



# Transit Network Redesign

**Common Council Executive Committee**  
**January 4, 2022**

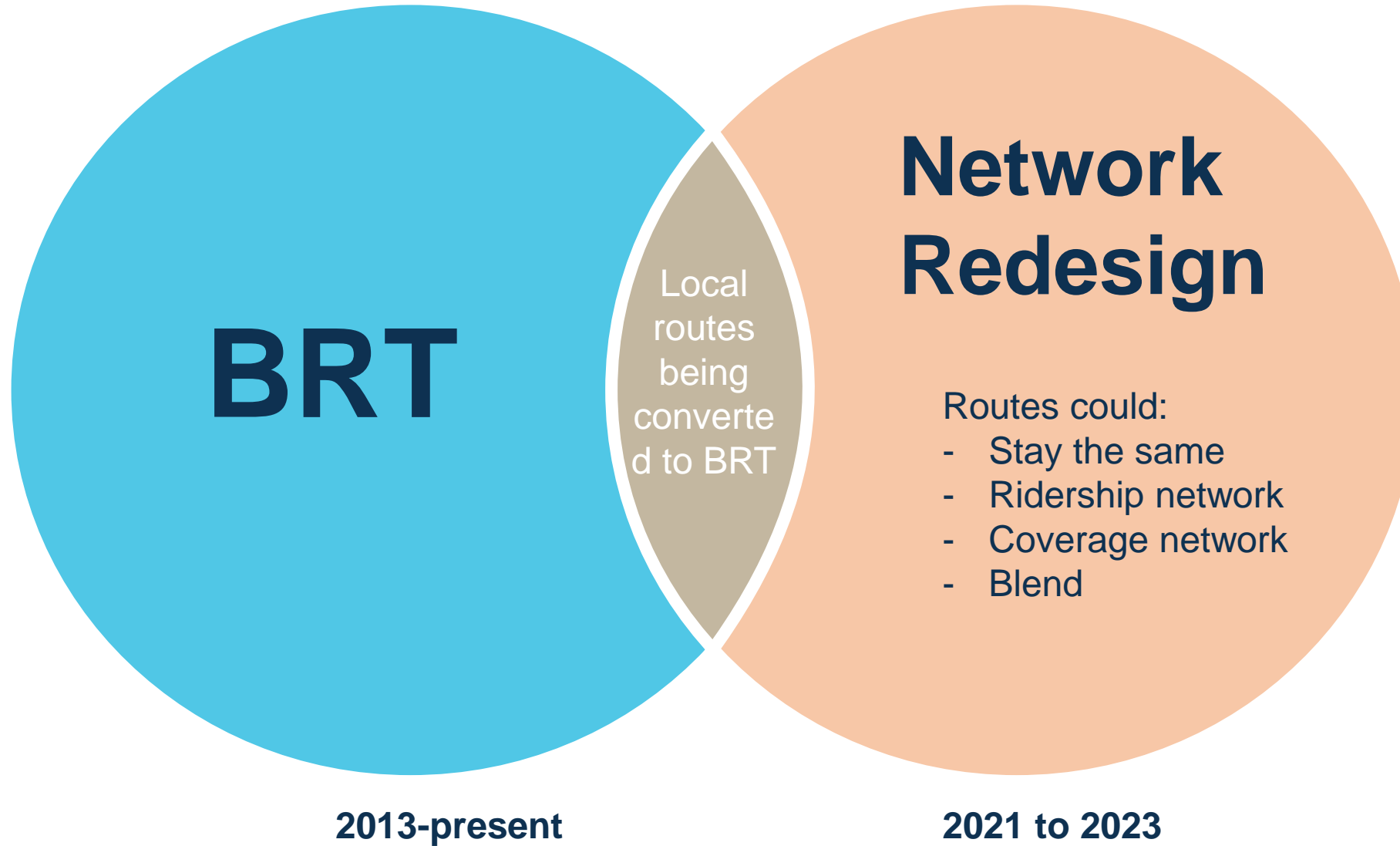
# Transit Network Redesign

- The Metro Transit Network Redesign will design a route system that will better meet the needs of Madison area residents and businesses.



- [www.MyMetroBus.com/Redesign](http://www.MyMetroBus.com/Redesign)

# Separate Efforts









# Why now?

- Address long-standing issues and discrepancies
- Recover from COVID-19 in a way that reflects future needs
- Compliments BRT and brings some of those benefits to more neighborhoods

