

# Monroe Street Reconstruction

Cross Section Workshop

September 29, 2016



# Introductions

- Urban Assets
- City Staff
  - Engineering
  - Traffic Engineering
  - Planning
  - Metro
- Engagement Resource Team
  - Alder Eskrich
  - DMNA and VNA
  - Madison Bikes
  - Monroe Street Merchants Assoc.
  - UW-Madison
  - Friends of Lake Wingra
  - Wingra School
  - Edgewood College

# Tonight's Agenda

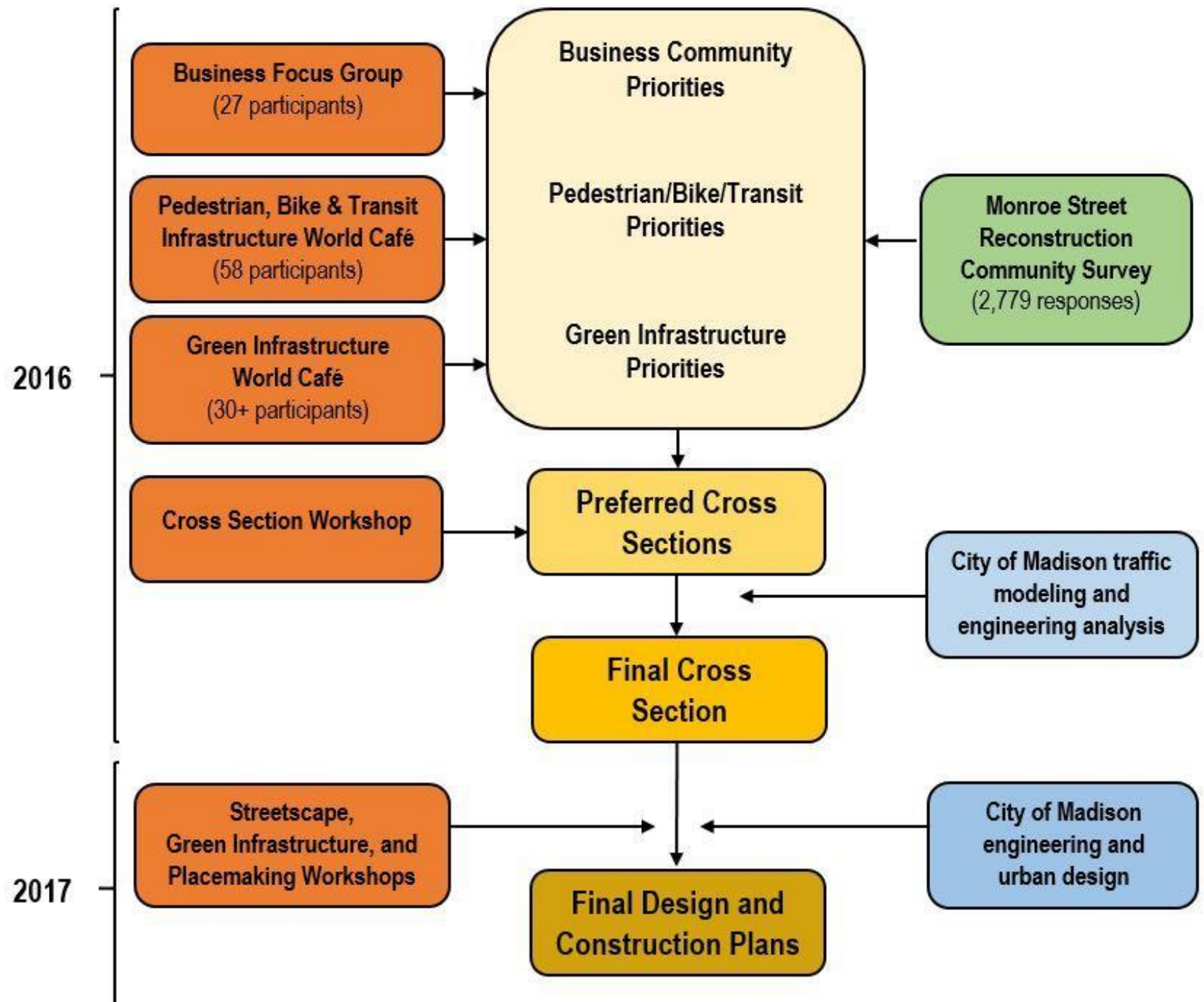
## **Thank you to Wingra School!**

1. Community Input Summary
2. Workshop Orientation
3. Cross Section Design Exercise
4. Group Report-Out
5. Next Steps & Dot Voting



# Planning Process

# Monroe Street Planning Process





# Community Survey Results

# Community Survey Results

- 2,779 responses!
- 63% aged 31-60
- 47% live in a neighborhood other than Vilas or Dudgeon-Monroe
- 33% live within three blocks of Monroe Street
- Respondents include high school and college students, neighborhood residents, visitors, commuters, business owners, parents, etc.



# Community Survey Results

What three words would you use to describe  
Monroe Street to a visitor?





# Community Survey Results

## What qualities would you most like to see improved or invested in?

1. 54%: Walkability
2. 46%: Green Street with more plant life and sustainable design
3. 43%: Bikeability
4. 42%: Comfortable commuting route
5. 40%: Vibrancy of the commercial districts

# Community Survey Results

## What is most important to achieve as a result of the Monroe Street reconstruction?

1. 70%: Better pedestrian-friendliness and safety
2. 65%: A reconstructed street, free of cracks and potholes
3. 51%: Better bike-friendliness and safety
4. 46%: A “greener” approach to stormwater management
5. 42%: Slower vehicular traffic

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# Community Priorities

# 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.
- Be a model of innovation and look for demonstration opportunities to educate the public about sustainability.

