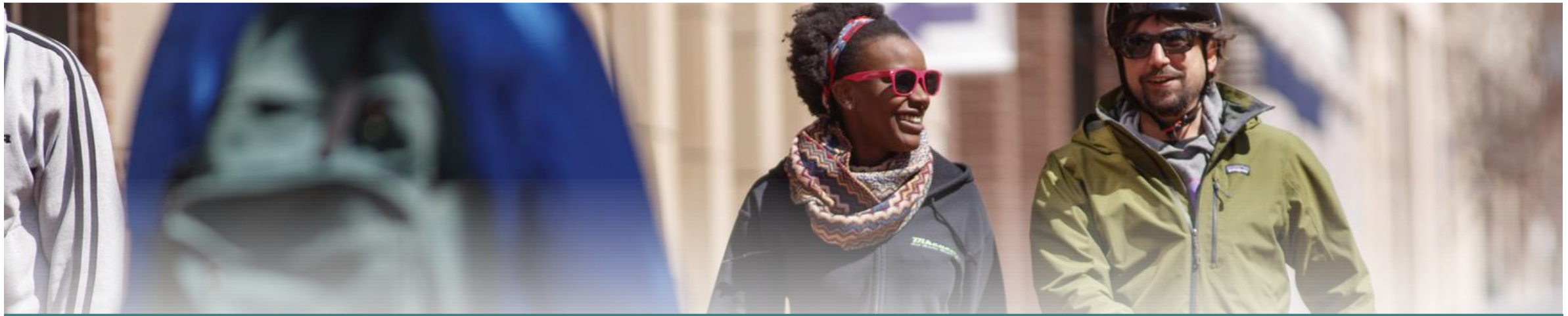

TPPB MEETING // OCTOBER 24, 2022

# COMPLETE GREEN STREETS GUIDE

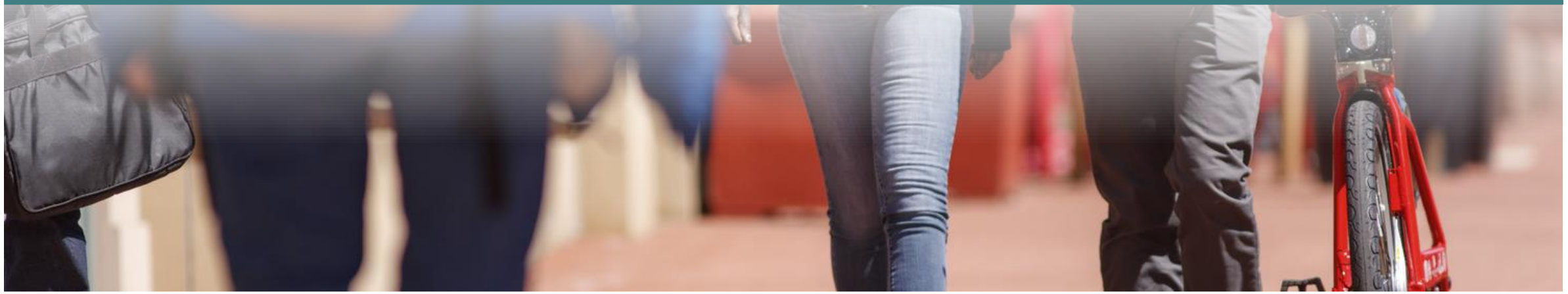
TOOLE DESIGN · EQT by design · STRAND ASSOCIATES · CITY OF MADISON TRANSPORTATION

# AGENDA

- Engagement Update
- Equity Approach Update
- Green Infrastructure Update
- Street Design Parameter Tables
- Adjustments to Street Types



# ENGAGEMENT UPDATE



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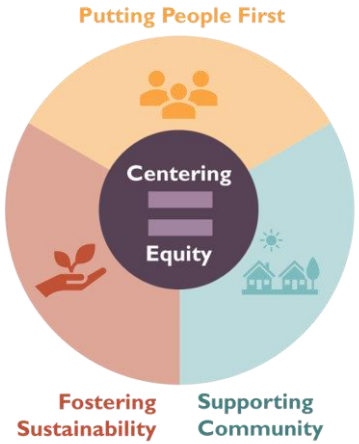
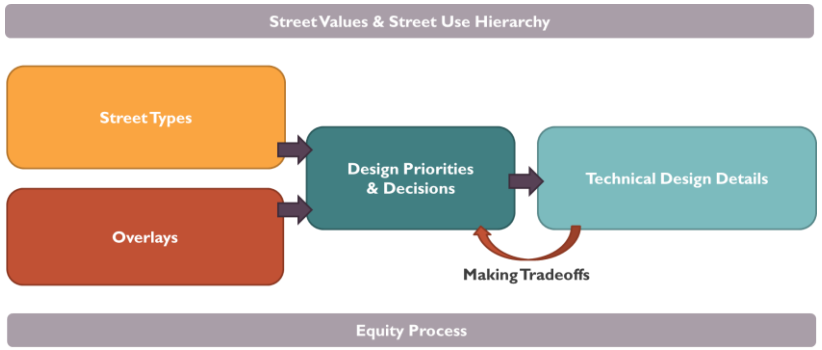
# WHAT WE PRESENTED

## Values




## Hierarchy

## Decision-making process




## Overlays

**Equity Priority Areas**
(includes additional process elements)

**Transit Priority Network**
(prioritizes transit on high frequency transit routes)

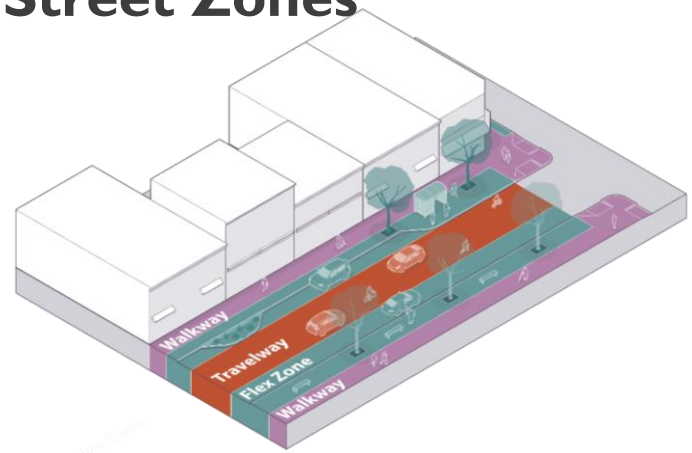
**All Ages and Abilities Bike Network**
(key corridors to prioritize high-comfort bikeways)

**Tree Canopy Priority Areas**
(includes detailed decision matrix)

**Green Infrastructure Priority Areas**
(includes detailed decision matrix)

**NHS & Truck Routes**
(higher traffic streets)

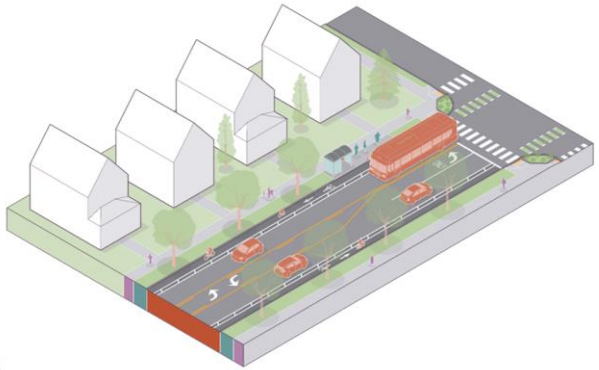
## Street Zones




## Typology and priorities

**Community Connector**

| |
|---|
| **Walkway** High Priority |
| Standard sidewalks, with buildings offset from the sidewalk by landscaping. |
| **Flex Zone** Low Priority |
| Landscaped terrace with street trees. On-street parking may be provided in some locations. |
| **Travelway** Medium Priority |
| 1 travel lane per direction with bike facilities, often with medians or center turn lane. Appropriate transit accommodations. |
| **Additional Features and Considerations** |
| Intersections every 300-500 feet; controlled crossings every 800-1,200 feet; frequent driveways |