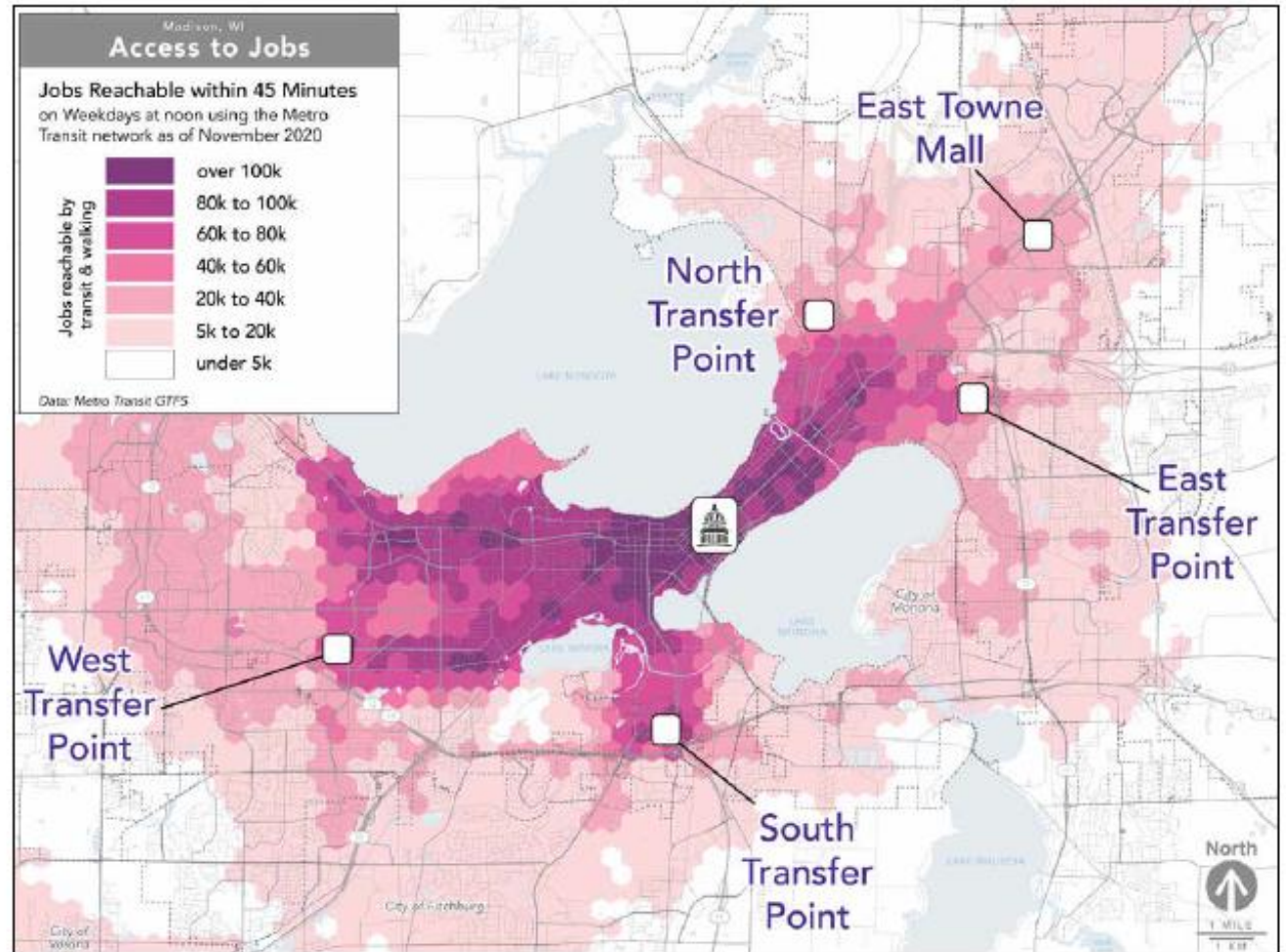


# The limitations of the existing network fall hardest on outlying low-income areas

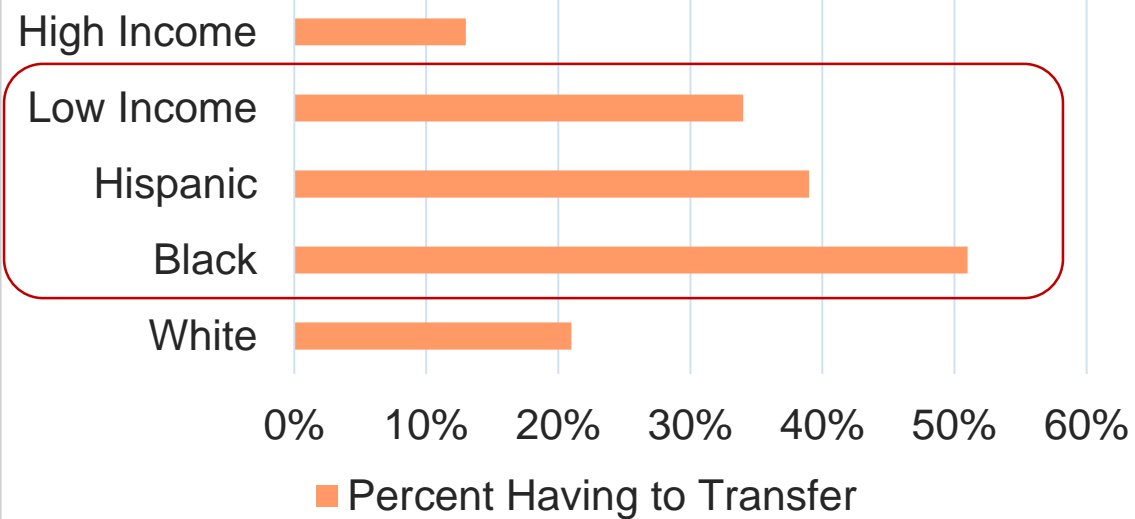
There are two kinds of poverty that are most prevalent in Madison:

- **Students in poverty.** Because it's hard to work and outlying full-time, college and university students often have low incomes. But statistically, most students will go on to lead mid- to high-income lives. Reflecting the broader situation, they tend to be mostly White, with a substantial Asian minority.
- **Generational poverty.** People born in low-income or low-wealth households are more likely to experience low incomes for much of their lives. Although people of all races and ethnicities experience generational poverty, it is statistically more prevalent among Black and Latino people, as well as certain Asian groups such as the Hmong.

In contrast, **people who experience generational poverty are much more likely to live outside central Madison**, such as on the South and North Side, pockets of the northeast, and in areas south of the Beltline. **They are concentrated in the areas where transit provides the least access to the city.**

