



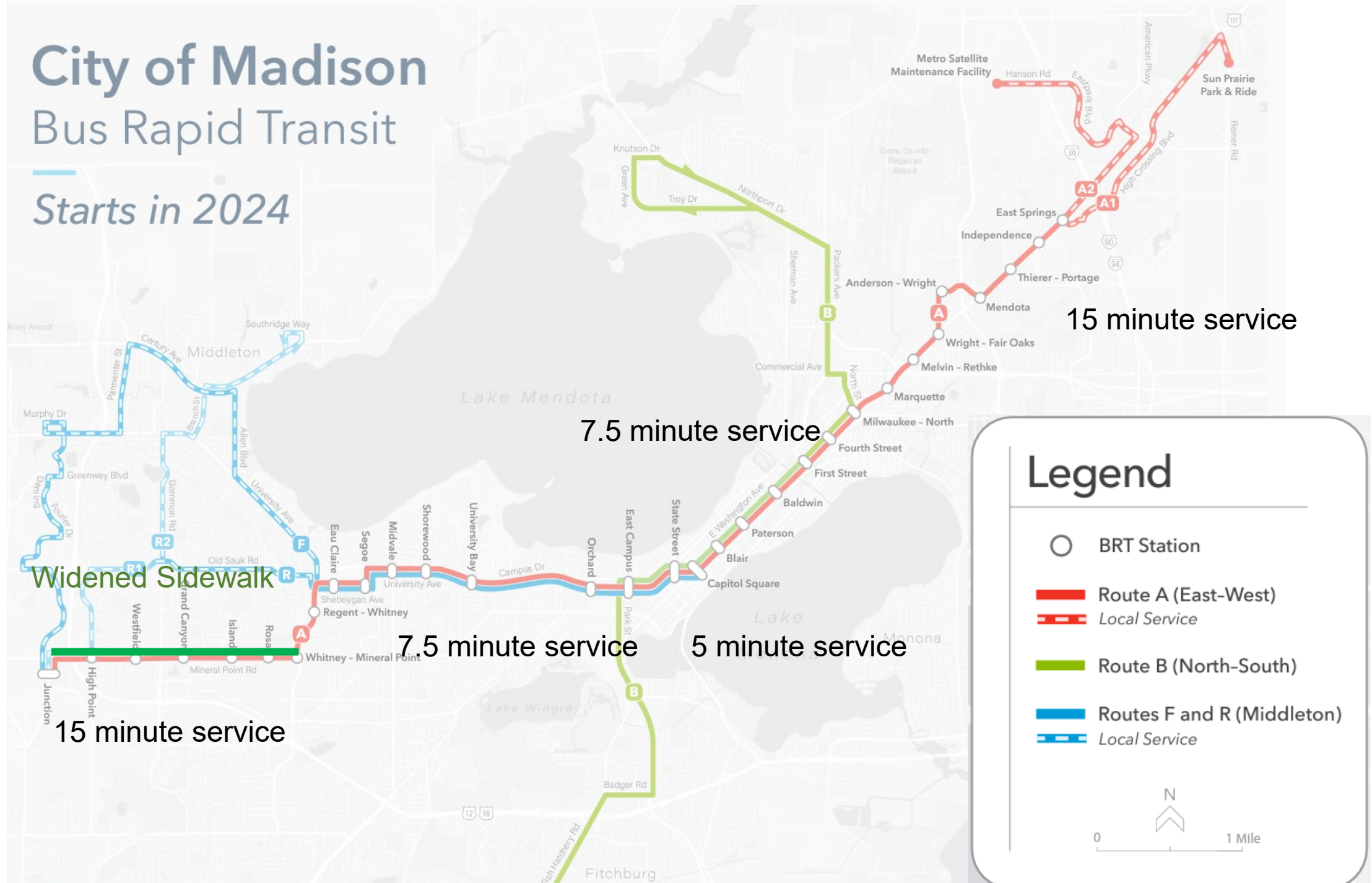
East-West Bus Rapid Transit

Mineral Pt Widened Sidewalk

November, 2023

City of Madison Bus Rapid Transit

Starts in 2024



15 minute service

7.5 minute service

Widened Sidewalk

7.5 minute service

5 minute service

15 minute service

Legend

- BRT Station
- Route A (East-West)
- - - Local Service
- Route B (North-South)
- Routes F and R (Middleton)
- - - Local Service



East-West BRT

Jobs

Jobs per square mile by TAZ.