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## Equity process

| Is the project within or near an EPA? | Are there other City departments active in the CGS project area? |
|---|---|
| • Engage with NRT & community to understand needs<br>• Review past public input<br>• Use EPA project checklist* | • Engage with NRT & community to understand needs<br>• Review past public input & other department projects in area and coordinate work to improve all project outcomes<br>• Use EPA project checklist |

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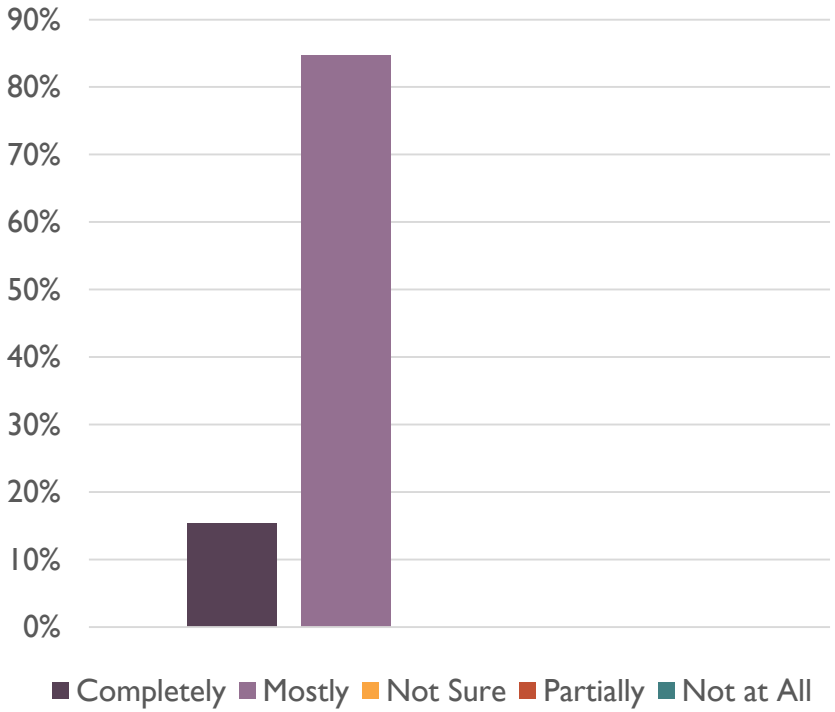
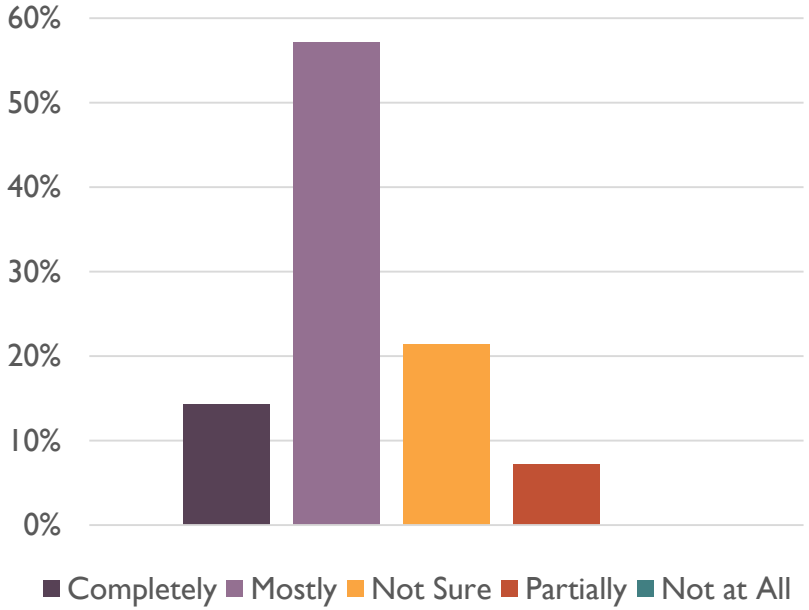
# ONLINE PUBLIC MEETING

- **43 registrants for meeting, 15 additional views of meeting video**

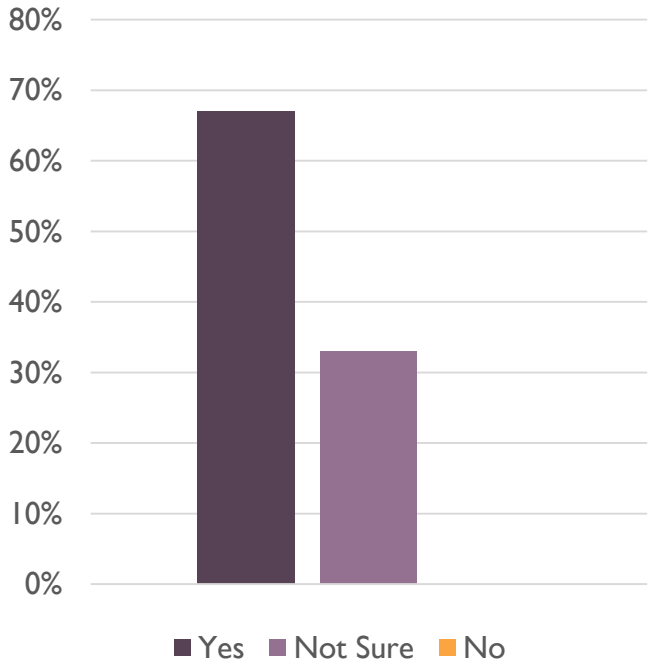
How well do you think the values reflect what our community needs?




Do you think the Complete Green Streets process reflects the street values and street use hierarchy that we explained earlier in the presentation?




Do you think the proposed process will lead to tangible, positive impacts within the city?

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# FOCUS BIPOC POPULATION ENGAGEMENT

- Four focus group sessions totaling 25 diverse participants. Two community groups and two professional groups.
- Key Points:
  - Complex information, but mostly understood.
  - CGS equity process/EPA/checklist well-received.
  - Skepticism but also hopefulness that these changes to the process will have a positive impact on neighborhoods and people.
  - Community groups very interested in the details but less connected to conventional City communication channels. City advised to spend more time engaging (notifying and meeting with residents*), discussing, and getting input on projects in these neighborhoods.