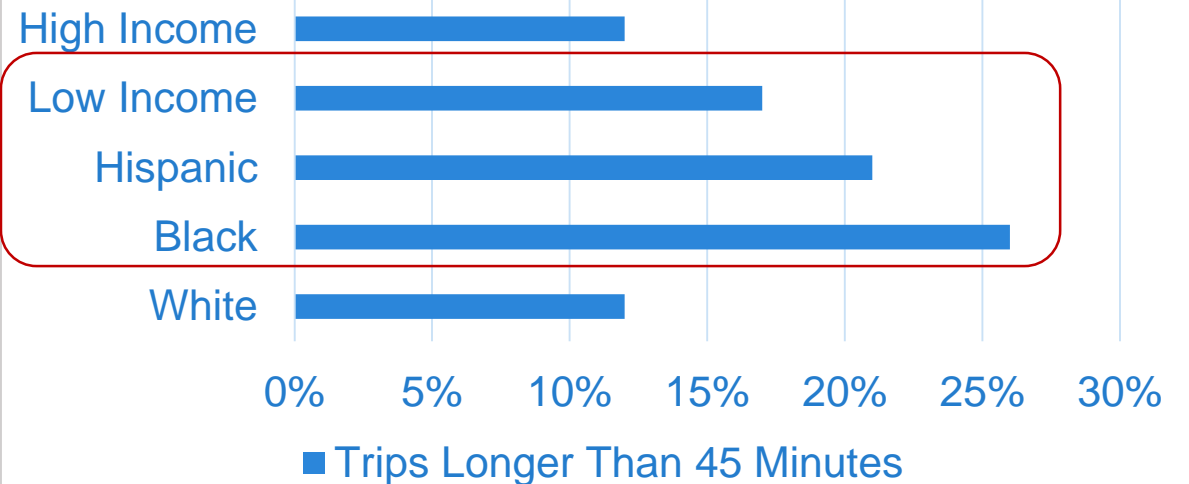


## Transfer Rates



**Limitations of the existing network disproportionately affect low-income and people of color**

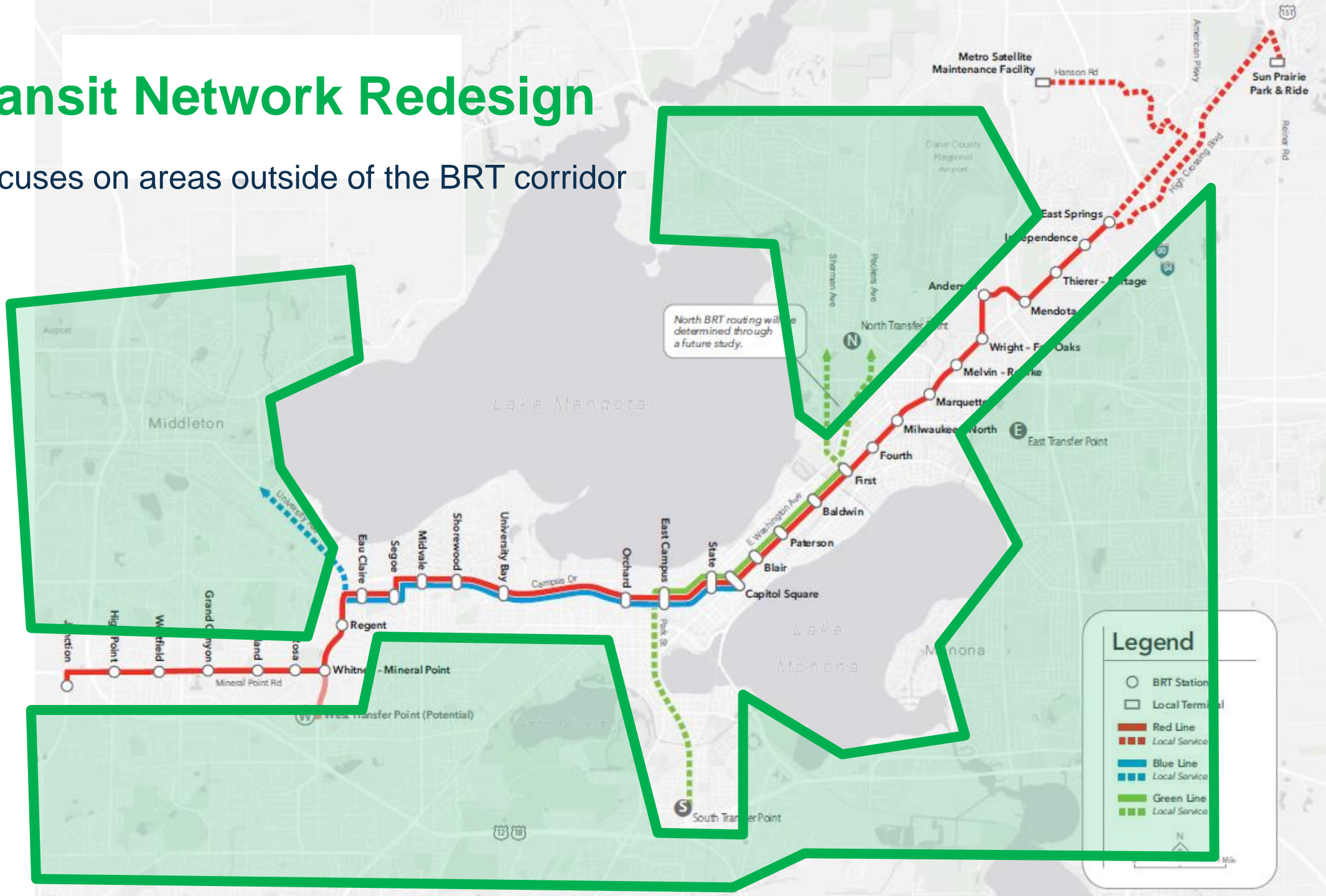
## Trip Duration





# Transit Network Redesign

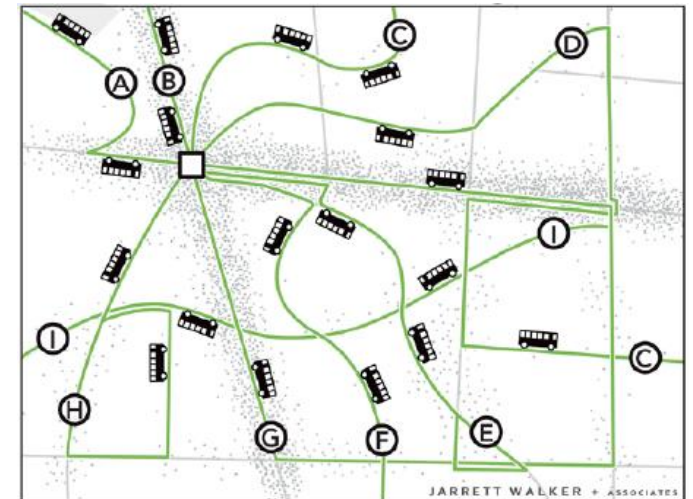
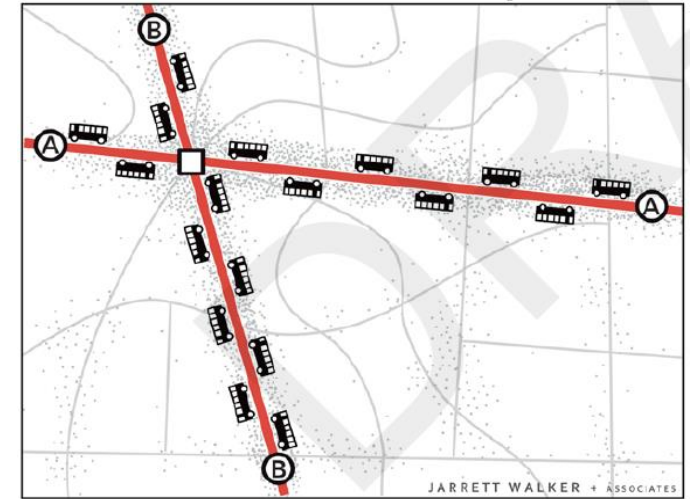
Focuses on areas outside of the BRT corridor