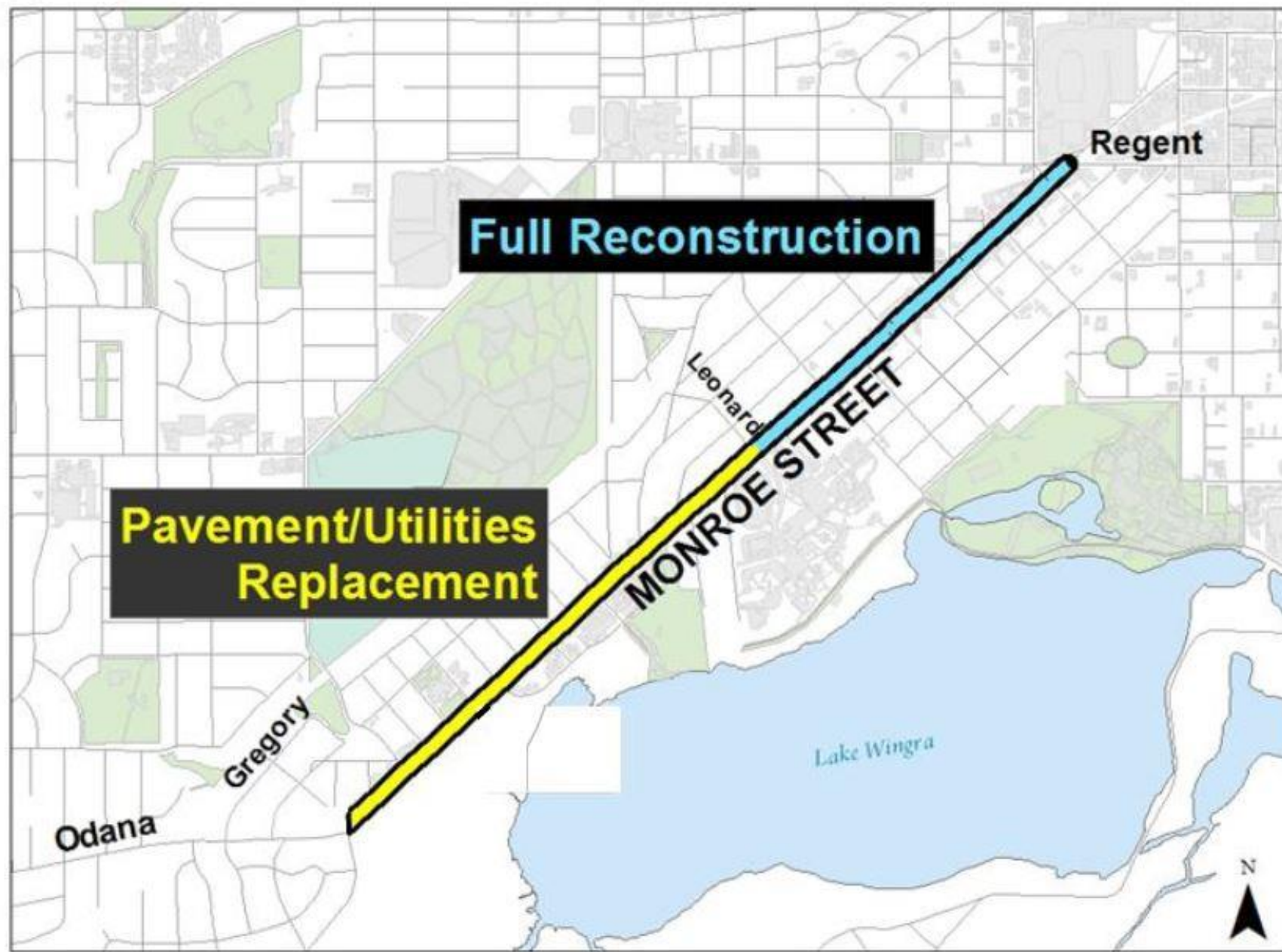


# Cross Section Workshop

Jim Wolfe, Project Engineer



# Project Scope



# What's Been Discussed

- Business Enhancements
- Pedestrian & Bike Improvements
- Green Infrastructure
- Some opportunities in all areas impacted by cross section

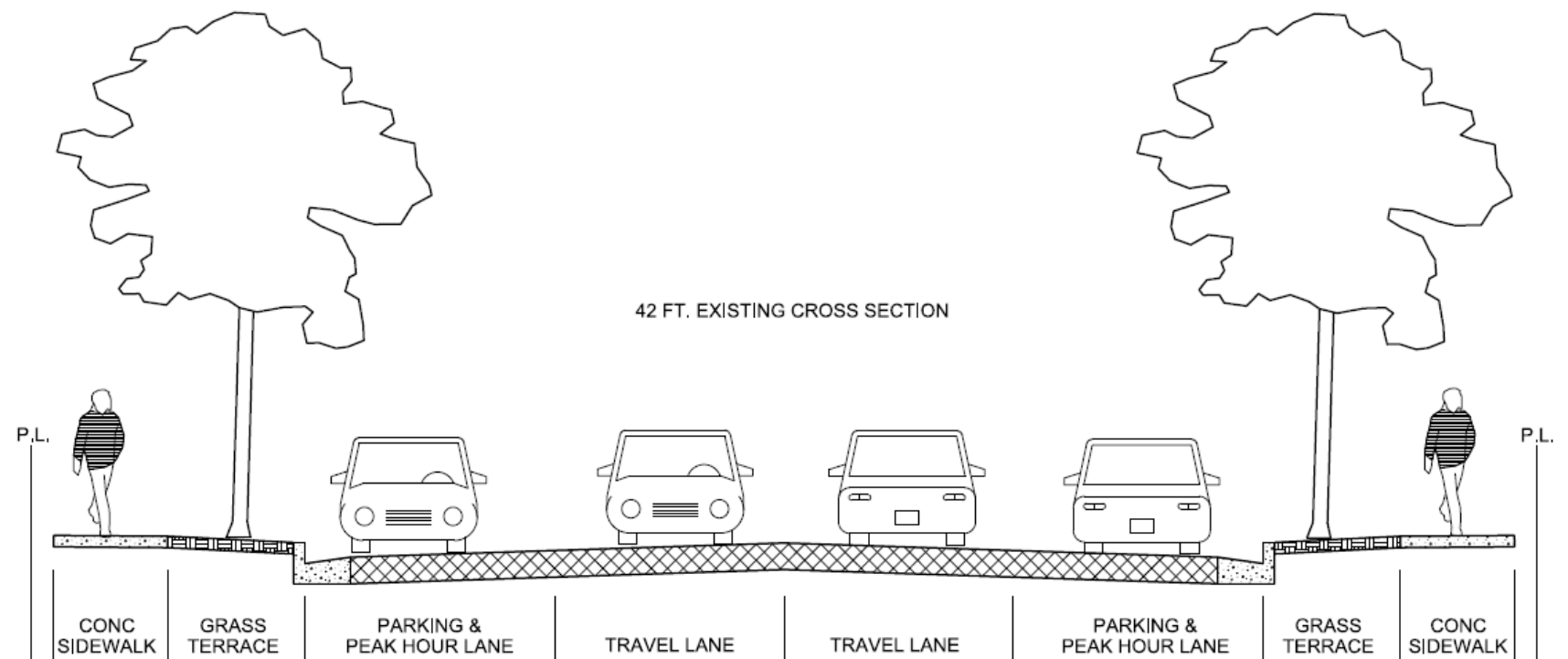




## Existing Condition

- Right-of-way width: 66'
- Typical street width: 42'
- Typical sidewalk: 6'
  - Includes maintenance buffer
- Typical terrace width: 6'
- Lane configuration:
  - One thru lane each direction at centerline
  - Shared parking & peak hour lane at curb