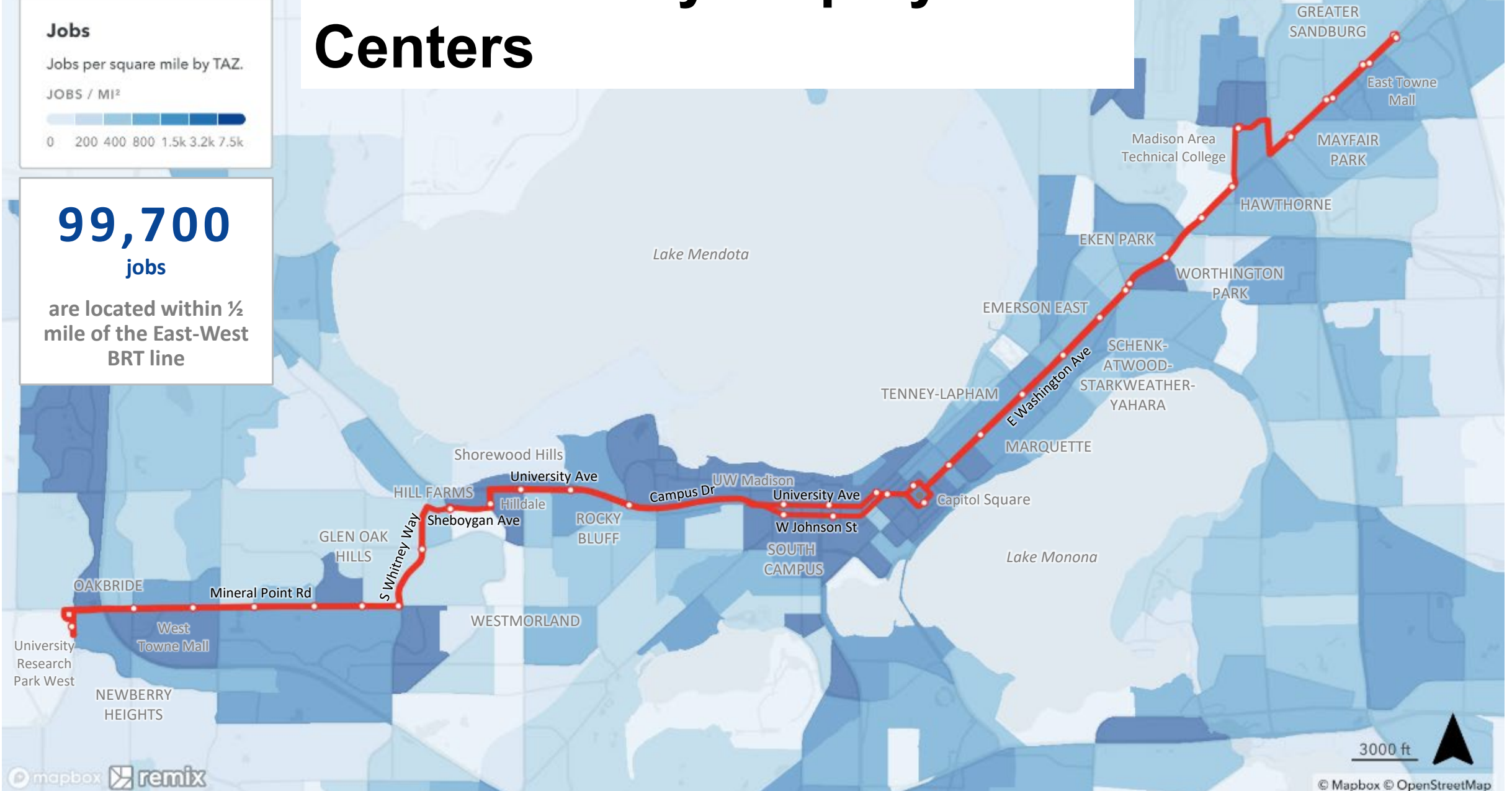
JOBS / MI²



99,700
jobs

are located within ½
mile of the East-West
BRT line

Connects Key Employment Centers

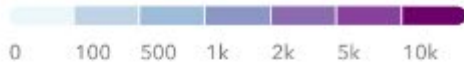


Better Access for Communities of Color

East-West BRT

Minority 2020

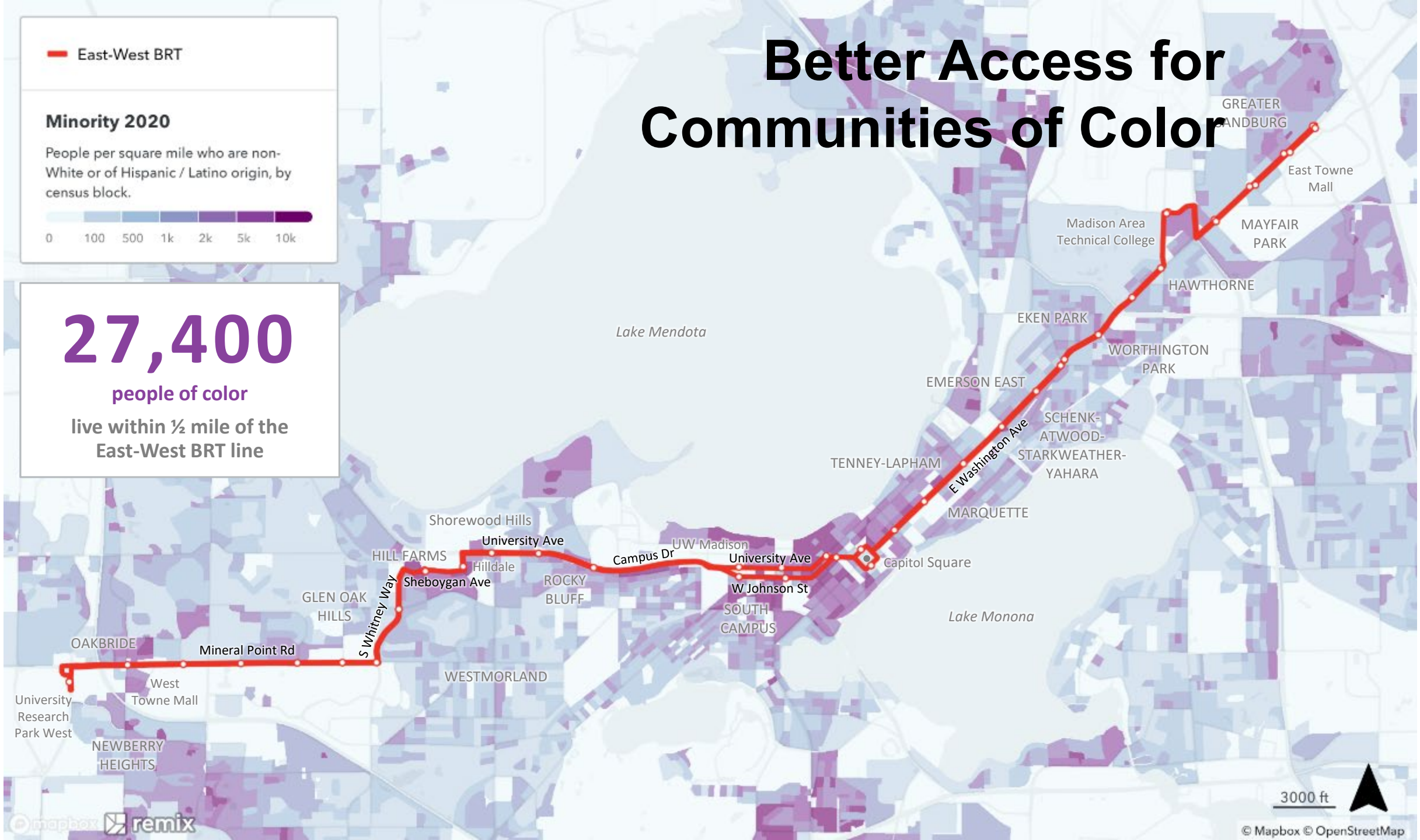
People per square mile who are non-White or of Hispanic / Latino origin, by census block.