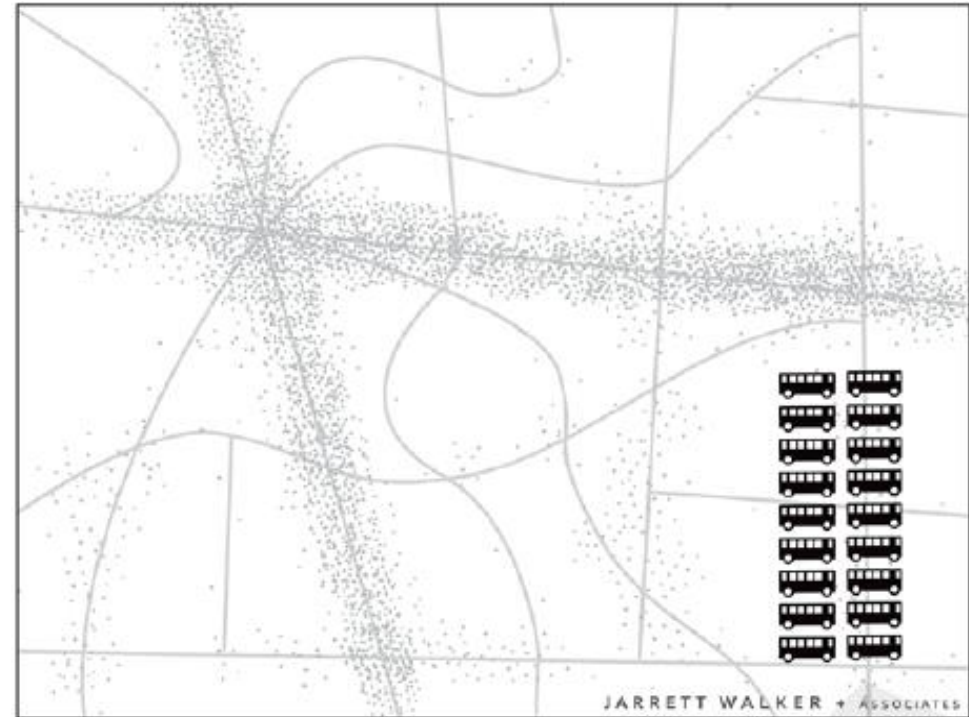
# Basic Goals for Public Transportation

- **Ridership** concentrates transit service onto fewer routes with more frequent service, ultimately increasing ridership
- **Coverage** extends transit service to as many people as possible regardless of frequency



# Competing Goals

- With a fixed level of funding, we can't do both everywhere.



