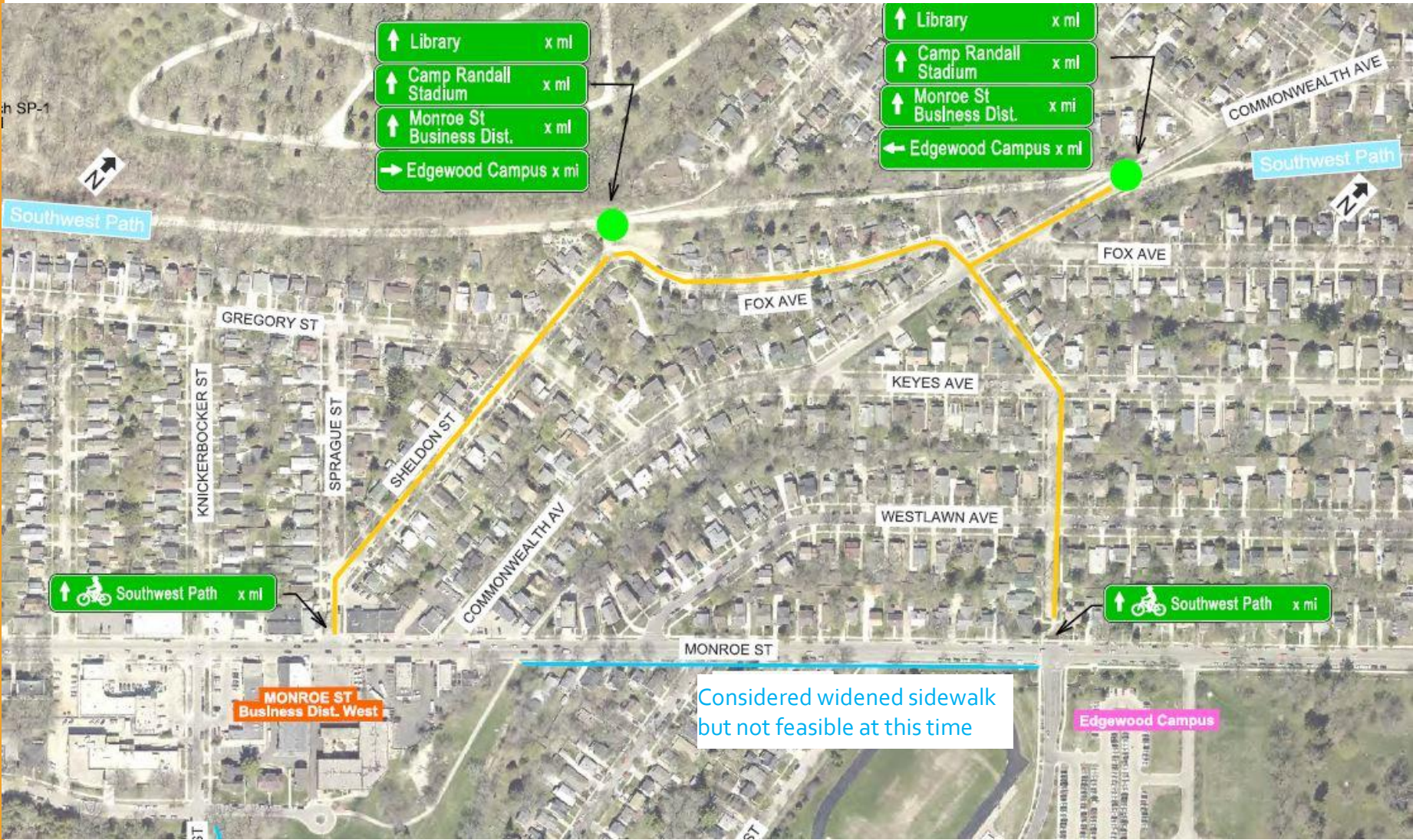
- Priority locations for potential connections:
Schools, library, stadium, business districts