27,400

people of color

live within ½ mile of the East-West BRT line



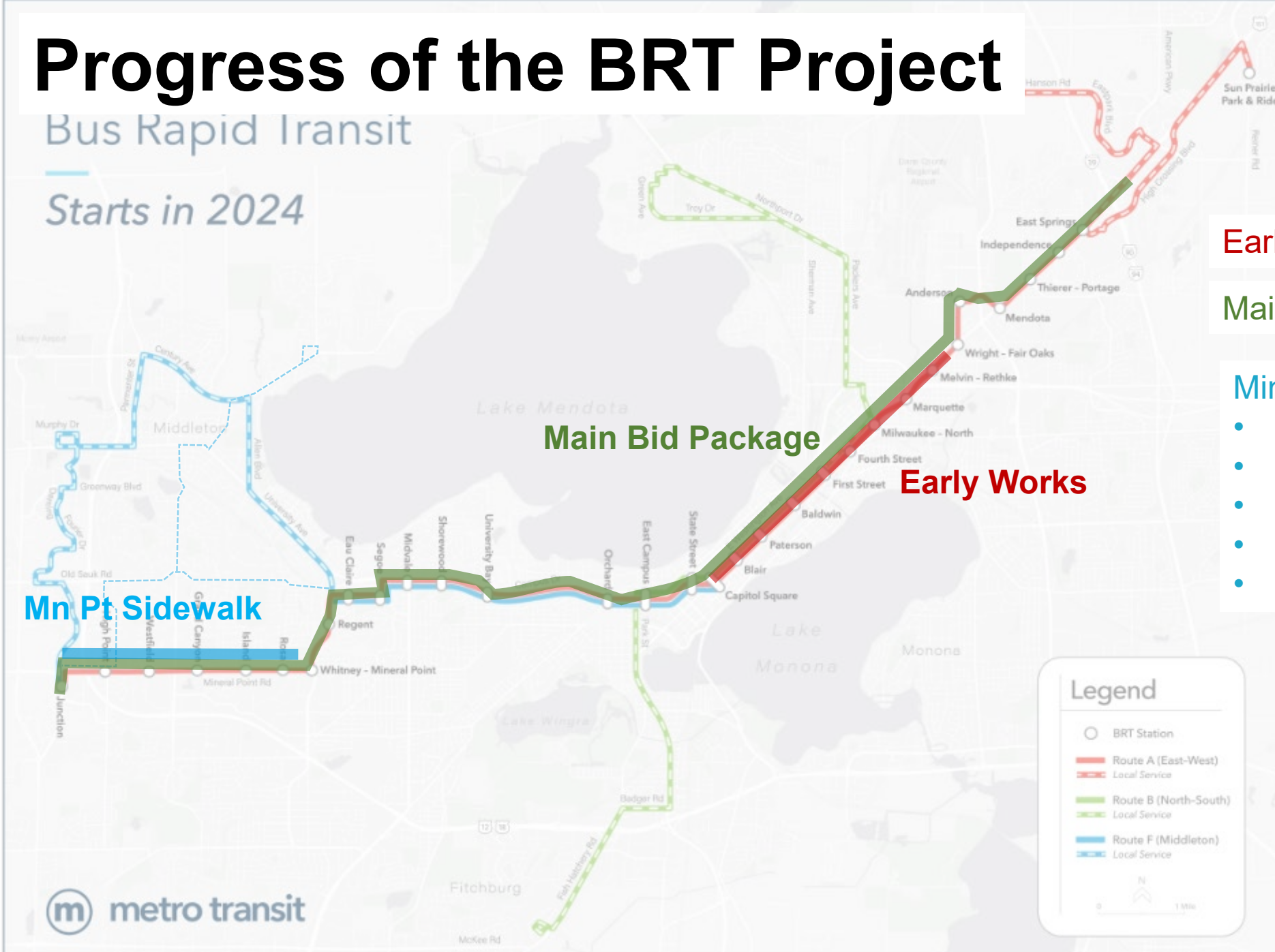
3000 ft



Progress of the BRT Project

Bus Rapid Transit

Starts in 2024



Early Works awarded 8/22

Main Bid Pkg awarded 1/23

Min Pt Sidewalk

- 5/11 Plat BPW 5/11/23
- Geometry TC 11/8/23
- Geometry BPW 11/20/23
- Geometry CC 12/5/23
- Bid 1/24?



Bus Bike Right Turn Lane

Traffic Lane

Traffic Lane

33,000 VPD

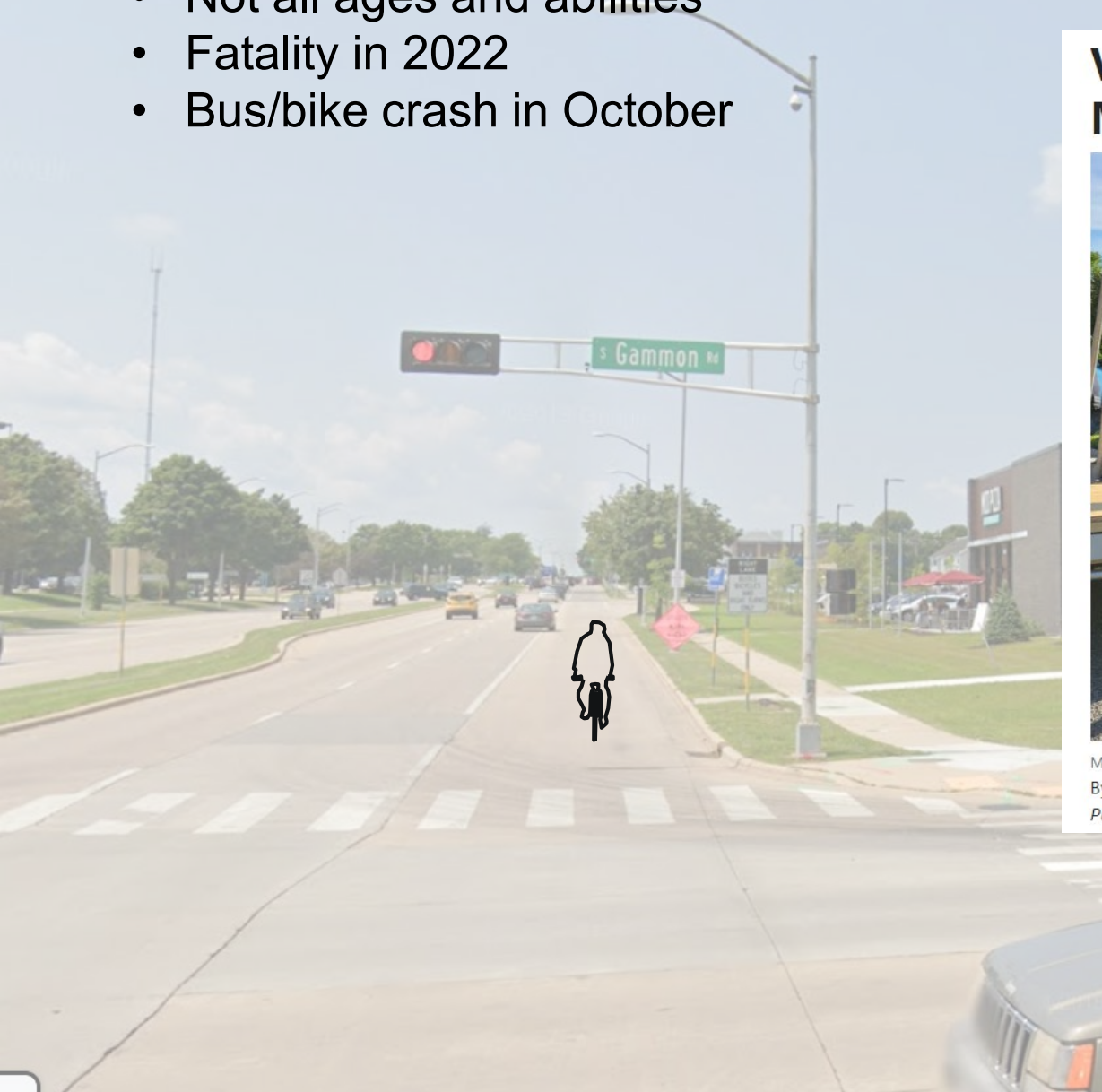
Traffic Lane

Traffic Lane

Bus Bike Right Turn Lane

Safety of Cyclists is Poor

- Not all ages and abilities
- Fatality in 2022
- Bus/bike crash in October



Vigil held for bicyclist who died in crash on Madison's west side



Madison Bikes held a vigil Thursday morning for the bicyclist killed in a crash earlier this week. (NBC15)

By [Juliana Tornabene](#)