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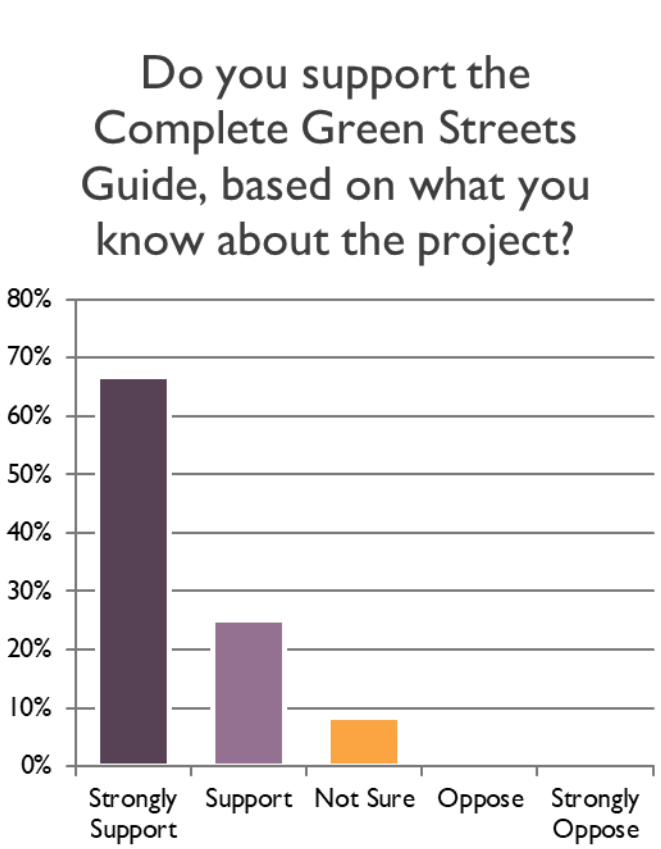
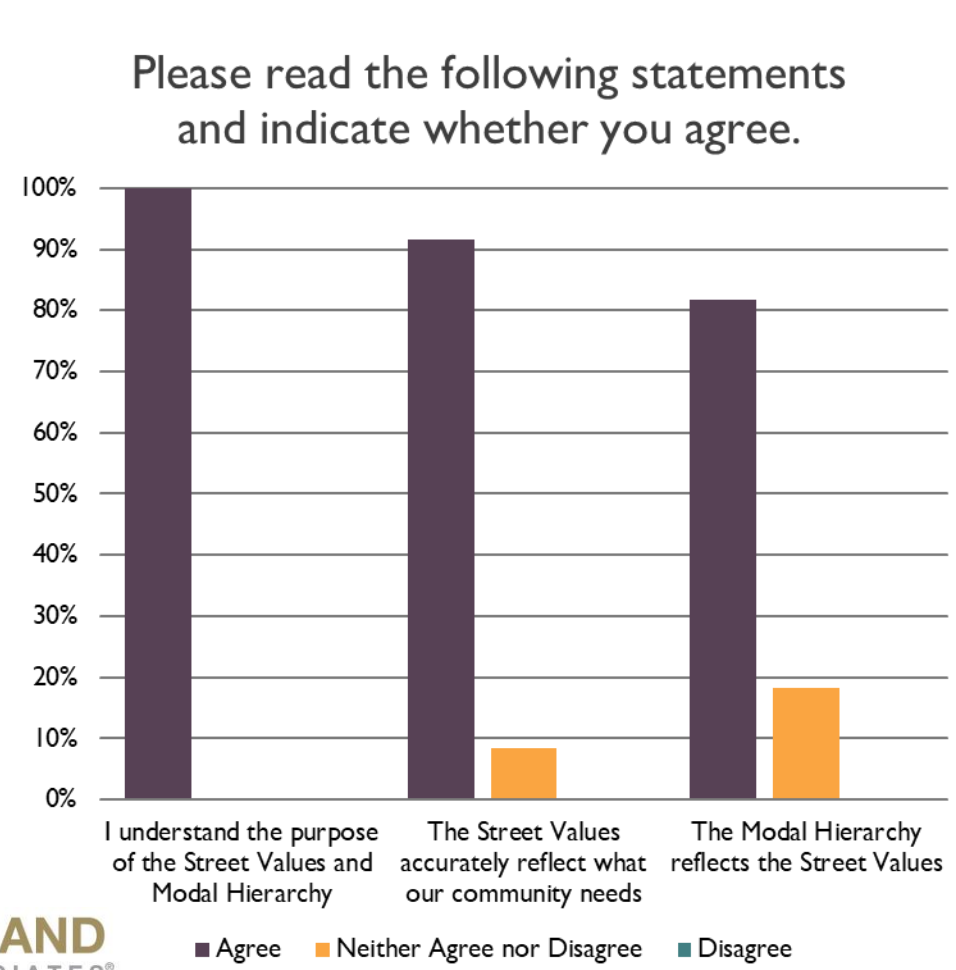
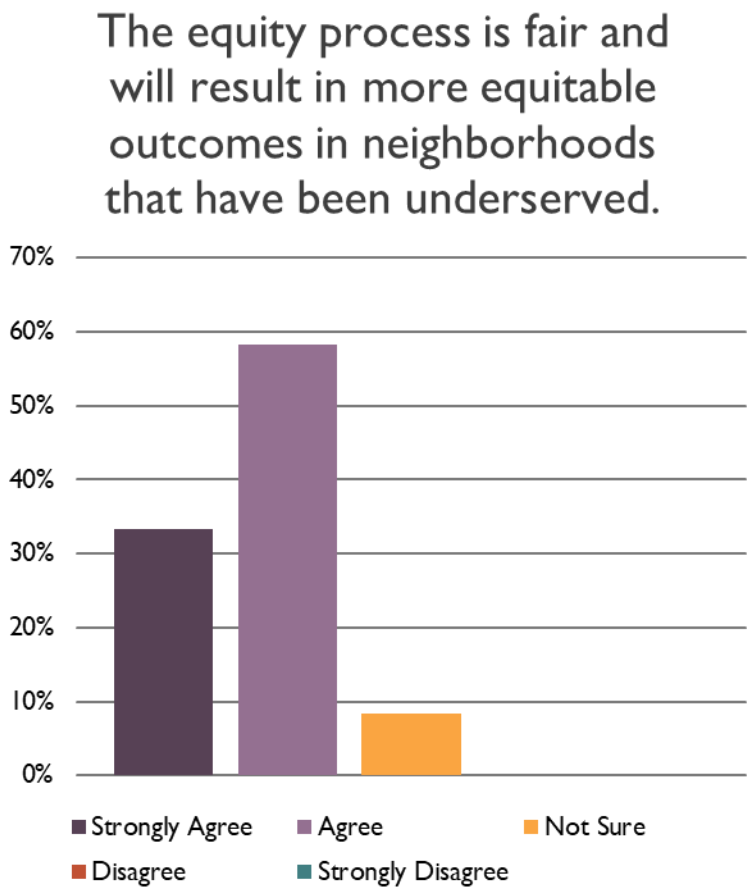
*Renters, not just landlords

# ONLINE SURVEY

- **Survey was posted online for 3 weeks and has 12 participants**

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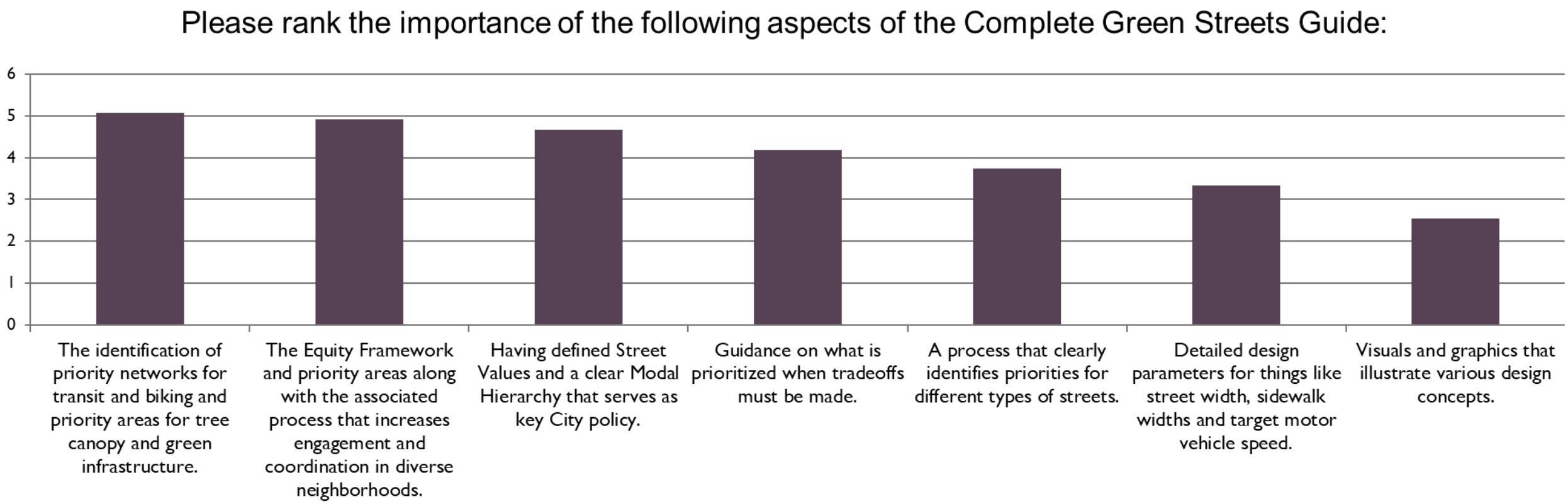
# ONLINE SURVEY