JARRETT WALKER + ASSOCIATES

# Alternative Maps

Data used for designing Network Alternatives










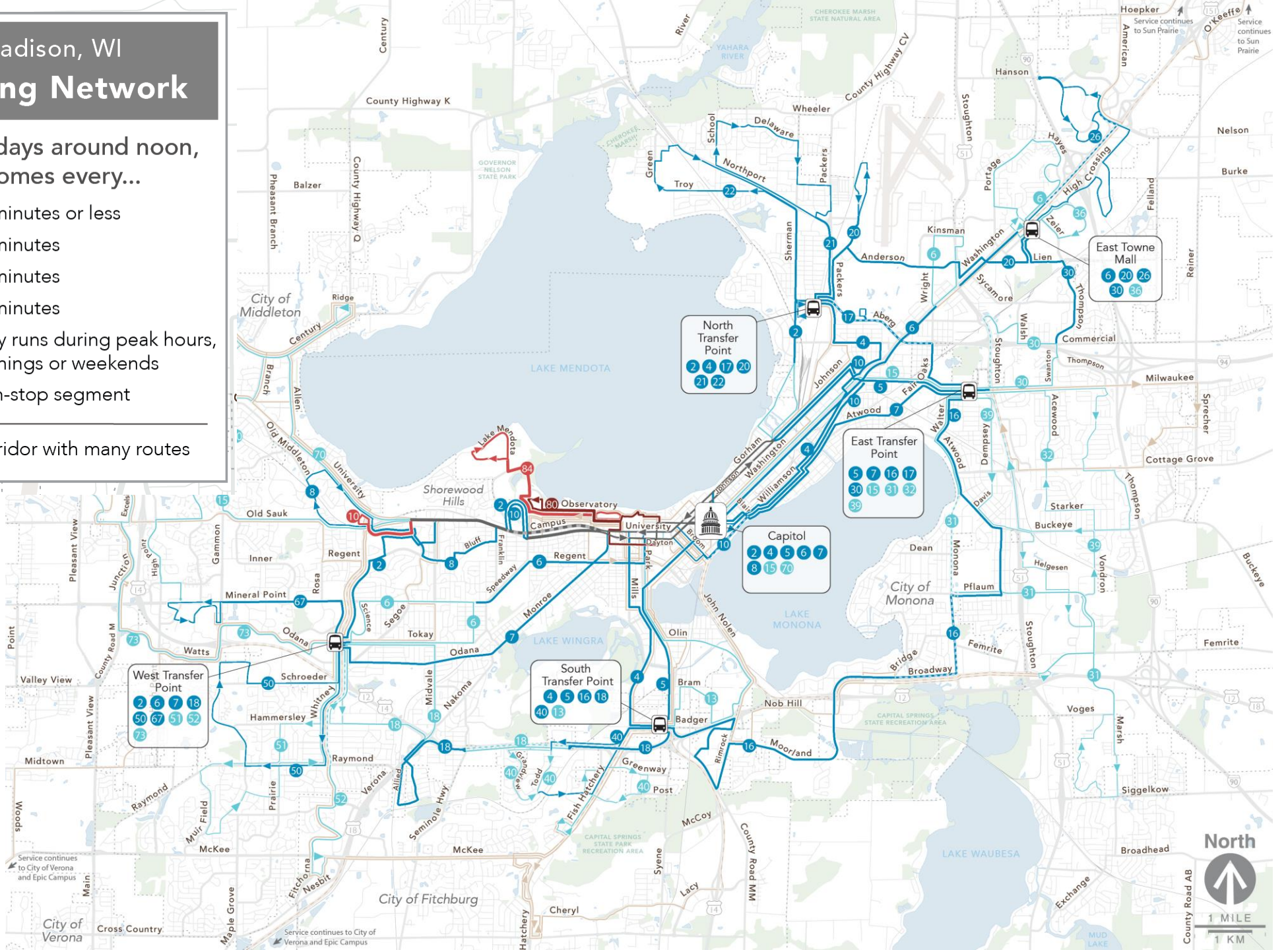


# Existing

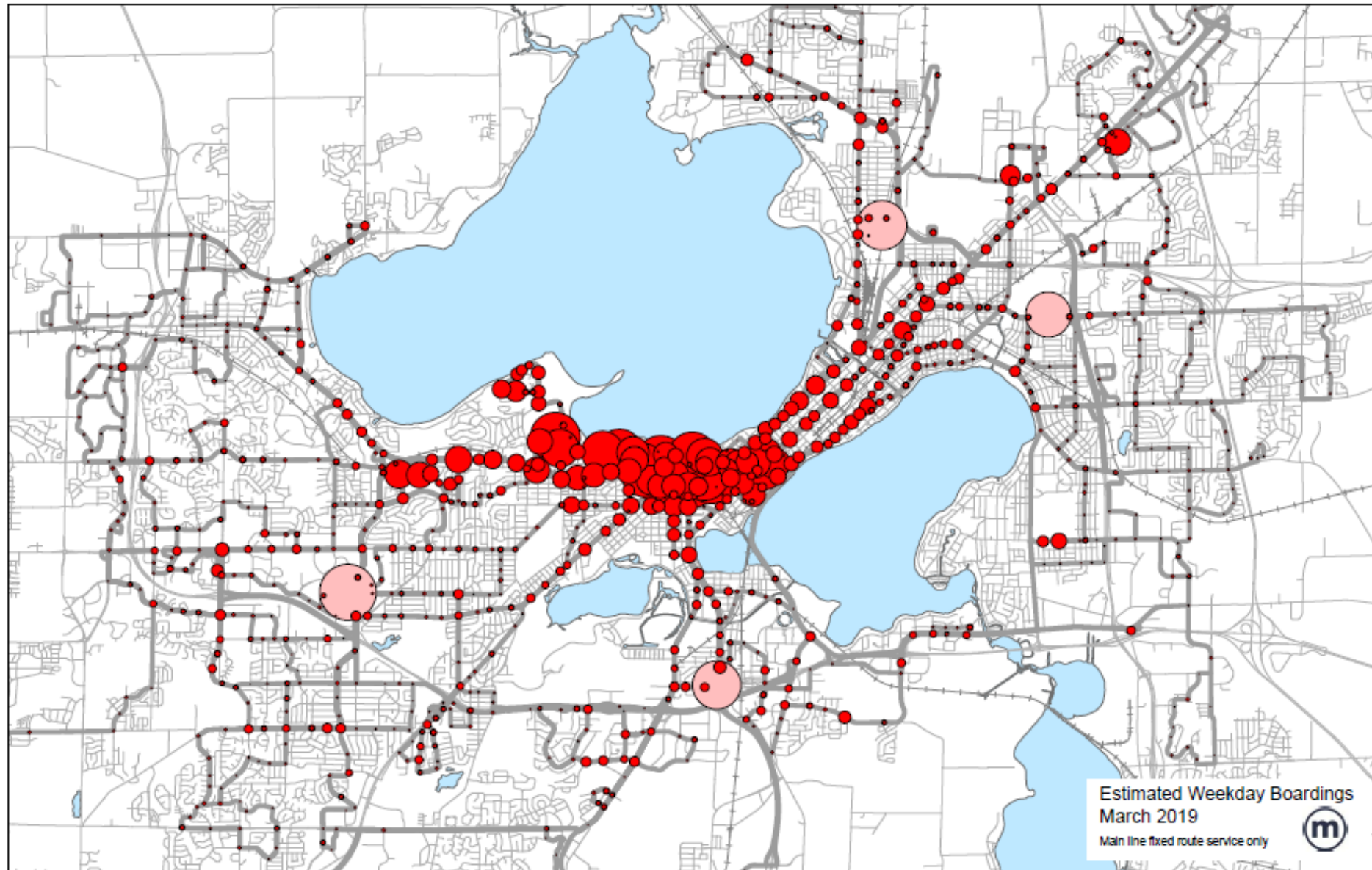
## Madison, WI Existing Network

On weekdays around noon,  
the bus comes every...

-  10 minutes or less
-  15 minutes
-  30 minutes
-  60 minutes
-  Only runs during peak hours, evenings or weekends
-  Non-stop segment
-  Corridor with many routes