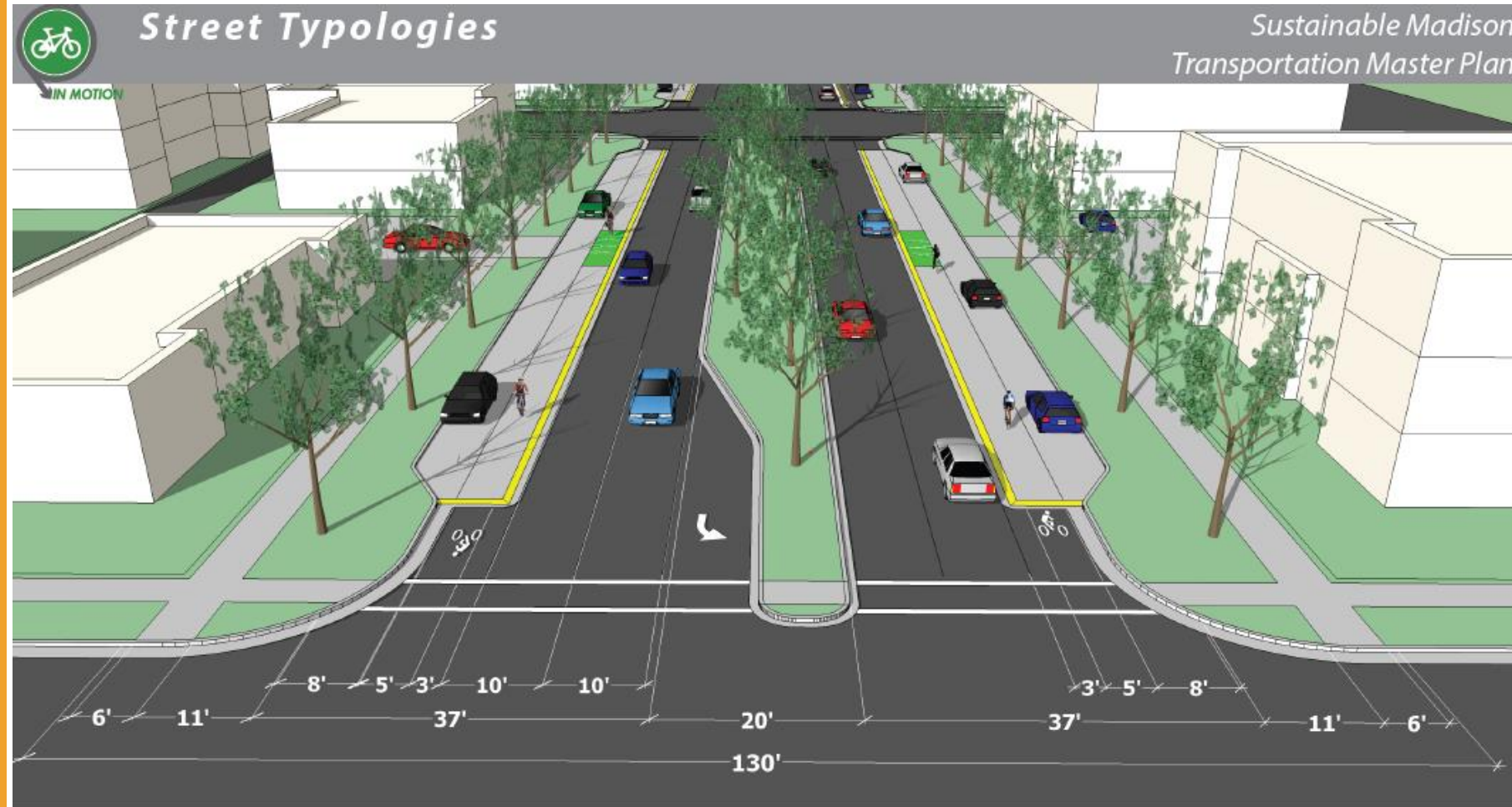
# Existing Condition



## Existing Condition

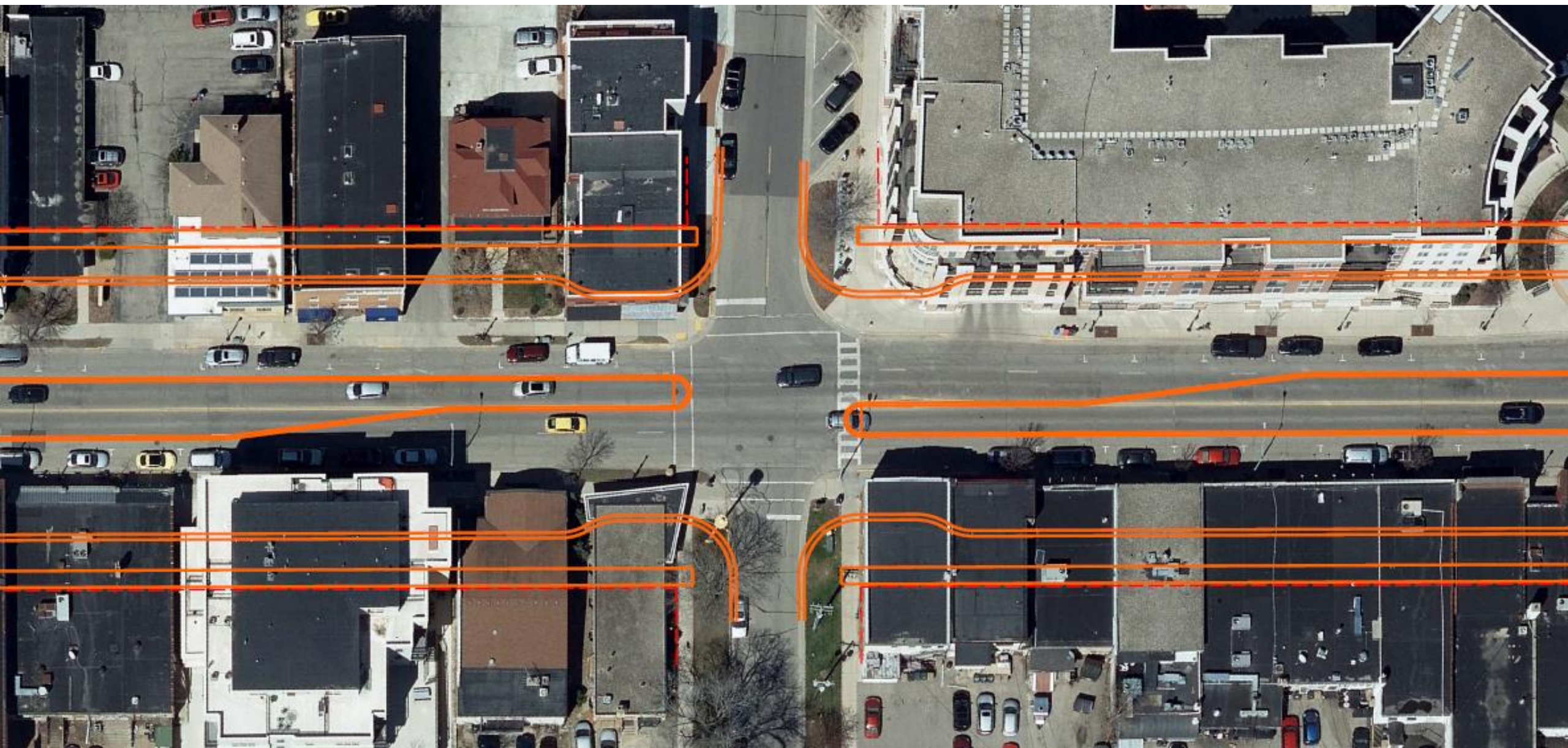
- Pros
  - 2 travel lanes in peak hours to lessen congestion
    - Affects safety, traffic on neighborhood streets, etc.
  - Parking on both sides most of the day & evening and near to intersections
  - Bus stops out of main travel lane
    - Peak hour lanes help bus schedules
  - Narrower than standard lanes
    - Some traffic calming, and wider terraces
- Cons
  - No on street bike lanes
  - Loss of parking for 1.5 hours each side
  - No bump-outs at intersections to shorten crossings
  - Limited terrace space

If Monroe St.  
was a new street in an  
undeveloped area...



***Arterial - Raised Bike Lanes with Parking***







Item	Low Volume Residential	Medium Volume Residential	Non-Residential	Front-loading Residential	Rear-loading Residential (no driveways)	Non-Residential	Minor Arterial	Major Arterial
Daily Volume (ADT)	0 - 750	750 - 1,500	up to 5,000	1,500 - 5,000	1,500 - 5,000	13,000 or less	20,000 or less	30,000 or less
<b>Street Characteristics</b>								
No. of Travel Lanes	2	2	2	2	2	2	4	6
Width (curb-to-curb) (feet)	30	32	34 to 36	41 to 43	27 to 30	55 to 58	64 to 71	87 to 96
On-Street Parking (Y,N)	Y	Y	Y	Y	N	Y	N	N
Parking Lane Width (feet)	7	7	7	7	N/A	8	N/A	N/A
Travel Lane Width (feet)	8	9	10 to 11	10	10	11	11 to 14	11 to 14
Left-Turn Lane Width (feet)	N/A	N/A	N/A	N/A	N/A	10	10 to 12	10 to 12
Raised Median (Y,N)	N	N	N	N	N	N	Y	Y
Maximum Block length (ft)	600	800	800	1,000	1,000	1,000	1,300	1,300
Minimum Sidewalk Width (feet)	5 (attached) 4.5 (detached)	5 (attached) 4.5 (detached)	5 (attached) 4.5 (detached)	6 to 8	6 to 8	6 to 8	6 to 8	6 to 8
Bicycle Lanes (Y, N)	N	N	N	Y	Y	Y	Y	Y
Transit Accomodation	None	None	Possibly bus stops	Possibly bus stops	Possibly bus stops	Bus Stops	Bus Stops	Enhanced Bus Stops
Landscape strip (Y, N)	Y	Y	Optional	Y	Y	Y	Y	Y
Minimum Landscape Strip Width (feet)	6	6	6	8	15 including sidewalk	15 including sidewalk	15 including sidewalk	15 including sidewalk

- Monroe Street doesn't fit neatly into any of these categories. Monroe's curb-to-curb width ranges from 42-46 feet, with an average daily traffic (ADT) volume of 16,000-20,000 cars.