Published: Jun. 9, 2022 at 3:40 PM CDT

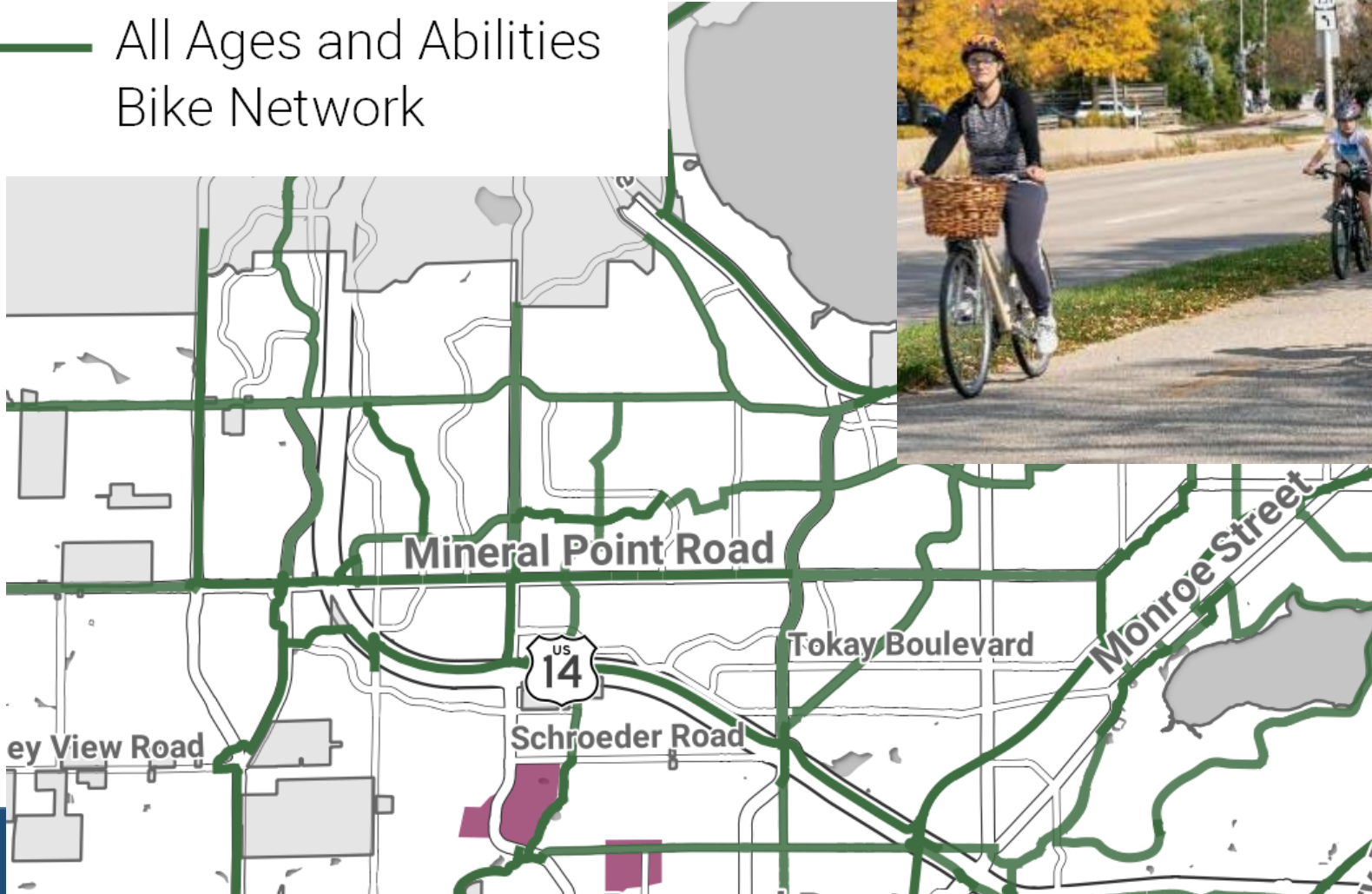


Ped and Bike Fatalities and Injuries 2018-2023

CITY OF MADISON

Mineral Pt Rd is Designated for All Ages and Abilities

— All Ages and Abilities
Bike Network



Reallocation of Street Space



Bike/Ped

Traffic Lane

Traffic Lane

Bus Lane

33,000 VPD

Bus Lane

Traffic Lane

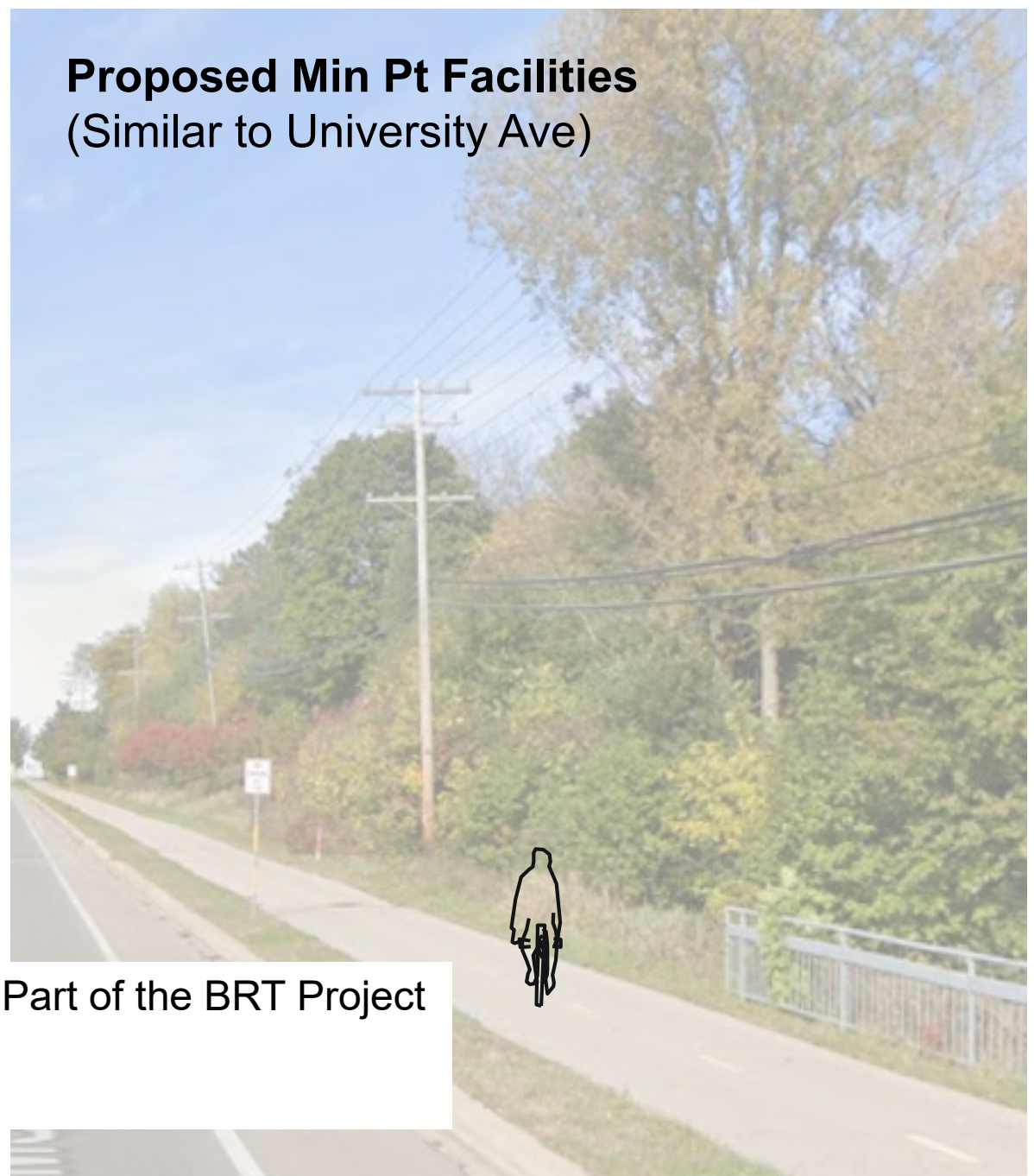
Traffic Lane

Existing Min Pt Facilities

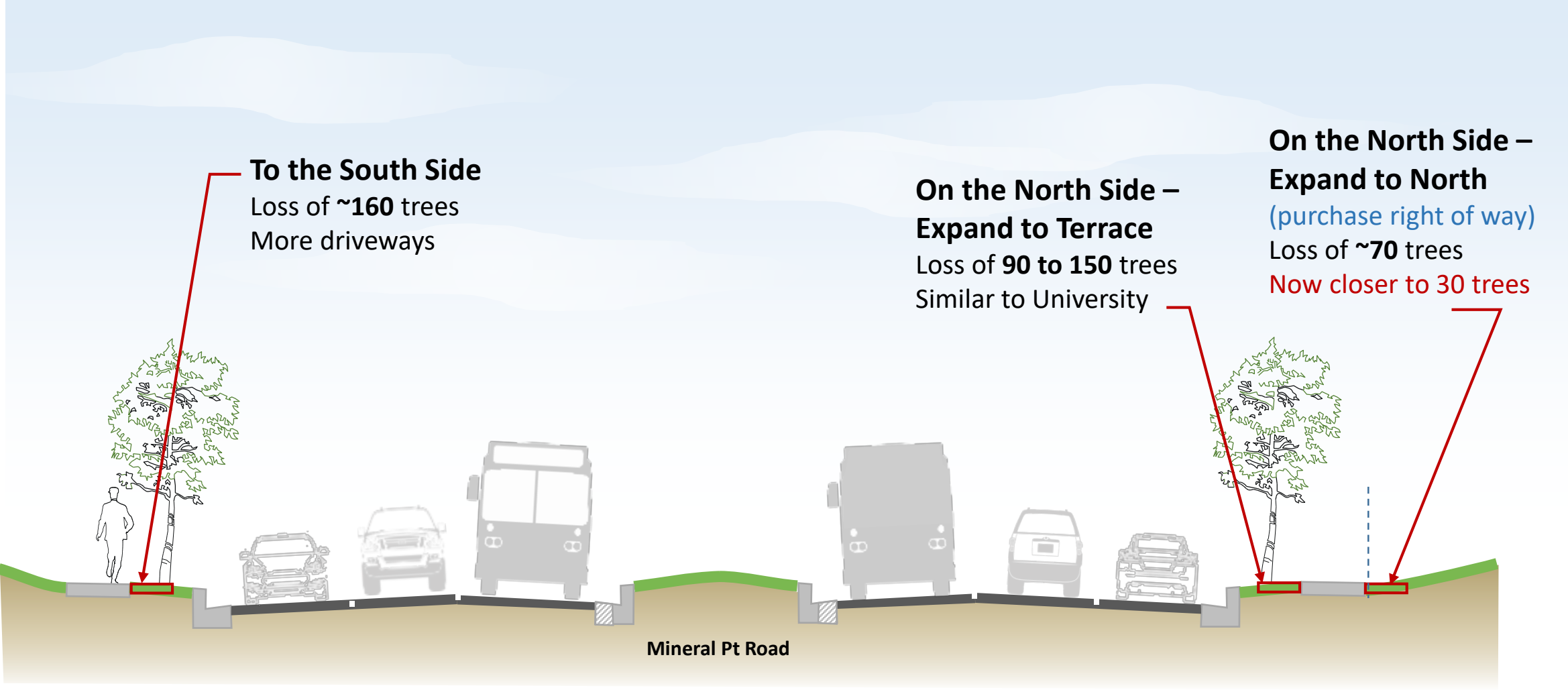