**Priority Networks** | **Equity Framework** | **Values & Hierarchy** | **Tradeoffs Guidance** | **Street Type Priorities** | **Design Parameters** | **Visuals & Graphics**

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# EQUITY APPROACH

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# EQUITY PROCESS

- Consult the Map of Equity Priority Areas (EPAs)
  - Initial map based on Neighborhood Resource Team (NRT) areas
    - City project started that will identify additional areas based on demographic data
- EPA locations trigger additional process steps that are detailed in the CGS Project Checklist

| Is the project within or near an EPA? | Are there other City departments active in the CGS project area? |
| --- | --- |
| • Engage with community to understand needs<br>• Engage with NRT<br>• Review past public input<br>• Use EPA questions on CGS project checklist | • Engage with community to understand needs<br>• Engage with NRT<br>• Review past public input & other department projects in area and coordinate work<br>• Use EPA project checklist |

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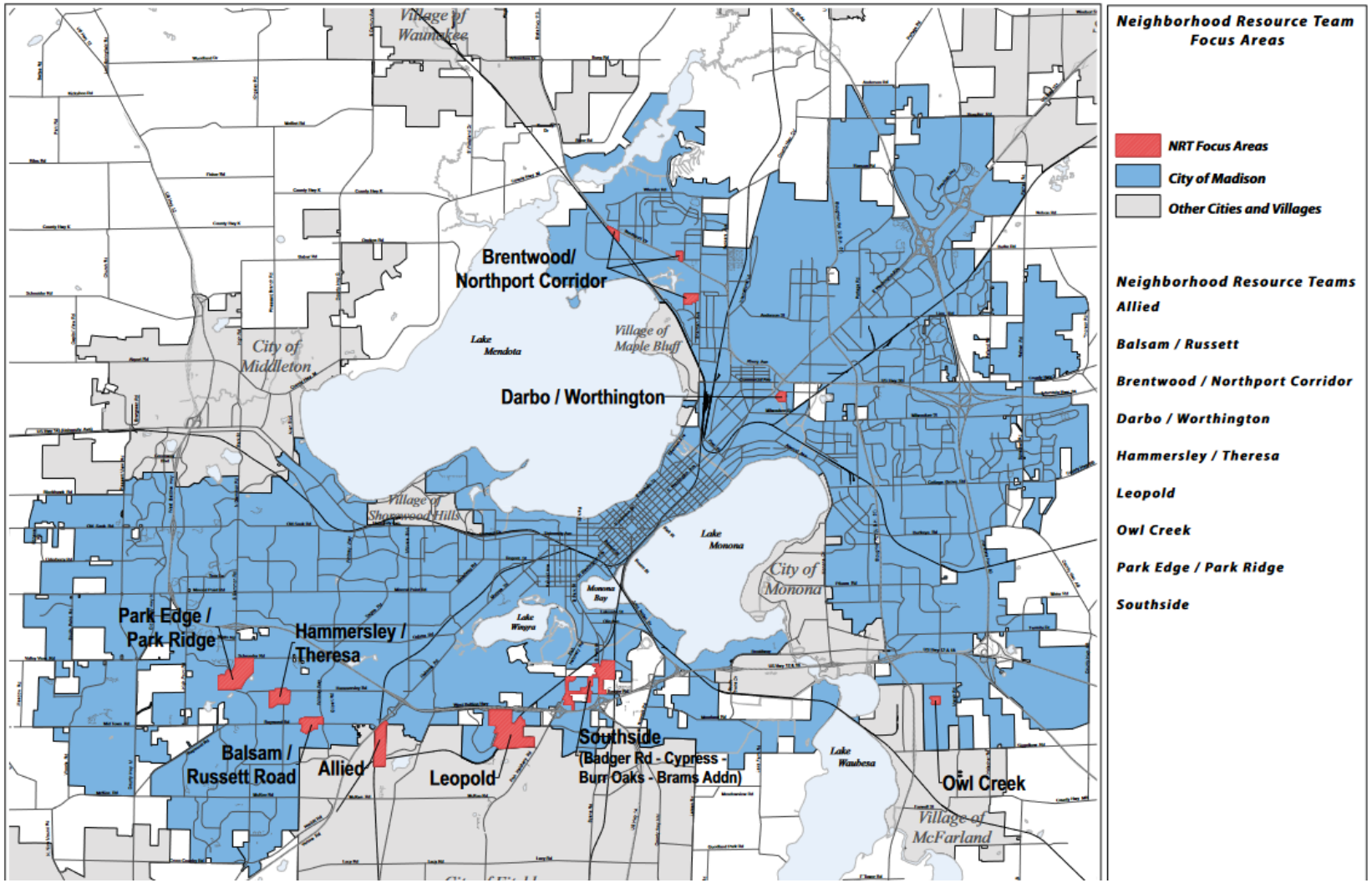
# Equity Priority Areas
(includes additional process elements)

## Initial Map

Based on Neighborhood Resource Team (NRT) areas

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# PROJECT CHECKLIST

- This checklist is designed to assist project managers oversee planning, design, and construction of transportation projects using the Complete Green Streets framework.
- The Project Manager is responsible for ensuring the checklist sections are completed as the project advances, on the project website and placed in Legistar when a project goes to a Board, Commission, Committee or Council.
- The checklist will be part of reviewing the Complete Green Streets guide outcomes

# COMPLETE GREEN STREETS PROJECT CHECKLIST

## Complete Green Streets Project Checklist

Project Name and Limits
Click or tap here to enter text.

Insert Project Map

Project Improvement Type
Click or tap here to enter text.

Alder District
Click or tap here to enter text.

Project Schedule
Click or tap here to enter text.

Project Website
Click or tap here to enter text.

Project Team
Click or tap here to enter text.

# SECTION ONE: DATA GATHERING

- What is the Street Type for this project?
- What is the Right of Way Width?
- What are the Overlays for this project? (EPA, Transit, Bike, Tree, DGI, NHS/Truck)
- What type of facilities that will influence the street design are located within the project boundaries or within ¼ mile of the project?
- Insert current street cross section
- Details on current infrastructure such as current speed limit, traffic volumes, sidewalks, bicycle infrastructure, pavement rating, stormwater study information, tree canopy, transit service, parking policies & utilization and more
- List any recent area or neighborhood plans or other outreach efforts that can inform the project and the relevant information from those efforts.

# SECTION TWO: ENGAGEMENT PLANNING

- List engagement activities such as mailings, meetings/events, surveys, etc.
- For Equity Priority Area, use the City's RESJII Public Participation Guide to assist the project team in developing an engagement plan appropriate for the project.
- List other City projects or private developments are happening within the project boundaries or in the neighborhood.
- For Equity Priority Area, list any opportunities to work together with other departments on engagement.

# SECTION THREE: ENGAGEMENT OUTCOMES

- Were concerns raised during the engagement about the original Street Type designation? If yes, what were the concerns and is a new Street Type recommended?
- What are the top priorities or concerns expressed by residents during project engagement?
- What project elements address the top concerns raised during engagement? What concerns are not able to addressed with this project and why?
- What other project elements address concerns determined by reviewing data?

# SECTION FOUR: DESIGN

- Insert initial proposed cross section
- Insert final approved cross section

# SECTION FIVE: IMPACT & ACCOUNTABILITY

- After project approval, how will the final street design be communicated back to the neighborhood and people who provided input?
- For Equity Priority Area, did the City hear any feedback on the final design, project processes or communication that could improve the CGS process? If so, list.
- For Equity Priority Area, were there issues or concerns that were not addressed by this project? Were these shared with other department or staff? Are there current opportunities to address these concerns?
- List the final project design elements that support the goals of CGS.
- List any other project review information.