## Workshop: Site Constraints

- Right-of-way remains the same: 66'
  - No land purchases
- Sidewalk remains in place on both sides
  - Minimum width 5' with 1' buffer to P.L.
  - **54 ft. of space between sidewalks**
- Lanes must be provided at intersections for thru traffic in both directions & turning vehicles (32 ft min)

## Workshop: Section Widths

- Guidance on minimum lane widths
- Travel lane at centerline – 10 ft. min, typical 11 ft.
- Travel lane at curb line – 11 ft. min, typical 12 ft.
- Turn lane – 10 ft.
- Bike lane – 6 ft.
- Dedicated Parking lane – 8 ft.
- Terrace options
  - Keep existing trees – 6 ft.
  - Remove existing trees, plant low-growing – 4 ft.
  - No trees < 4 ft.
  - Rain gardens – 10 ft. X 15 ft.
  - Max bump-outs – 2 ft. on both sides



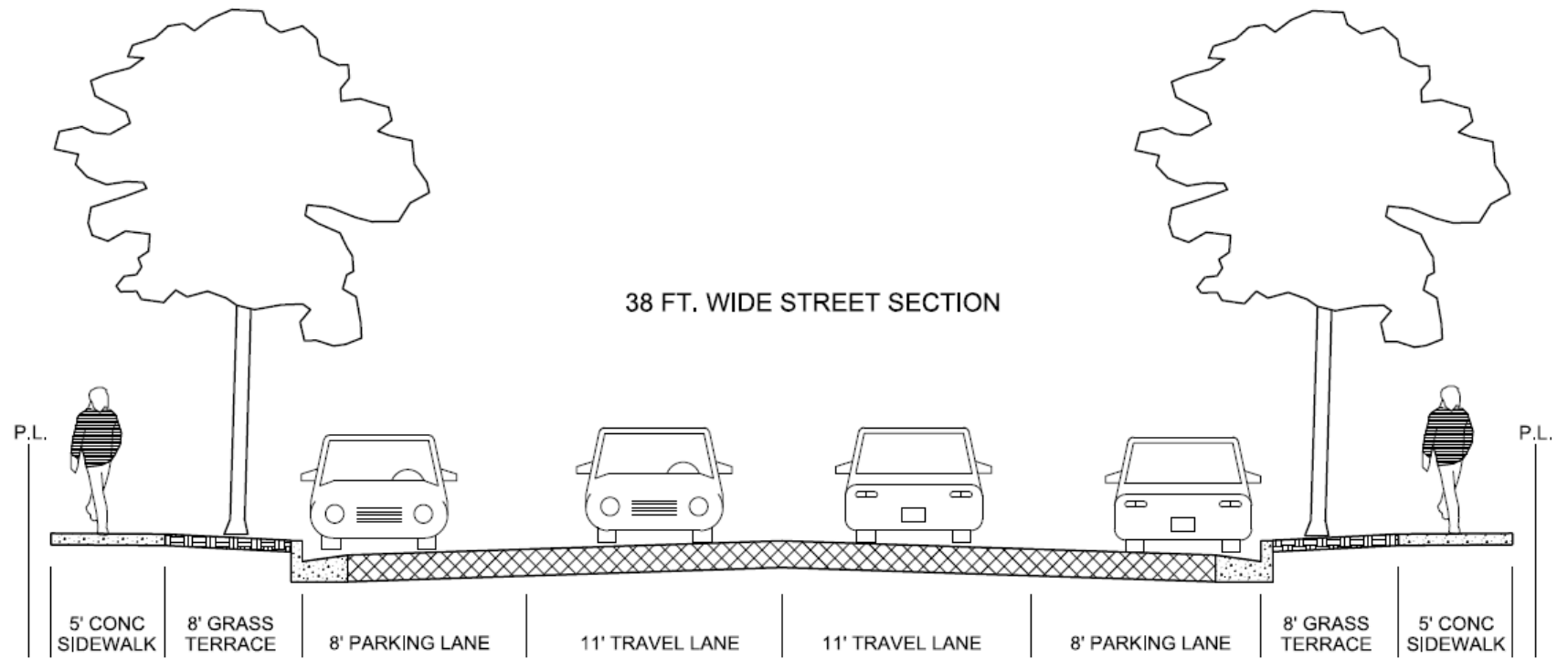
# Workshop: Other Considerations

- Not all details need to be considered on this section
- As discussed at previous meetings, pedestrian, bike, and green infrastructure improvements will still be included with project
  - Crosswalk enhancements
  - Bike path connection improvements
  - Side street rain gardens
  - Stormwater treatment structures



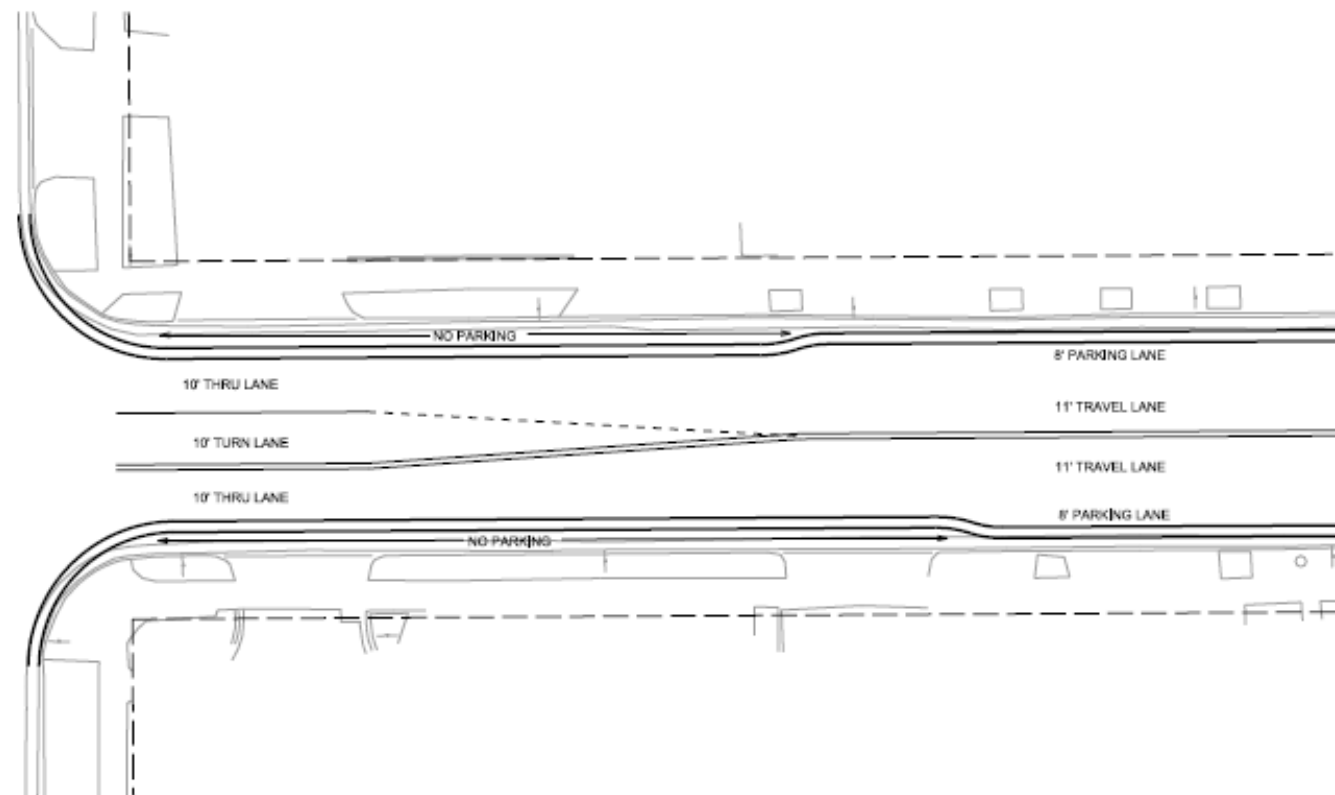
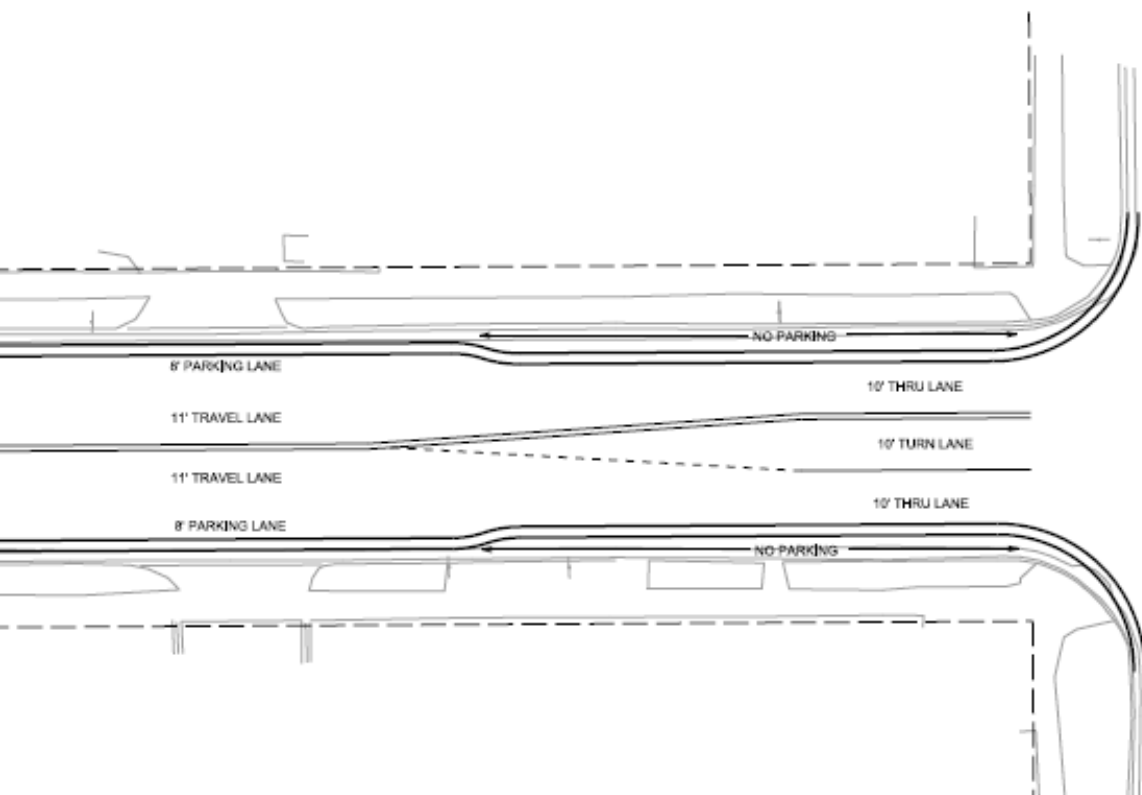
# Workshop: Sample Cross Sections