The expanded Sidewalk is Part of the BRT Project
~72% Federally Funded
~\$7.3 million + right of way

Proposed Min Pt Facilities (Similar to University Ave)



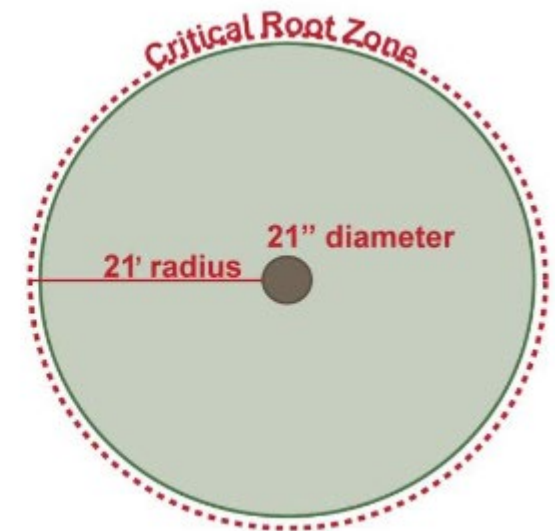
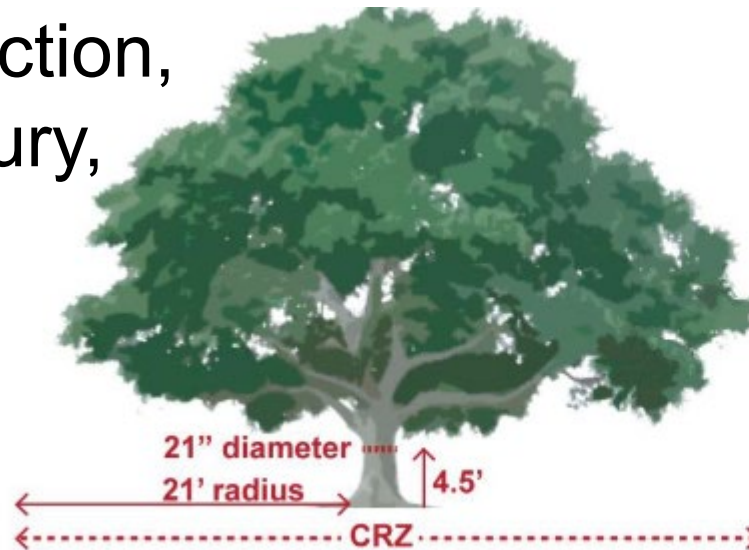
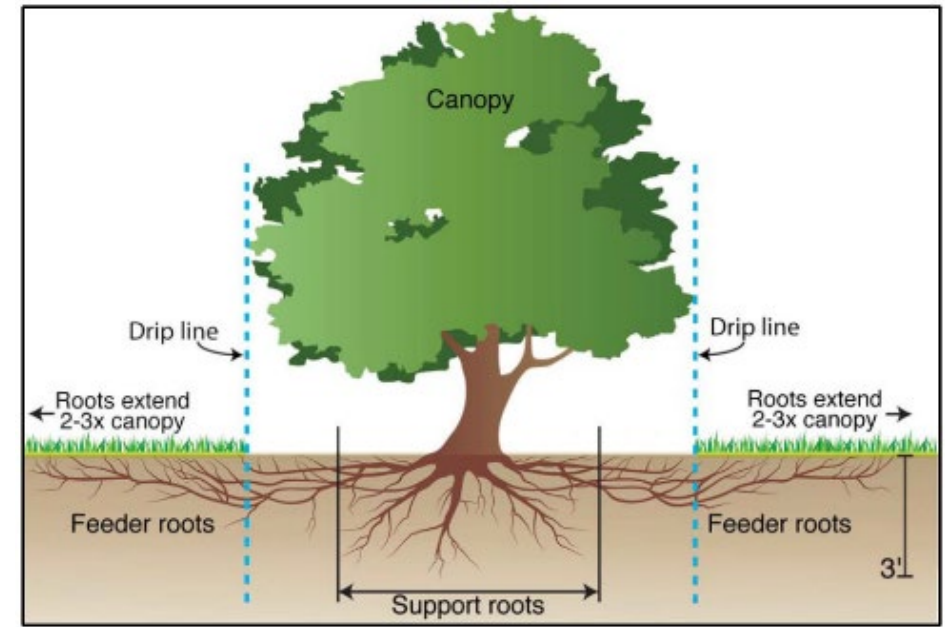
Placement of Expanded Sidewalk – 3 Options



Critical Root Zone

- Roots spread wide not deep
- CRZ generally 1-2' radius per 1" diameter trunk
- Protect against soil compaction, grade change, physical injury, etc.