# GREEN INFRASTRUCTURE

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# GREEN OVERLAYS

**Tree Canopy Priority Areas**
(includes detailed decision matrix)

**Green Infrastructure Priority Areas**
(includes detailed decision matrix)

A companion report was created including:

- Detailed analysis of tree planting and green stormwater infrastructure solutions
- Robust guidance on decision-making and engineering solutions
- Decision-making charts
- Online at Complete Green Streets website

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# Tree Canopy Priority Areas

## Purpose & Goals

- Reach citywide goal of 40% tree canopy coverage.
- Identify areas with low amounts of existing tree canopy coverage to prioritize space in Flex Zone for trees
- Identify appropriate solutions for planting trees while reducing conflicts with other right-of-way priorities.

| Tree Canopy Priority | Existing Percent Tree Canopy in ROW | Tree Equity Score[1] |
|---|---|---|
| High | <15% | 40 to 75 |
| Moderate | 15% to 35% | 75 to 90 |
| Low | >35% | 90 to 100 |

[1]Madison Score: https://www.treeequityscore.org/map/#11/43.0699/-89.4111)
[2]Methodology: https://www.treeequityscore.org/methodology/

**Table 1 Tree Canopy Priority**

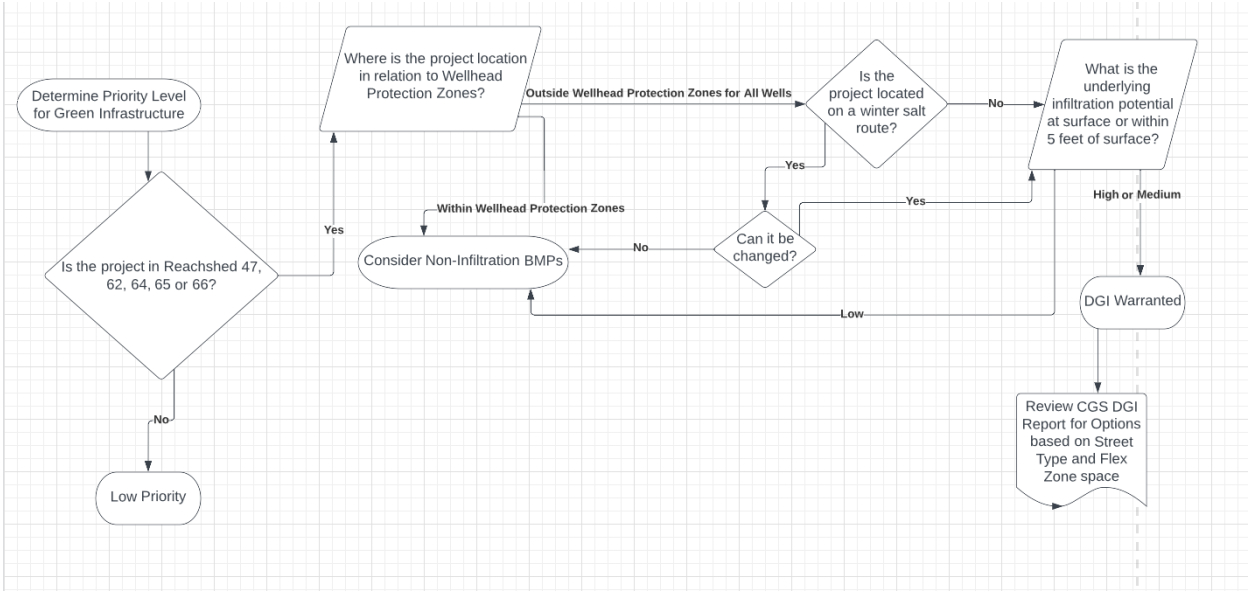
# Green Infrastructure Priority Areas

## Purpose & Goals

- Identify appropriate and viable locations for distributed green infrastructure (DGI) for stormwater management and water quality improvement and appropriate engineering solutions.

## What does this mean?

- Priority level for DGI is determined using the DGI flowchart.
- High priority areas are where green infrastructure should be prioritized over other Flex Zone uses (e.g., on-street parking, sidewalk cafes, etc.).

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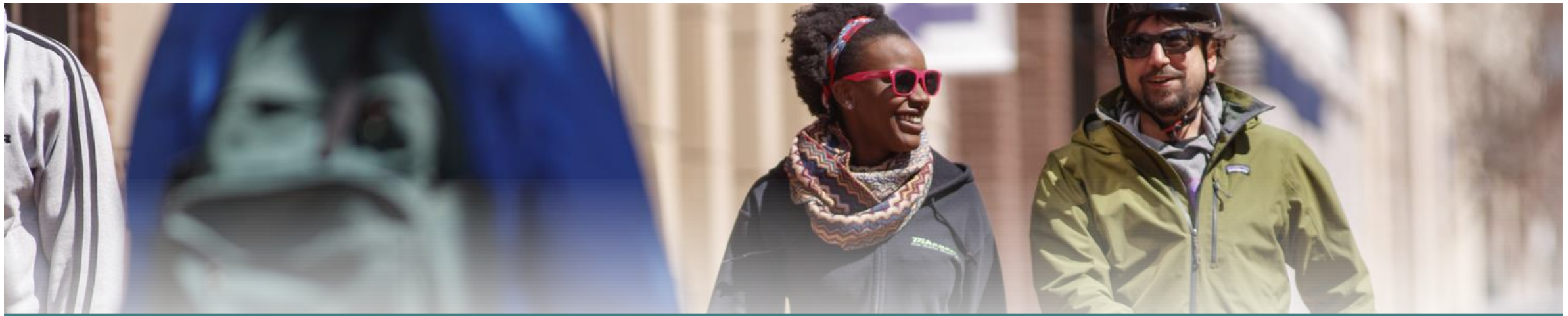
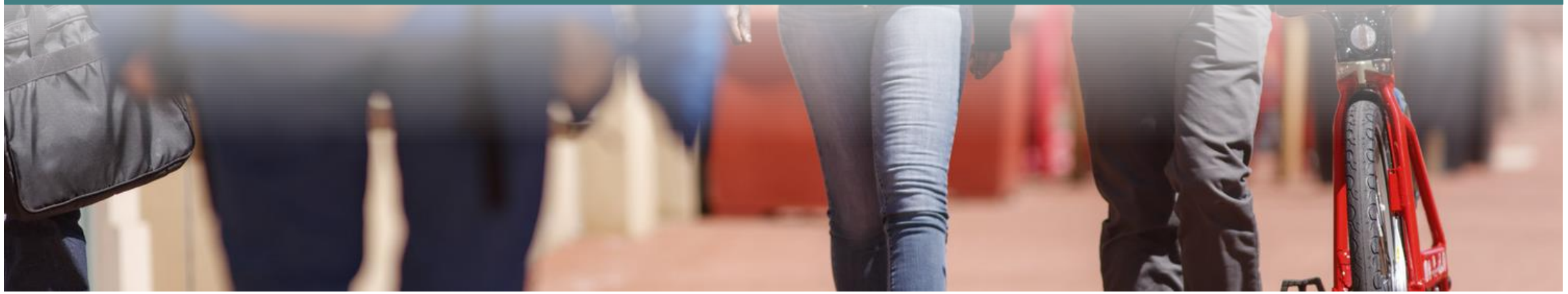