A



- 11' Thru lane in each direction
- Parking lane both sides
- Turn lanes at intersections (no parking)
- No peak hour travel lane
  - Allows for bump-outs

A



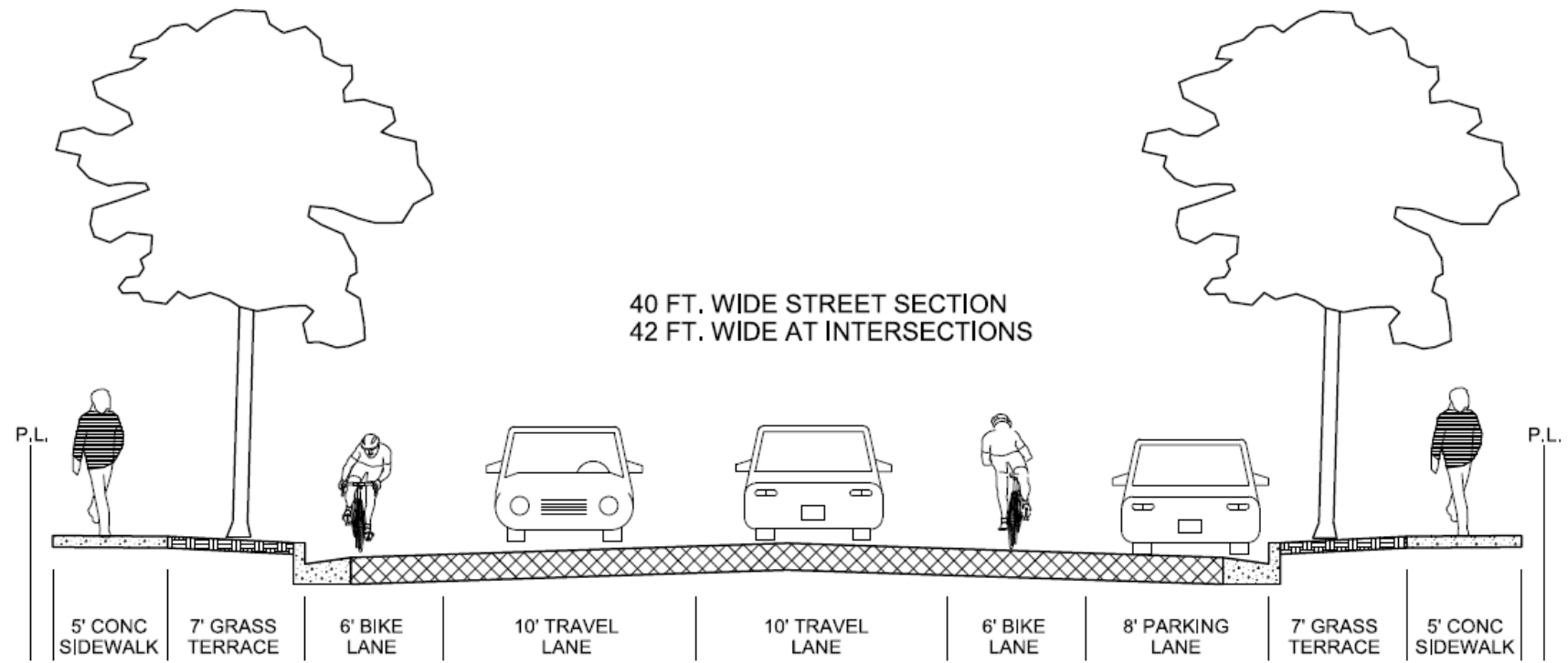
# Workshop: Sample Cross Sections

A

- Pros
  - Parking on both sides of street throughout the day
  - Allows for small bump-outs at intersections
  - Wider terrace space for trees, amenities, etc.
  - Potential for mid-block stormwater treatment in terraces (lose parking to do so)
- Cons
  - Increased congestion during peak hours
    - All buses stop within travel lane, block traffic
    - Congestion affects bus schedules
  - No bike lanes
  - No parking within 130' +/- of intersections
    - Loss of approximately 6 parking stalls on each leg
    - Could be most of blocks depending on block length