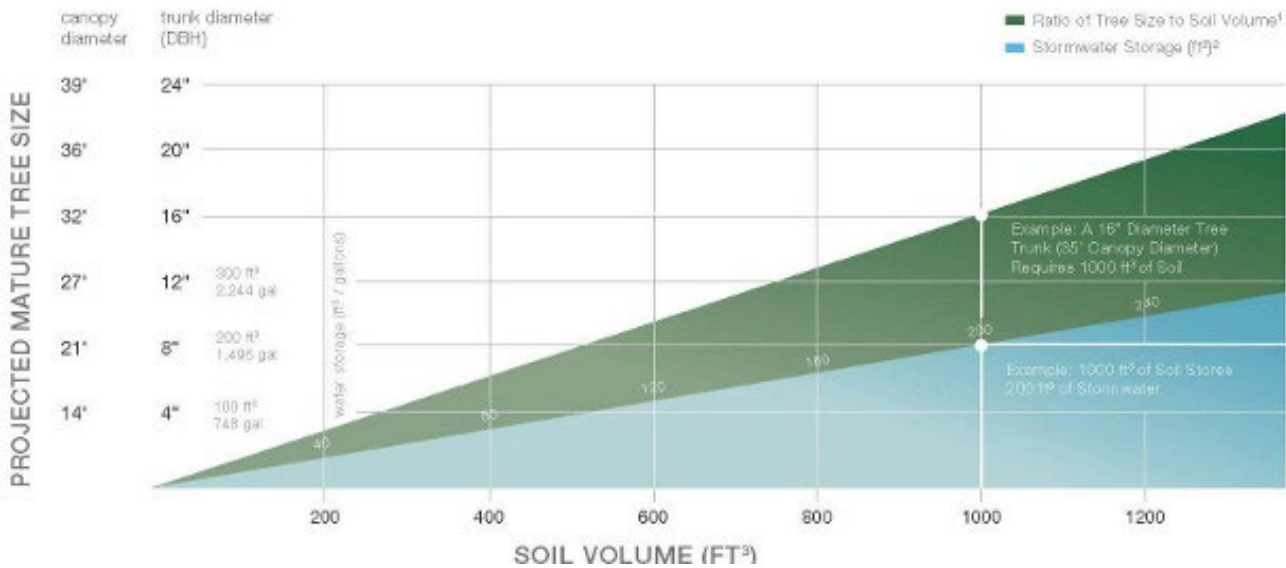
Trying to be thoughtful about infrastructure in relation to existing trees



<https://isatexas.com/wp-content/uploads/2015/11/BMPs-Tree-Protection.pdf>

Soil Volume

- Larger volume needed for bigger trees



<https://www.deeproot.com/blog/blog-entries/our-recommended-soil-volume-for-urban-trees-2/>

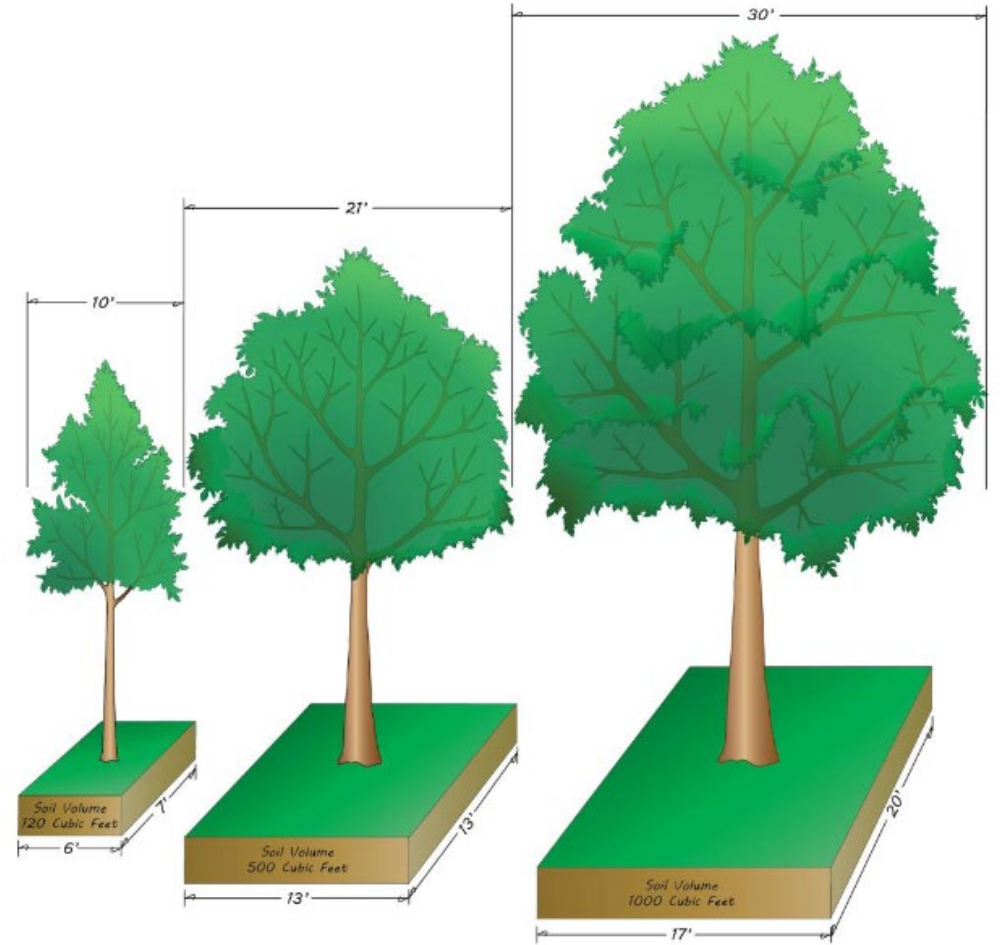


Figure 3. Tree growth is limited by soil volume. To grow big trees, large amounts of uncompacted soil are needed. For a mature tree with a canopy spread of approximately 30 feet, 1,000 cubic feet of soil is needed. Illustration from Casey Trees, 2008.