# PARAMETERS TABLES



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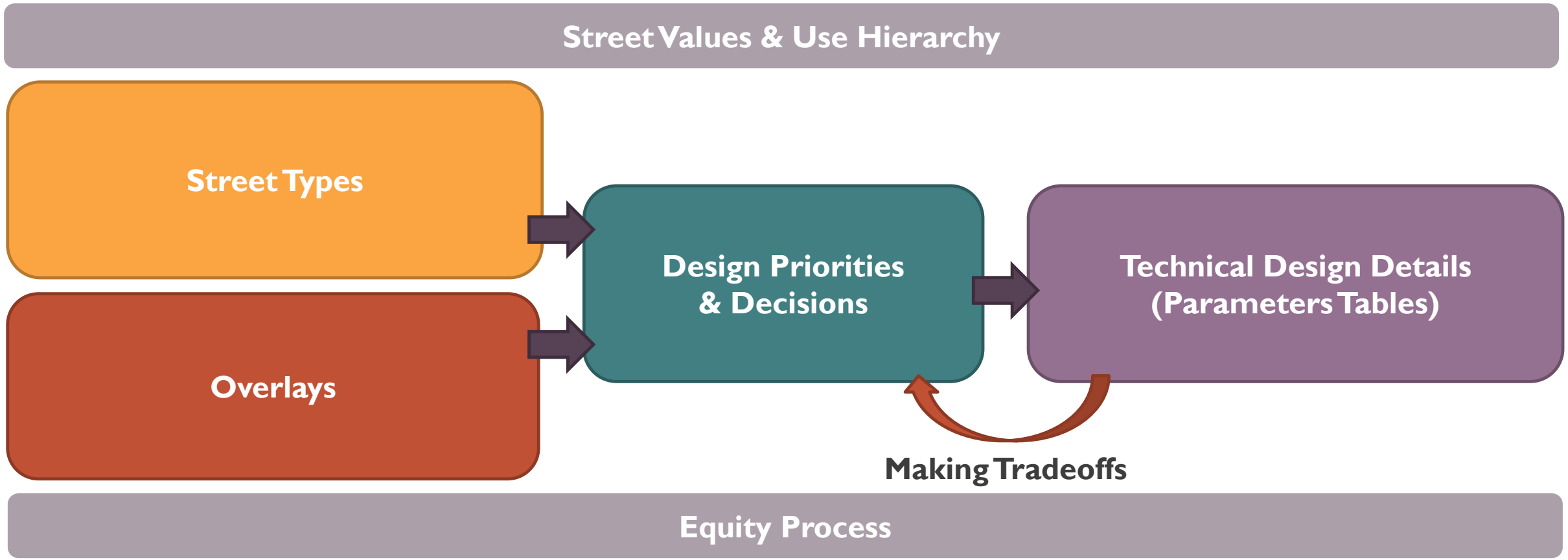
# COMPLETE GREEN STREETS PROCESS AND ELEMENTS

The process is built around the key elements shown below. Street values, street use hierarchy, and the equity process influence all elements.

- **Street types** and **overlays** reflect context and modal network needs to guide **design priorities and decisions**.
- **Technical design details** identify minimum, maximum, and preferred values for things like sidewalk and terrace widths.
- When constraints require making tradeoffs, the **design priorities** should be reassessed in consultation with the **street types** and **overlays**.



# TRAVELWAY

| Street Type | Travelway | | | | | | |
|---|---|---|---|---|---|---|---|
| | Typical # of Travel Lanes | Lane Width | | | Center Turn Lane / Median | Target Design Speed (mph) | Typical ADT (motor vehicles) |
| | | Max. | Pref. | Min. | | | |
| Urban Avenue | 4 | 11’ | 10’ | 10’ | Median Standard | 25 | >20,000 |
| Boulevard | 4 | 11’ | 10’ | 10’ | Median Standard | 25-30 | >20,000 |
| Parkway | 2-4 | 11’ | 10’ | 10’ | Median Standard | 25-30 | >10,000 |
| Mixed-Use Connector | 2 | 10.5’ | 10’ | 10’ | Center Turn Lane Optional | 25 | 3,000 to 20,000 |
| Community Main Street | 2-4 | 10’ | 10’ | 10’ | Center Turn Lane Optional (not common) | 25 | 10,000 to 25,000 |
| Community Connector | 2-3 | 10’ | 10’ | 10’ | Center Turn Lane Optional | 25 | 3,000 to 20,000 |
| Mixed-Use Neighborhood Street | 2 lanes often no centerline | If centerline, typical 10’ | | | Not preferred | 20 | <3,000 |
| Neighborhood Street | 2 lanes often no centerline | If centerline, typical 10’ | | | Not preferred | 20 | <3,000 |
| Neighborhood Yield Street | No centerline | | N/A | | Not compatible | 15-20 | <1,000 |
| Civic Space | 2 lanes often no centerline | If centerline, typical 10’ | | | Not compatible | 15 | <2,000 |
| Neighborhood Shared Street | N/A | | N/A | | Not compatible | 10 | <500 |

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| Street Type | Total Pavement Width (Curb to Curb midblock) | | Typical # of Travel Lanes & other considerations |
|---|---|---|---|
| | Max | Typical Min | |
| Urban Avenue | 102’ | 74’ | 96’ with 2 motor vehicle lanes & a transit lane each direction includes one-way protected bike lanes and median with trees |
| Boulevard | 102’ | 72’ | 74’ with 4 motor vehicle lanes and protected bike lanes and 12' median |
| Parkway | 86’ | 26’ | 46’ with 4 motor vehicle lanes with no median<br>66’ with four motor vehicle lanes and median with trees (bicycle facility typically a shared-use path) |
| Mixed-Use Connector | 56’ | 38’ | 38’ with one-way street, motor vehicle lanes and parking protected bike lane;<br>56’ with protected bike lanes and parking both sides |
| Community Main Street | 60’ | 38’ | 56’ with protected bike lanes and parking both sides (no peak hour lane); 60' with peak hour lane<br>50’ with center turn lane, protected bike lane and no parking |
| Community Connector | 66’ | 24’ | 66’ with 2 motor vehicle lanes, center turn lane, buffered/protected bike lane and parking<br>54’ with 2 motor vehicle lanes, buffered/protected bike lanes and parking both sides<br>24’ with 2 travel lanes and no parking (bicycle facility a shared-use path) |
| Mixed-Use Neighborhood Street | 38’ | 30’ | 38’ with 2-way travel, bus route and parking both sides<br>36’ with 2-way travel, not a bus route, parking both sides<br>30’ with 2-way travel and parking on one side |
| Neighborhood Street | 38’ | 30’ | 38’ with 2-way travel, bus route and parking both sides;<br>36’ with 2-way travel, not a bus route, parking both sides<br>30’ with 2-way travel and parking on one side (low frequency transit only) |
| Neighborhood Yield Street | 30’ | 18’ | 30’ with 2-way travel and parking both sides;<br>24’ with 2-way travel and parking on one side (22’ if houses only on 1 side)<br>18’ with 2-way travel and no parking (limit distance at 18’) |
| Civic Space | 52’ | 18’ | Project Specific: Base width on travel, parking and event needs of street. May include contraflow lanes for bikes if one-way street. |
| Neighborhood Shared Street (Woonerf) | N/A | N/A | No travel lanes designated; shared space which is all considered part of Flex Zone |

| Street Type | Total Flex Zone Width (per side) | | Motor Vehicle Parking |
|---|---|---|---|
| | Typical | Typical Minimum | |
| Urban Avenue | 12’ | 8’ | Add 8’ for each side for streets that will include parking |
| Boulevard | 12’ | 8’ | Add 8’ for each side for streets that will include parking |
| Parkway | 12’ | 8’ | Parking not typical on Parkway. |
| Mixed-Use Connector | 18’ | 5’ | 18’ includes parking but may be only on one-side of street, inset into terrace or not needed based on development. If parking included, review if space needed for parking meters. |
| Community Main Street | 10’ | 5’ | Parking would be provided as part of travelway if street has a peak hour only travel lane; Add 8’ for each side of street needing parking if no peak hour lane. Consider if only on one side of street, inset into terrace or not needed. If parking included, review if space needed for parking meters. |
| Community Connector | 12’ | 6’ | Add 7-8' for each side for streets that will include parking |
| Mixed-Use Neighborhood Street | 18’ | 6’ | 18’ includes parking but may be only on one-side of street, inset into terrace or not needed based on development; review if space is needed for parking meters. |
| Neighborhood Street | 17’ | 6’ | 17’ includes parking but may be only on one-side of street, inset into terrace or not needed based on development |
| Neighborhood Yield Street | 17’ | 6’ | 17’ includes parking but may be only on one-side of street, inset into terrace or not needed based on development |
| Civic Space | 18’ | 10’ | 18’ includes parking but may be only on one-side of street, inset into terrace or not needed based on development; review if space is needed for parking meters. |
| Neighborhood Shared Street (Woonerf) | Varies based on features | Varies based on features | Parking would occur in defined areas only and serve as a traffic calming feature. Any parking will be considered along with other included features such as trees, green infrastructure, placemaking, etc. Travel happens in the Flex Zone as this is shared space. |