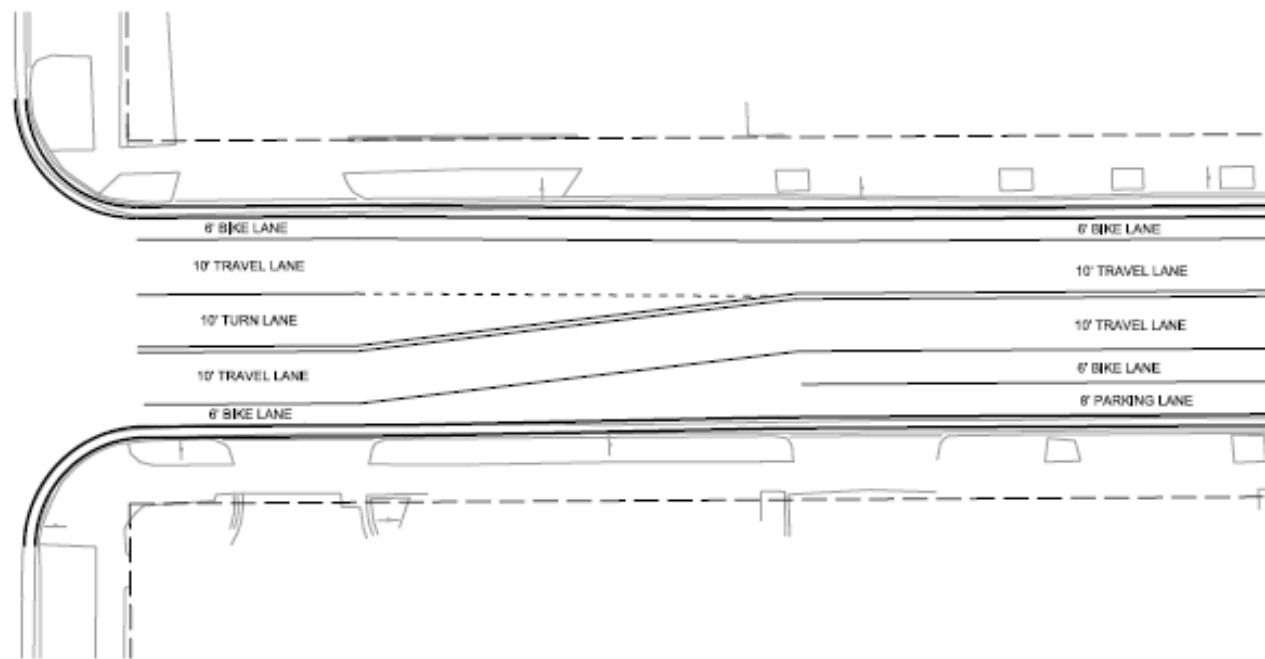
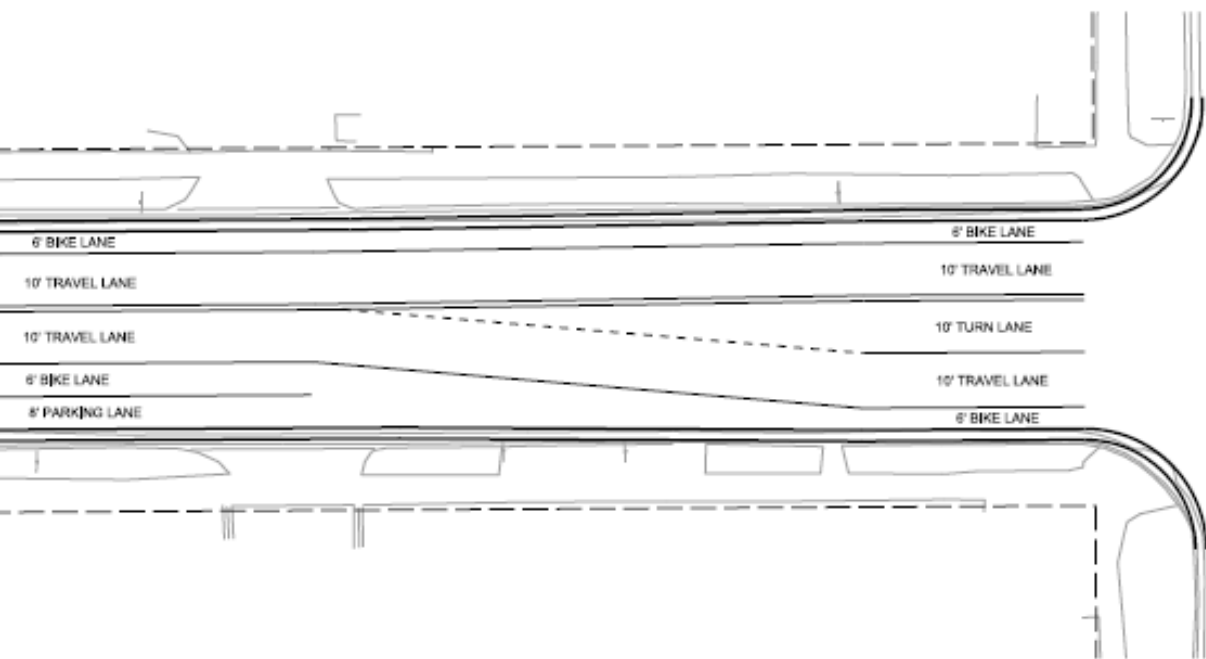
# Workshop: Sample Cross Sections

B



- Thru lane in each direction
- Parking lane one side (could be either side)
- Turn lanes at intersections (no parking)
- Bike lanes in both directions

B



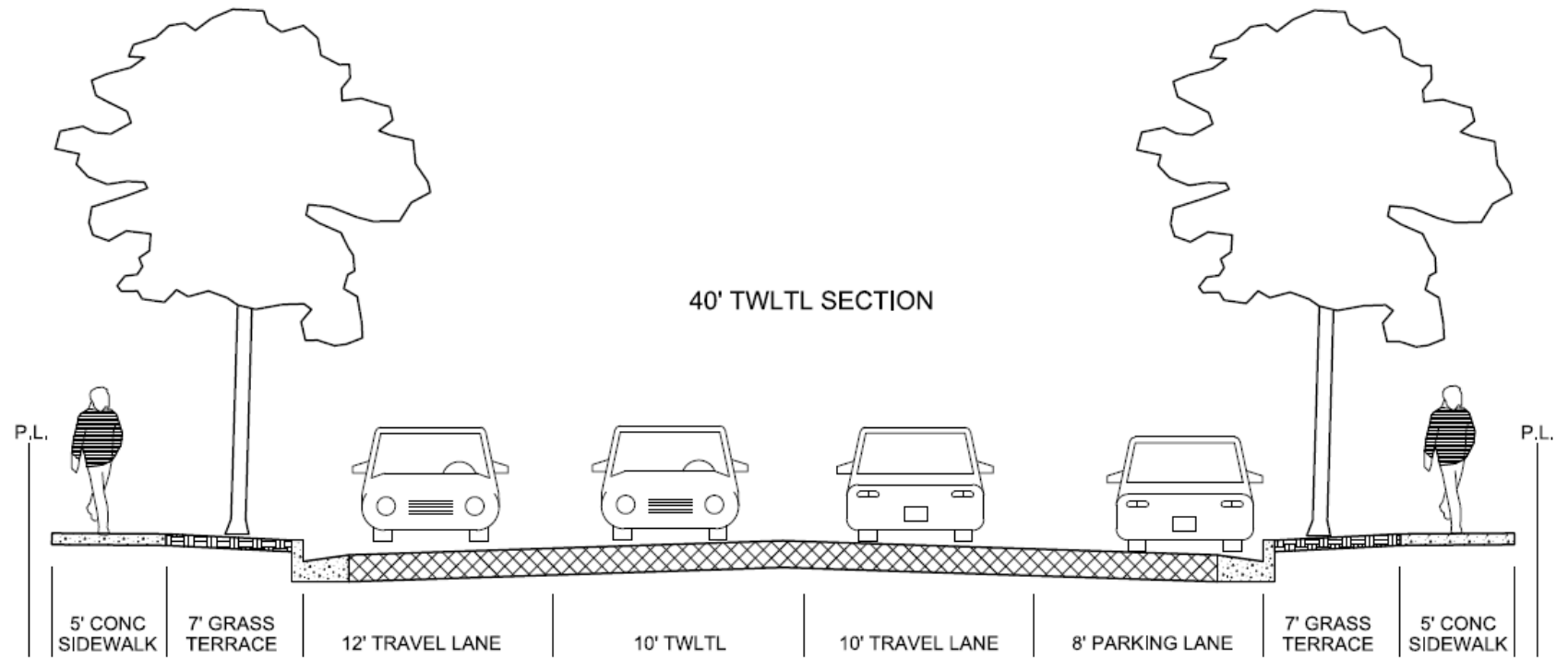
# Workshop: Sample Cross Sections

B

- Pros
  - Dedicated bike lanes on both sides
  - Wider terrace space for trees, amenities, etc.
- Cons
  - Increased congestion during peak hours
  - Parking on only one side at all times
  - No parking within 130'+/- of intersections
    - Could be most of blocks depending on block length
    - Approximately 6 stalls at each corner (24 total)
  - Bus stops in travel lanes
    - Bus times affect peak hour congestion