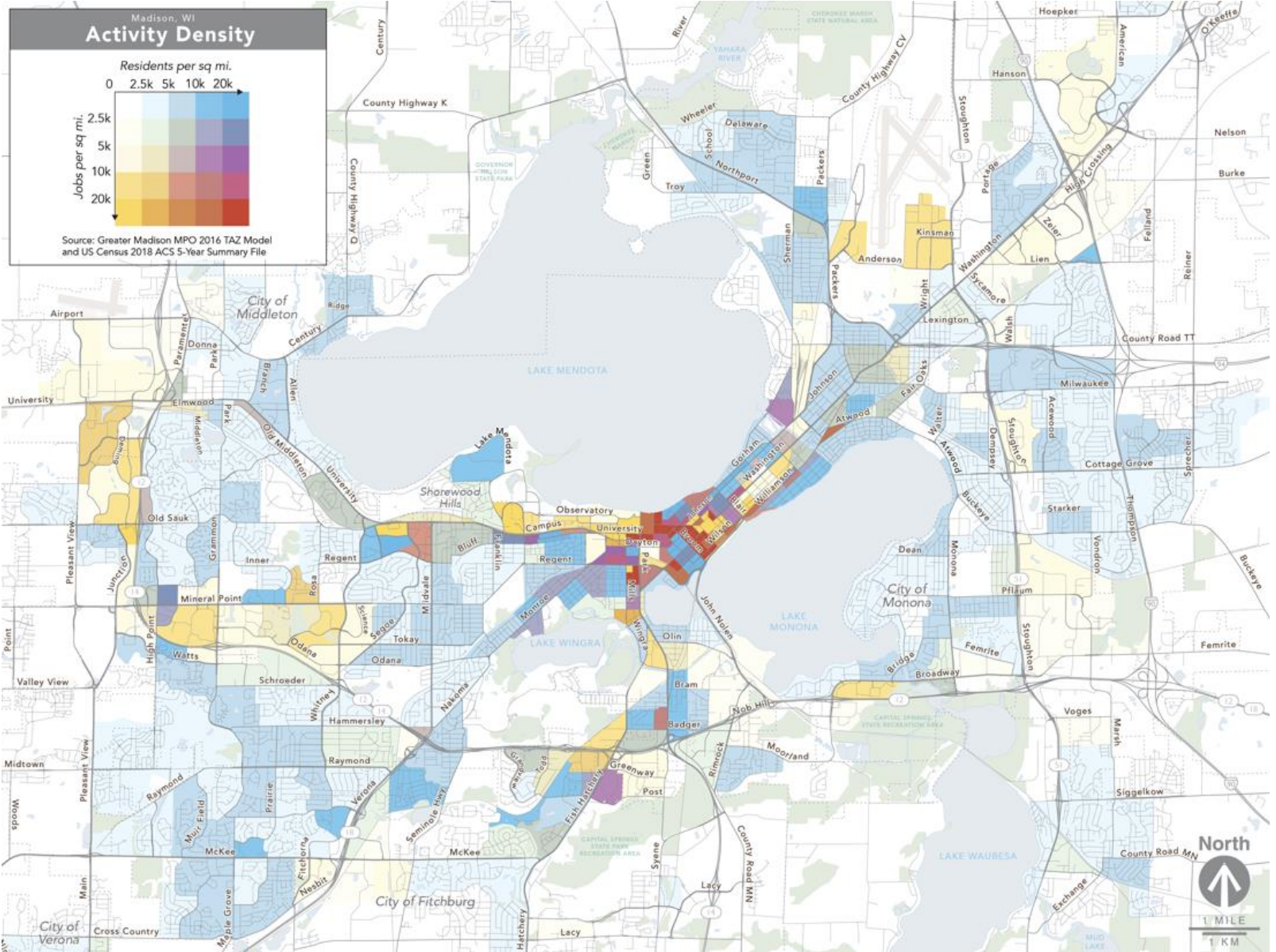


# Pre-COVID Transit Use





# Residential and Employment Density





# Limitations of Existing Network

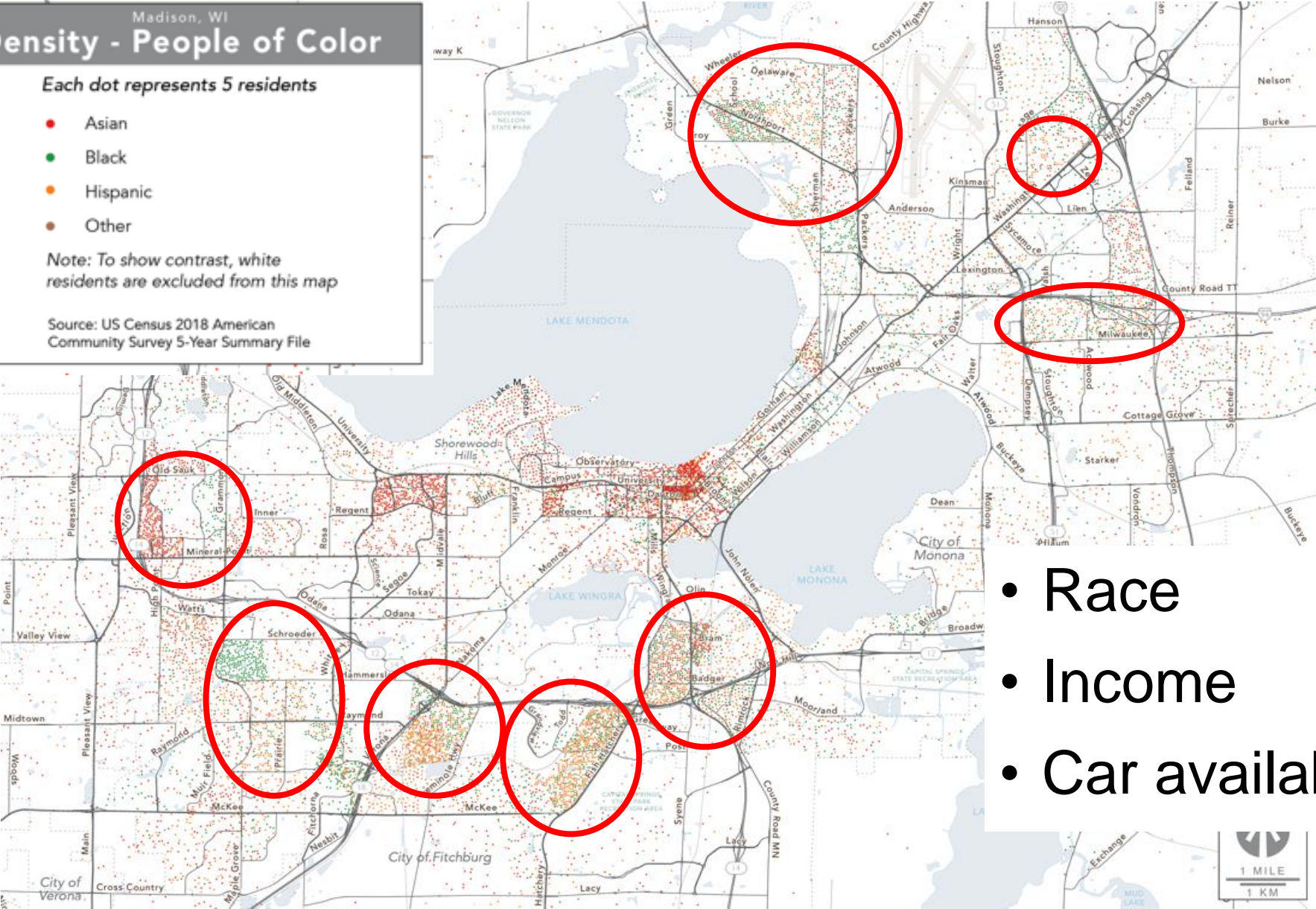
Madison, WI  
**Density - People of Color**