| Street Type | Total Walkway Width (per side including buffer to ROW edge) | | Typical sidewalk or path width* |
|---|---|---|---|
| | Preferred | Typical Minimum | |
| Urban Avenue | 9’ | 6' | Sidewalk: 8’ preferred, 5’ minimum |
| Boulevard | 7’ | 6’ | Sidewalk: 6’ preferred, 5’ minimum |
| Parkway | 14’ | 6’ | Shared-Use Path: 12’ preferred, 17’ where provide separate walk/bike space, 8’ minimum. Clear zone of 2-feet on each side of path.<br>Sidewalk: If have shared-use path only on one side and sidewalk on opposite side, 5’ minimum |
| Mixed-Use Connector | 9’ | 6’ | Sidewalk: 8’ preferred, 5’ minimum |
| Community Main Street | 9’ | 6’ | Sidewalk: 8’ preferred, 5’ minimum |
| Community Connector | 7’ | 6’ | Sidewalk: 6’ preferred, 5’ minimum |
| Mixed-Use Neighborhood Street | 9’ | 6’ | Sidewalk: 8’ preferred, 5’ minimum |
| Neighborhood Street | 6’ | 6’ | Sidewalk: 5’ typical |
| Neighborhood Yield Street | 6’ | 6’ | Sidewalk: 5’ typical |
| Civic Space | 13’ | 10’ | Sidewalk: 12’ preferred, 9’ minimum |
| Neighborhood Shared Street (Woonerf) | 6' | 6' | Pedestrian Zone: Accessible pedestrian area without obstacles or mode conflicts. Typical 5’ depending on context with appropriate tactile indicators if not a traditional sidewalk. |

# STREET TYPE ADJUSTMENTS

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Arterial

Collector

Local

## Urban Avenue

East Wash (to Starkweather Creek); University Ave; South Park St; South Gammon (at West Towne)

## Boulevard

East Wash (past Starkweather Creek); Mineral Point; Whitney Way; Midvale Blvd; Cottage Grove (past Stoughton)

## Parkway

John Nolen; Campus Drive; Eastwood; Packers; Seminole Hwy

## Mixed-Use Connector

Bassett; Broom; Outer Loop; Wilson

## Community Main Street

Willy; Monroe; Fair Oaks Atwood; Regent

## Community Connector

Watts Rd; N Thompson; Buckeye Rd; Milwaukee St; East Gorham; Schroeder

## Mixed-Use Neighborhood Street

Downtown local streets; internal streets in new mixed-use areas; East Main St

## Neighborhood Street

Park Edge Dr; Tree Ln; Allied Dr; Baldwin St; Mifflin St; Shore Dr; Commonwealth Ave; other residential local streets

## Civic Space

Capitol square; downtown diagonals; MLK Blvd

## Neighborhood Shared Street

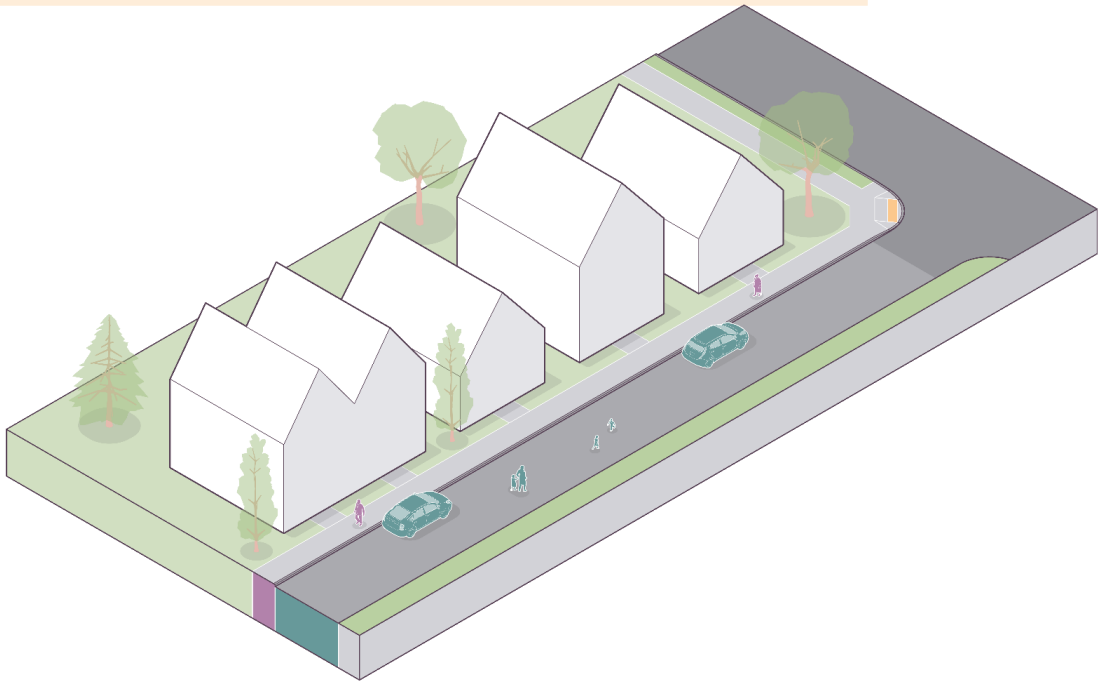
Numerous "Court" streets

## Neighborhood Yield Street

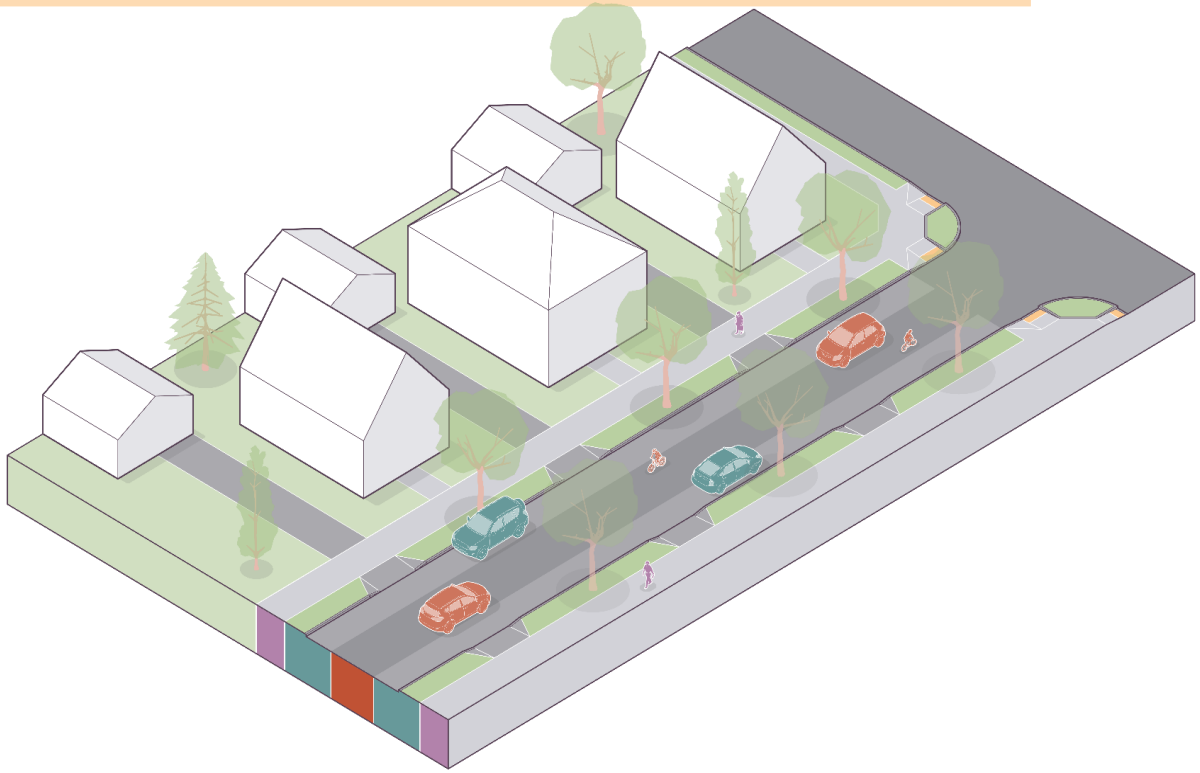
Riverside; other residential local streets