# Workshop: Sample Cross Sections

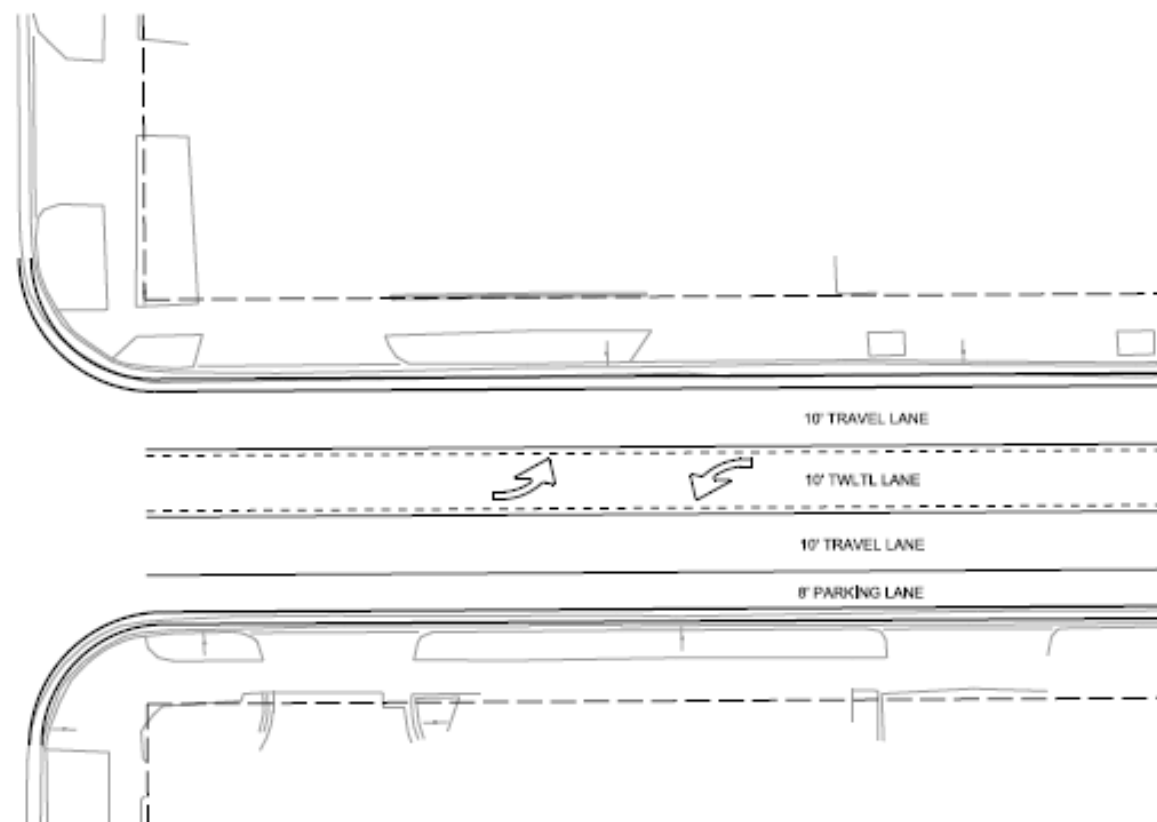
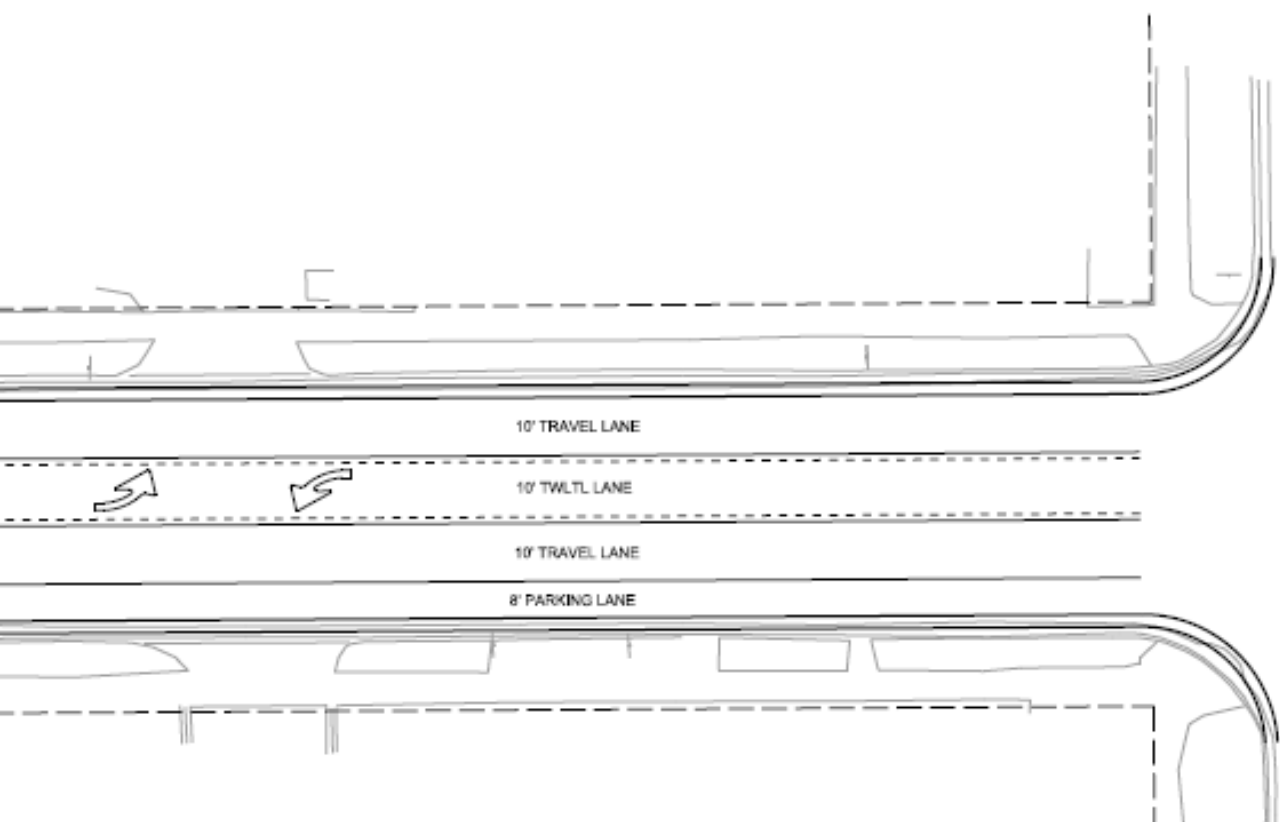
C



- Thru lane in each direction
- Parking lane one side
- Two-way Left Turn Lane (TWLTL) throughout
- Half bump-out at intersections (no parking)



C



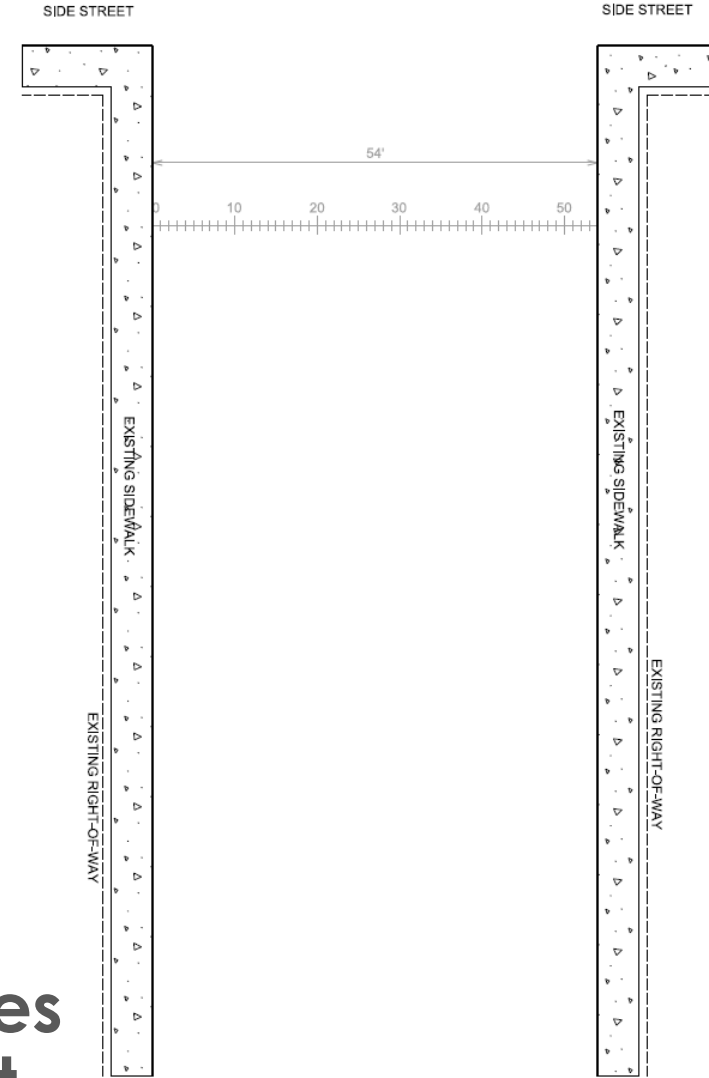
# Workshop: Sample Cross Sections



- Pros
  - Improved mid-block safety with dedicated turn space for driveways
  - Narrower street width
    - Wider terrace space for trees, amenities, etc.
    - Shortens pedestrian crossings
  - Allows for parking space up to intersections
  - Option for small bumpouts at intersections
- Cons
  - Increased congestion during peak hours
  - Bus stops in travel lanes & affects on timing
  - No bike lanes
  - Parking only on one side of the street

## Workshop: Site Constraints

- A number of possible combinations remain
- Right-of-way remains the same: 66'
- Sidewalk remains in place on both sides
  - Minimum width 5' with 1' buffer to property line
- Minimum 3 lanes through intersections (32 ft.)
- **Space to be considered (sidewalk to sidewalk) for lanes & terraces (grass/trees) is 54 ft.**



## Workshop: Section Widths

- Inside travel lane – 10 ft. min
- Travel lane at curb line – 11 ft. min
- Turn lane – 10 ft. (at intersections)
- Bike lane – 6 ft.
- Dedicated Parking lane – 8 ft.
- Terrace options
  - Keep existing trees – min. 6 ft.
  - Remove existing trees, plant low-growing – 4 ft.
  - No trees in terraces < 4 ft.
  - Rain gardens – 10 ft. X 15 ft.
  - Max curb bumpout – 2 ft. (on either side)
- Traffic island – 4 ft.