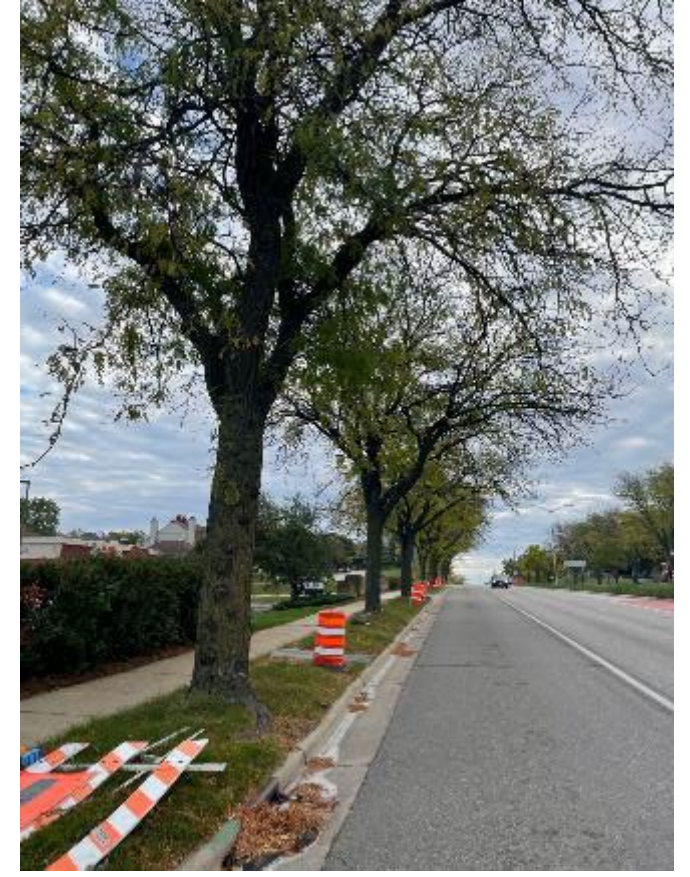
<https://www.epa.gov/sites/default/files/2015-11/documents/stormwater2streettrees.pdf>

Tree Considerations

- Vigor and size
- Species
- Growing conditions
- Existing canopy benefits

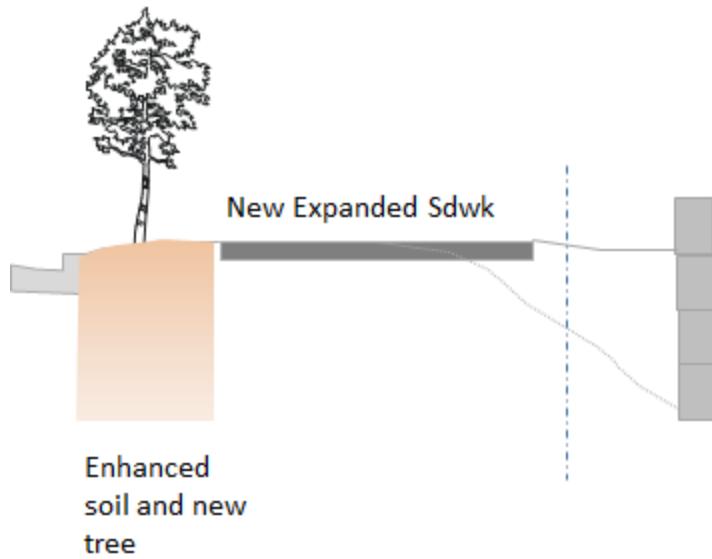


Low vigor, small size

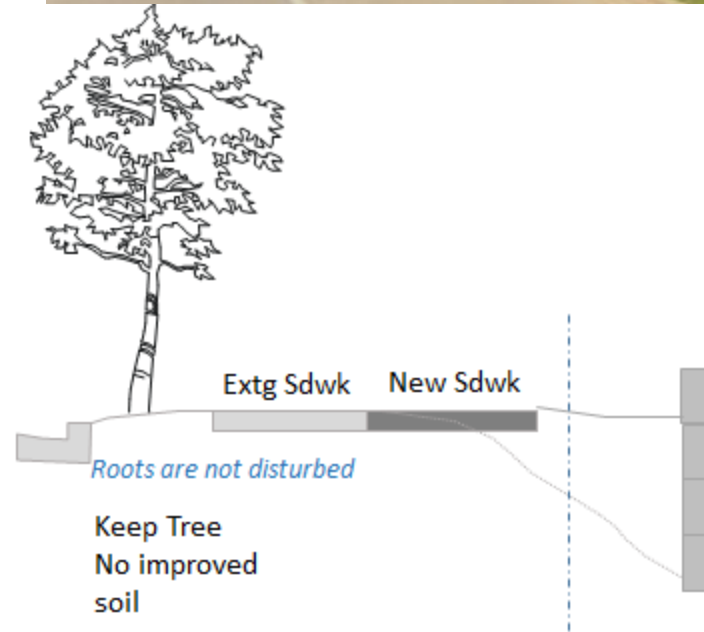


High vigor, large size

Consequently 8 trees have options



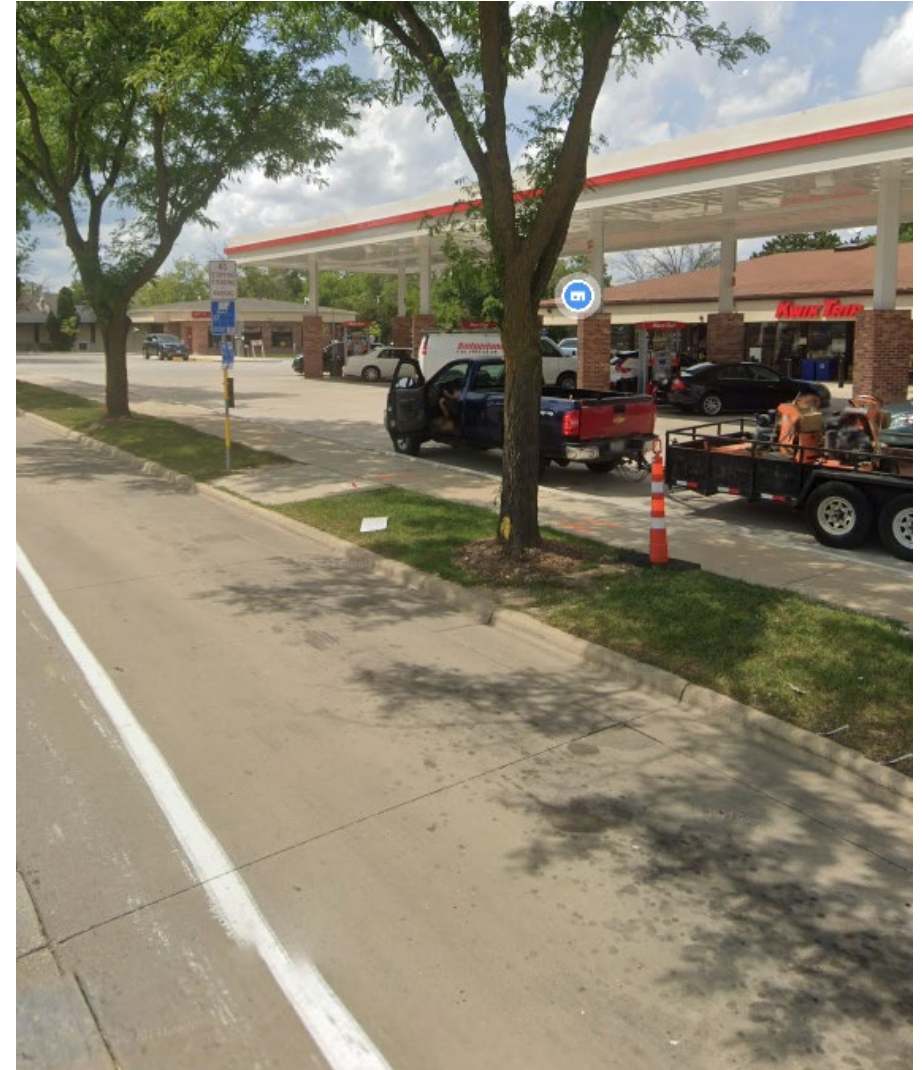
OR



Option

For other Portions of the Corridor Mitigation measures include:

- Selectively positioning widened sidewalk on north right of way
- Removing a Mineral Pt Road lane for about 1000 feet west of Whitney Way
- Providing selective tree semi-circle narrowing
- Retaining existing 5-foot sidewalk without widening. (800 feet or 6%)



Example of area with 5-foot sidewalk

Roughly 85% of Trees can be preserved through design and mitigation efforts

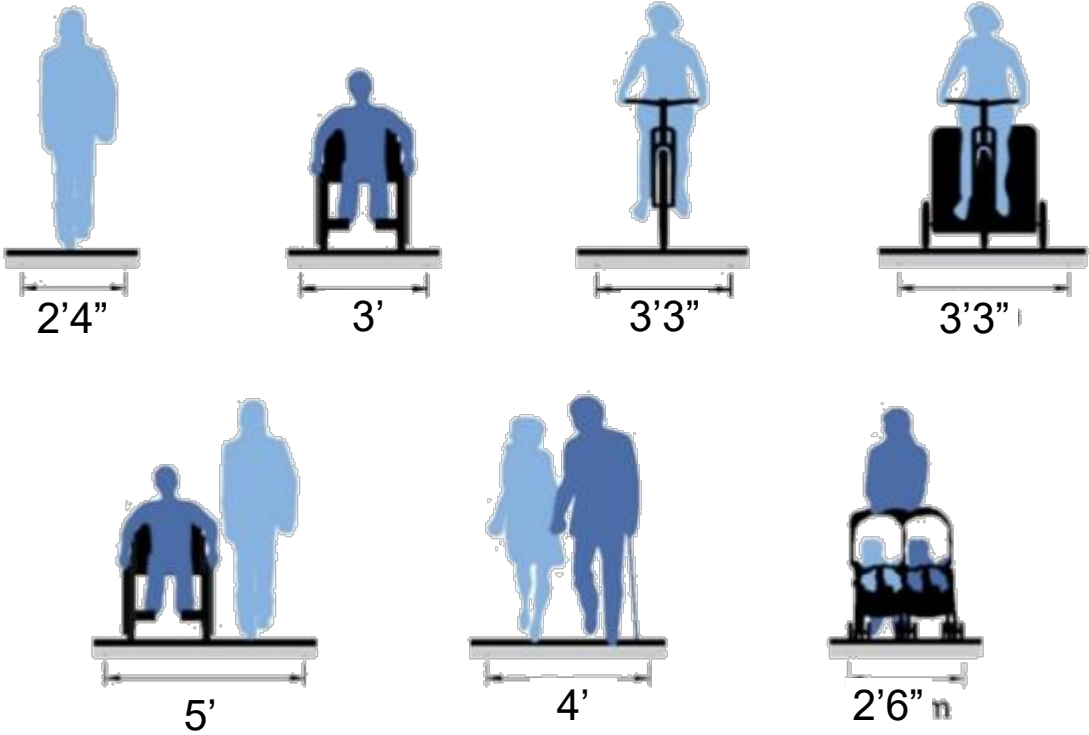
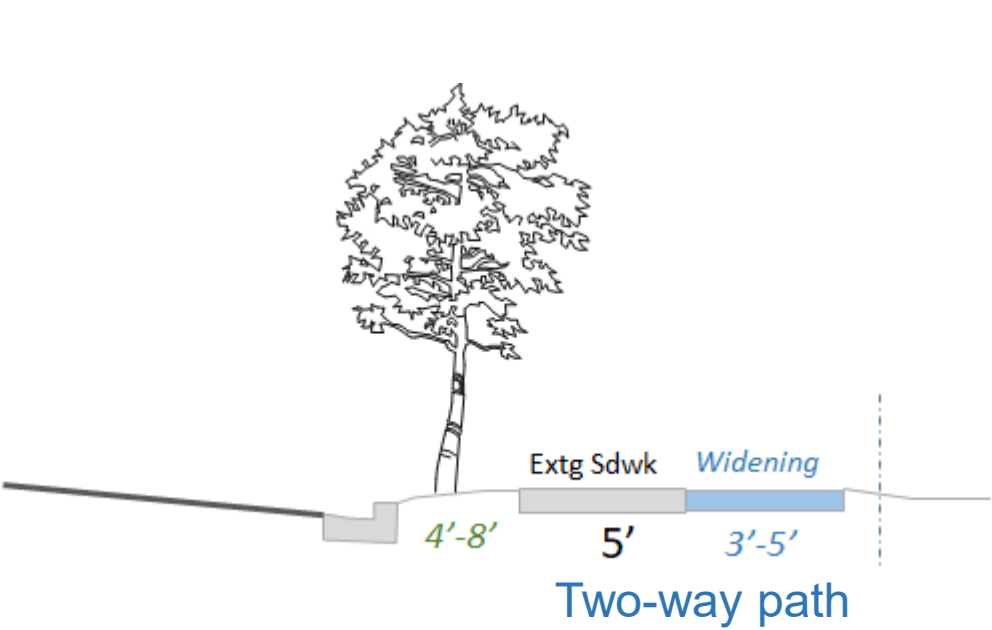


Example of trees preserved



Example of trees preserved

Wider sidewalk desirable to accommodate all users



Diverse range of users need to be able to pass each other

About 16 trees are preserved through maintaining 5' sidewalk width for ~800 feet.

	Landmark	Length of 5' Sidewalk	Trees Saved
Sta 89+00	Kwik Trip	150	3
Sta 134+50	Clock Tower	100	2
Sta 136+20	Clock Tower	100	2
Sta 155+00	Nautilus Park	325	7
Sta 158+50	Isle of View Apts	125	2
Sta 93+00 (Options)	Strip Mall <i>Recommended by Forestry</i>	400	Replace 7?



Areas where some trees are unavoidably impacted include:

- At intersections to address site distance issues and provide pedestrian/bicycle staging area.
- Near culverts
- Areas with steep grades which require some earthwork



Summary

Roughly 191 existing trees in corridor

- Existing Street Trees Removed 20
 - *Trees with Options (Randolph & Island)* 8
 - Near Garner Park 8
-

Total

28 to 36 trees

11 to 14 trees per mile

About 85% trees preserved

Trees removed will have new trees planted similar species and location

Of trees removed

- 11 At intersections
- 2 At Culverts
- 12 Due to grade
- 3 Other reasons (typically close property line/buildings)

Discussion of Trees in Corridor

- | Page | Example |
|------|-------------------------|
| 5 | 5' sidewalk |
| 6 | Trees with options |
| 14 | Trees at culverts |
| 18 | Trees with grade issues |
| 21 | Trees at intersections |
| 29 | Tree near Garner Park |



LANDSCAPING PLAN:
MINERAL POINT ROAD WIDENED SIC
CITY OF MADISON
60831225P
L-8



East-West Bus Rapid Transit

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