Each dot represents 5 residents

- Asian
- Black
- Hispanic
- Other

Note: To show contrast, white residents are excluded from this map

Source: US Census 2018 American Community Survey 5-Year Summary File











- Race
- Income
- Car availability

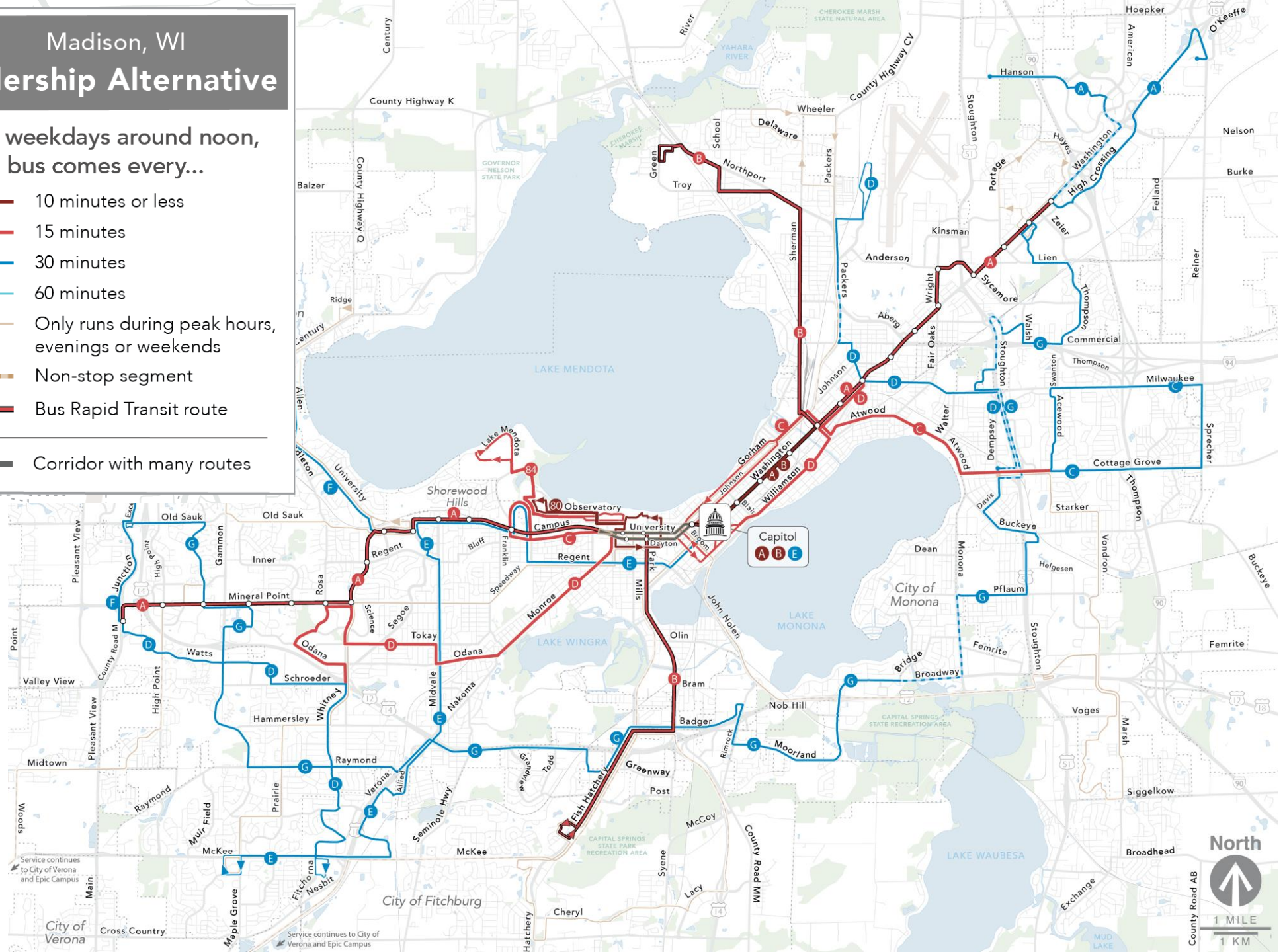


# Ridership Alternative

## Madison, WI Ridership Alternative

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


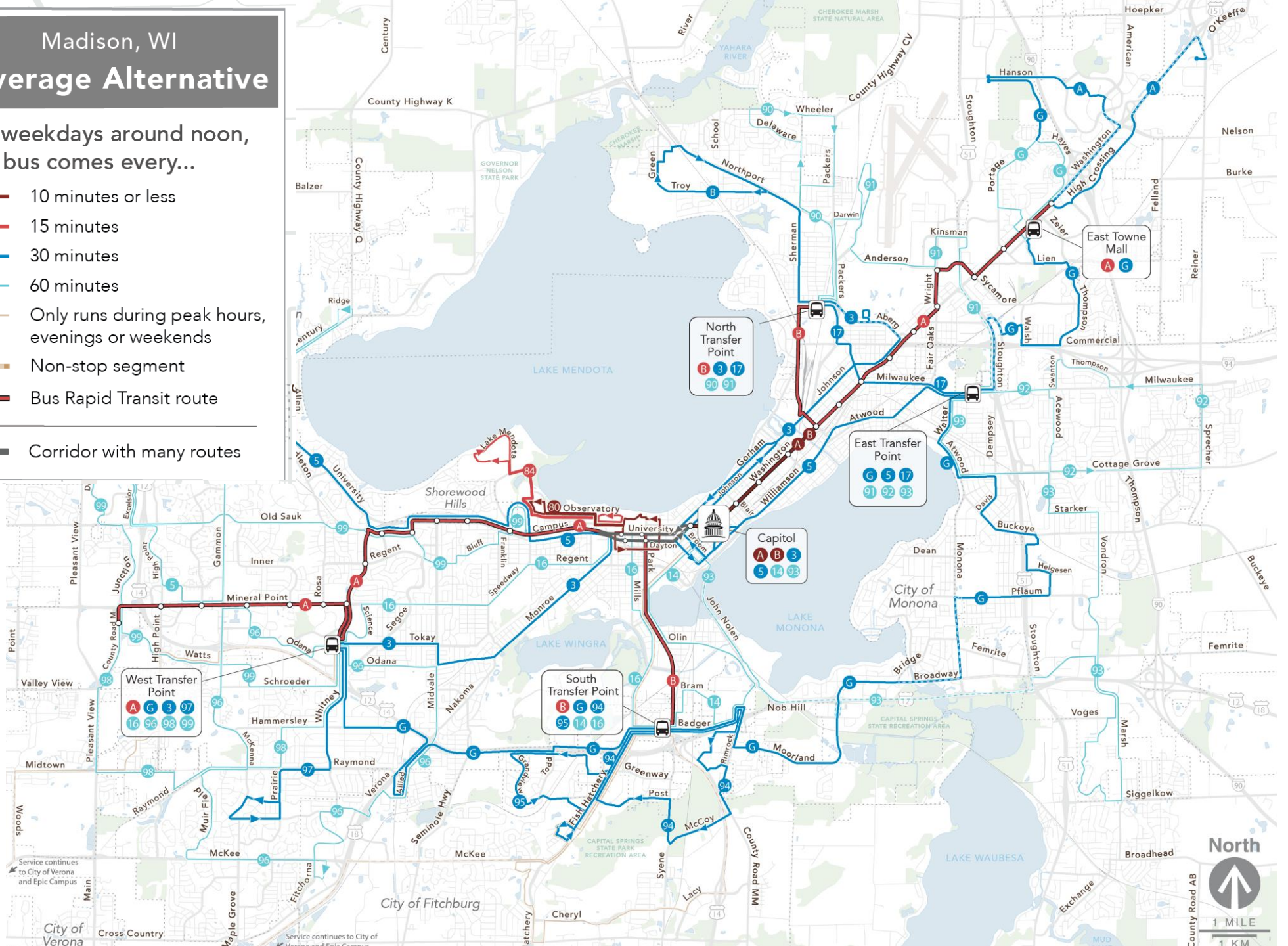