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Questions?



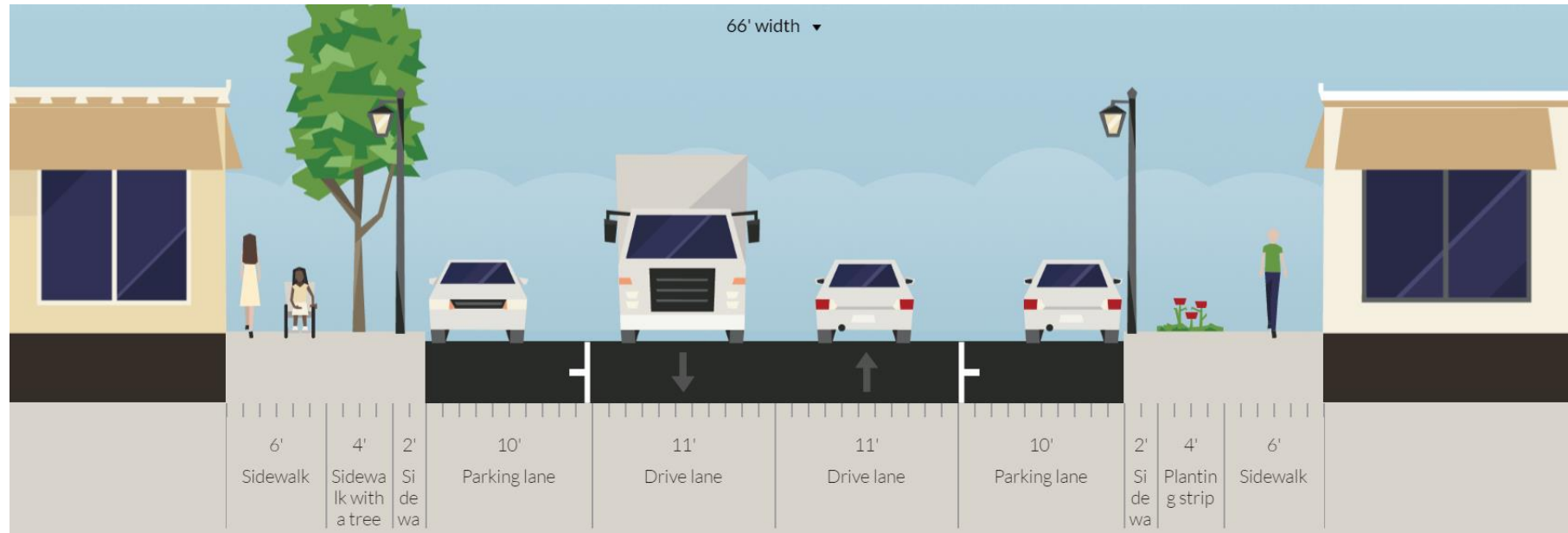
# Workshop Exercise

Small Group Cross Section Modeling



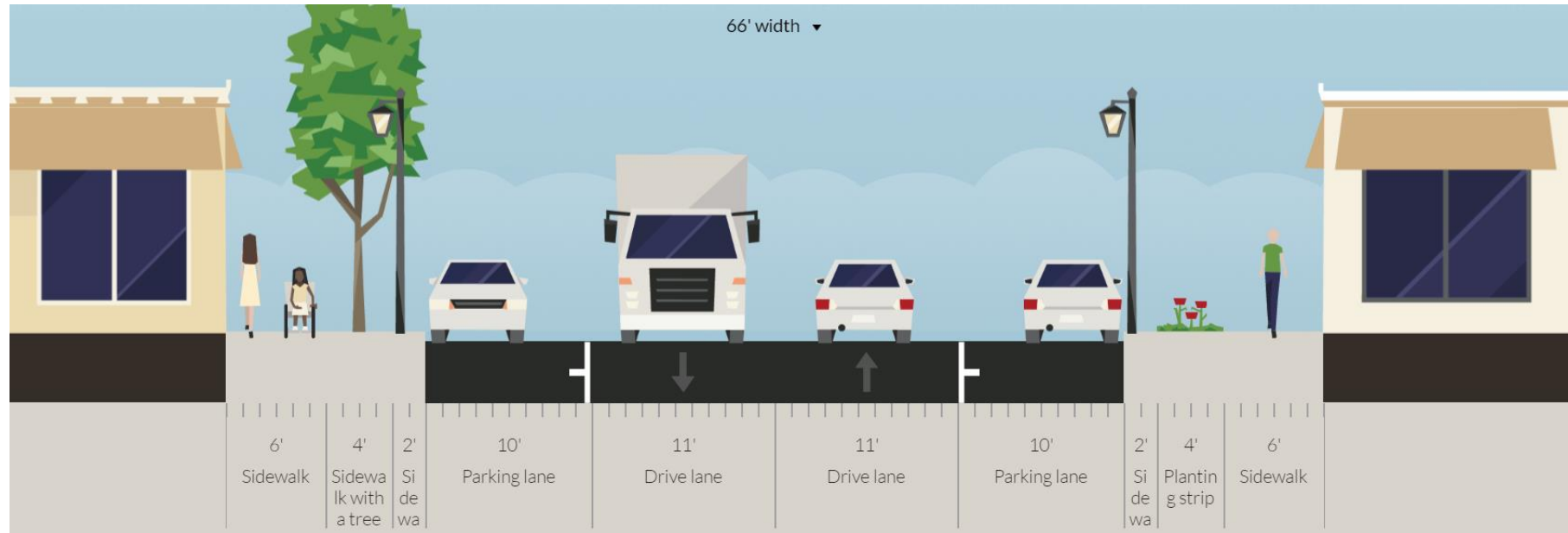
# Process

- Put on your engineering hat.
- 30 minutes for group work
  - Several resources
- 30 minutes to share
  - Use your “Outcomes” sheet to tell your story
- Dot-voting for favorites at the end of the meeting



# Process

- Focus broadly on defining spaces for different uses.
  - Pieces represent minimum widths – can go wider.
- Connect your design to the community priorities.
- Experiment, be creative, and take on the challenge!



# Ground Rules

- ✓ Be open to new ideas.
- ✓ Practice mutual respect.
- ✓ Challenge yourself and others.
- ✓ Contribute your thoughts and experience.
- ✓ Listen to understand. Do not judge or criticize.



**"Um, Can you repeat the part of the stuff where you said all about the things?"**

# Small Group Report-Out

## In 2 minutes:

1. Describe your group's cross section.
2. Sell it! Identify the benefits your group envisions and how it meets community priorities.
3. Explain the tradeoffs your group accepted with this design.

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Next Steps

# Next Steps

1. Traffic modeling
2. Final cross section design
3. Cross Section Open House
  - October 27, Edgewood College, 6-7:30PM



## For More Information:

- Survey results are posted online.
- City of Madison Engineering:  
[www.cityofmadison.com/engineering/projects/monroe-street](http://www.cityofmadison.com/engineering/projects/monroe-street)
  - Subscribe to email updates
  - View presentations and notes
- Alder Eskrich, District 13:  
[www.cityofmadison.com/council/district13/](http://www.cityofmadison.com/council/district13/)
  - Subscribe to email updates.
  - Share additional comments.

Thank  
You!



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