Bike Connectivity



Bike Connectivity



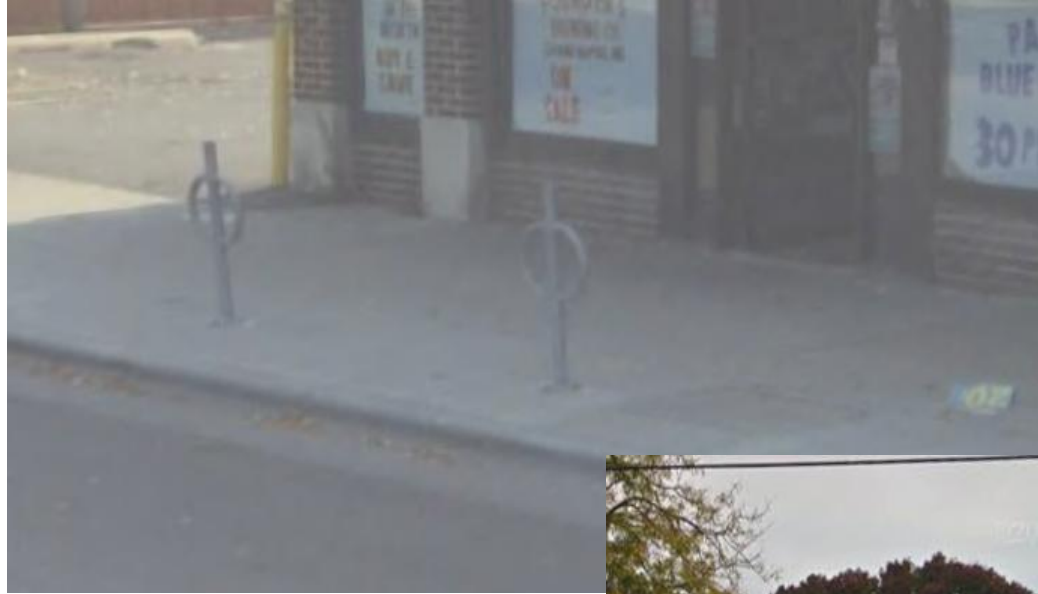
Bike Connectivity



Bike Connectivity



Improved Bike Parking



Bike Improvements

- Improved way-finding signage and Wingra Park connection will be considered separately of the Monroe St. Reconstruction project
 - Way-finding in 2017?
 - Wingra connection currently not scheduled since it will require property acquisitions
- Bike parking along Monroe included with project

Green Infrastructure

- Proposed cross section limits opportunities for green infrastructure on Monroe
- Explore opportunities outside the main Monroe St. corridor



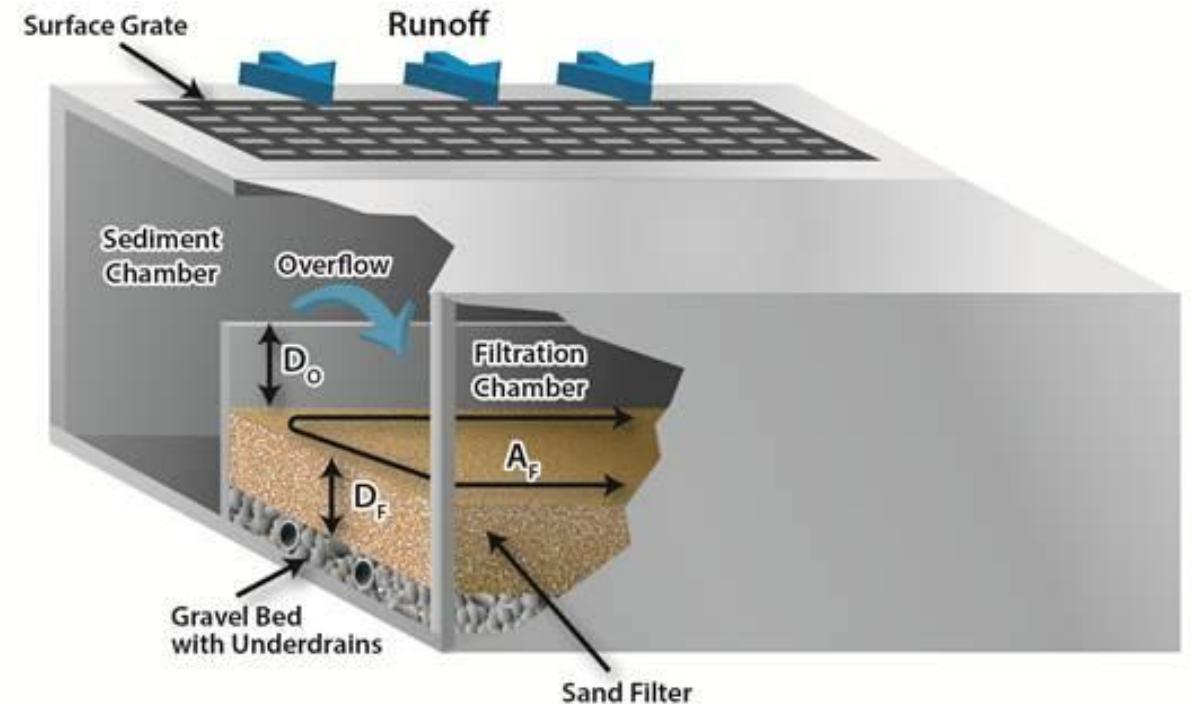
Green Infrastructure

- Opportunities for rain gardens on side street terraces
- Potential locations
 - Gilmore
 - Chapman
 - Baltzell
 - Pickford
 - Crandall
 - Knickerbocker
 - West Lawn
 - Lincoln
 - Harrison
- Additional investigation needed to verify grades



“Green” Infrastructure

- Consider a stormwater treatment structure in Wingra Park
- Catchbasins installed to collect sediment before entering Lake Wingra



Underground
Sand Filter

Placemaking

- Further discussions on placemaking and amenities
- Additional green infrastructure installed within Crazy Legs Plaza?
- LED lighting thru corridor
 - Much more energy efficient



Next Steps: Public Meetings

- 11/29: Ped/Bike/Motor Vehicle Commission
- 12/14: Board of Public Works (Lead Agency)
- 1/3/2017: Geometry Resolution goes to Common Council for approval
- Future public engagement on Green Infrastructure and Placemaking
- Approving final plans & specifications resolution in 2017

Questions?



Source: <http://www.monroestreetmadison.com/>