# CURRENT/OLD APPROACH

## Neighborhood Shared Street



## Neighborhood Yield Street



- Applies to "Courts" & indicates preferred conditions
- Entire roadway is Flex Zone
- Not highly reflective of more design-intensive shared street concepts

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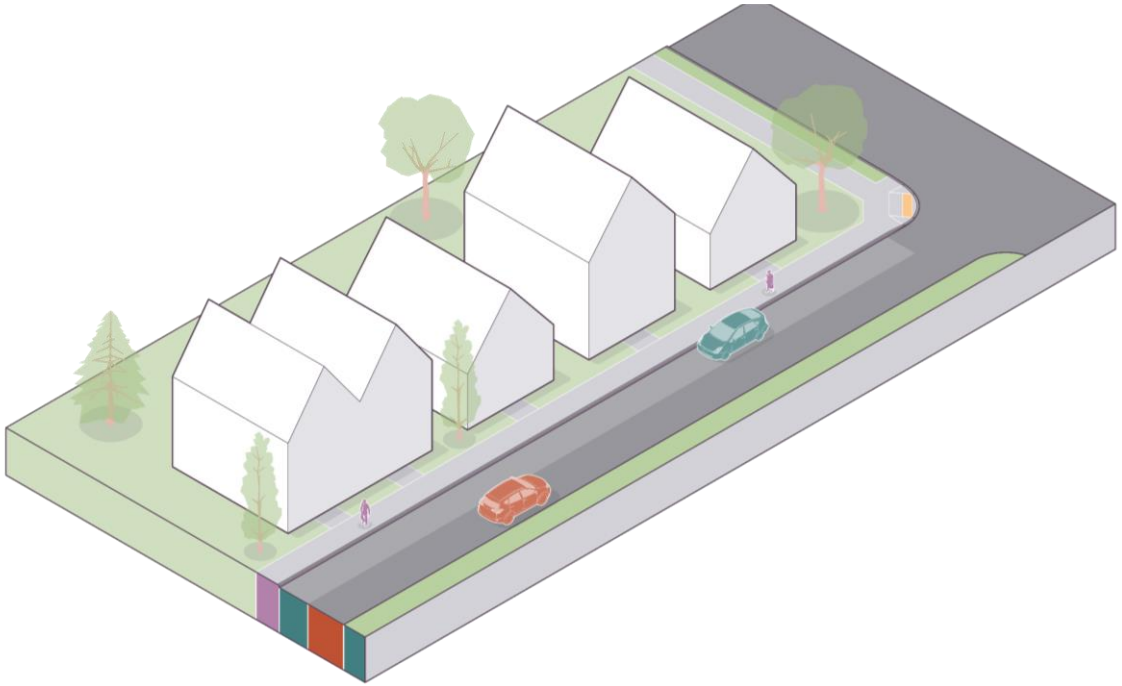
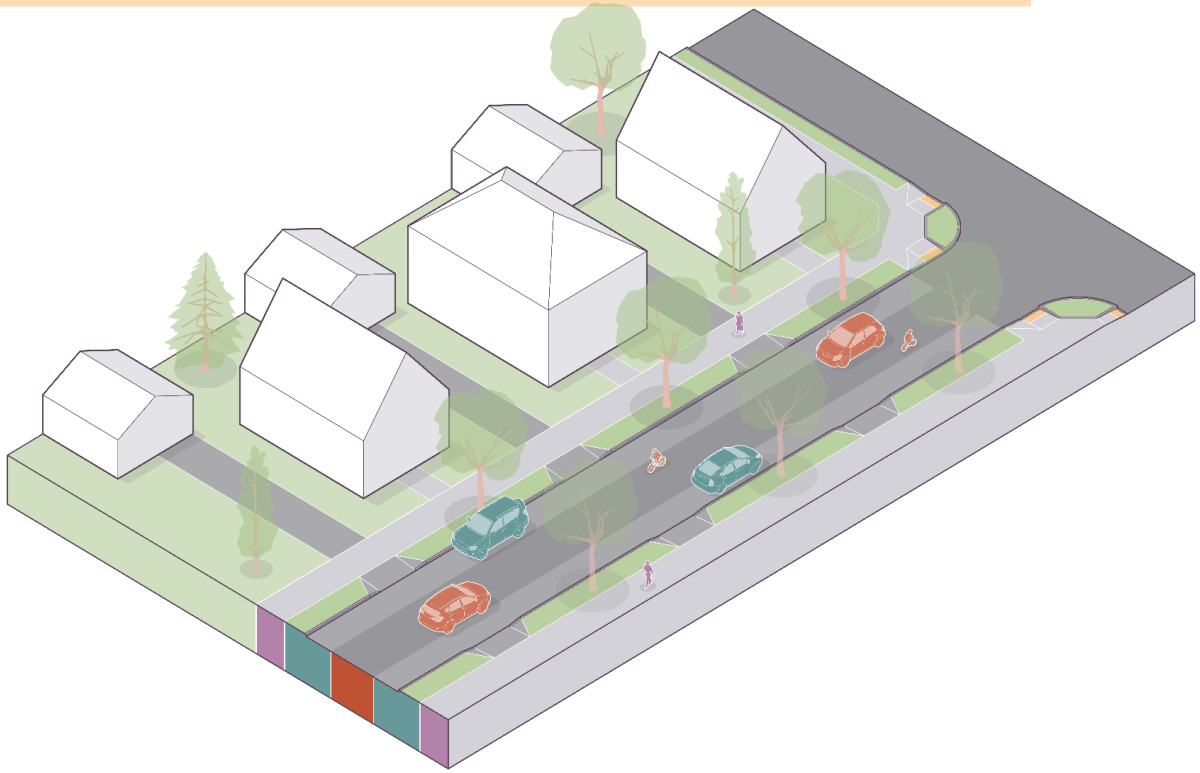
# NEW APPROACH

## Neighborhood Yield Street **(Constrained Conditions)**



## Neighborhood Yield Street



- Applies to "Courts" & indicates preferred conditions
- Travelway identified
- States conditions in which sidewalk ***may*** be back-of-curb or only one side

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# NEW APPROACH

## Neighborhood Shared Street

- Street designated as a pedestrian mall to allow broader traffic restrictions
- New streets in certain contexts meeting requirements
  - Long-term maintenance agreements for pedestrian-friendly snow/ice removal (e.g., HOA or BID)
  - Consolidated trash pick-up and removal location
  - Fire access on cross-streets and/or alleys
- Highly-flexible design – no default starting point
- Design must consider context & connections for the specific street & whole neighborhood

# NEXT STEPS

- Continue refinement of decision-making framework
- Updates to Overlays
- Finalize Street Design Element Tables
- Finalize Project Checklist
- Review Green Infrastructure/Tree items with Board of Public works
- November 14 TPPB Meeting

# FEEDBACK

TOOLE DESIGN EQT by design STRAND ASSOCIATES®