# Coverage Alternative

## Madison, WI Coverage Alternative

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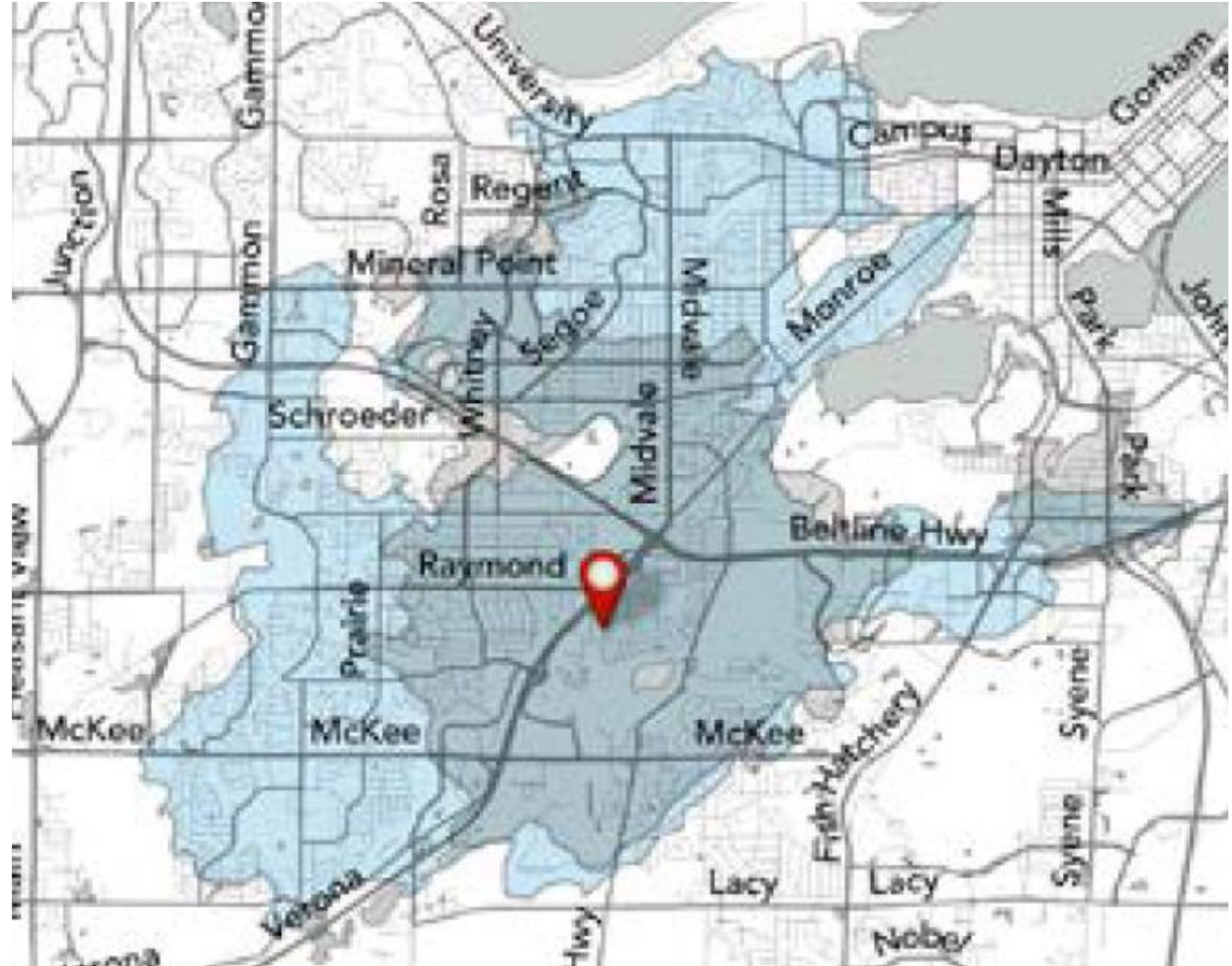


1 MILE  
1 KM



# Measuring Outcomes – Transit Access

- How many destinations or jobs can you access in a reasonable amount of time?
- Access can be measured for one point or aggregated





# Coverage Alternative - Job Access Change People with Low Income (1 dot per person)

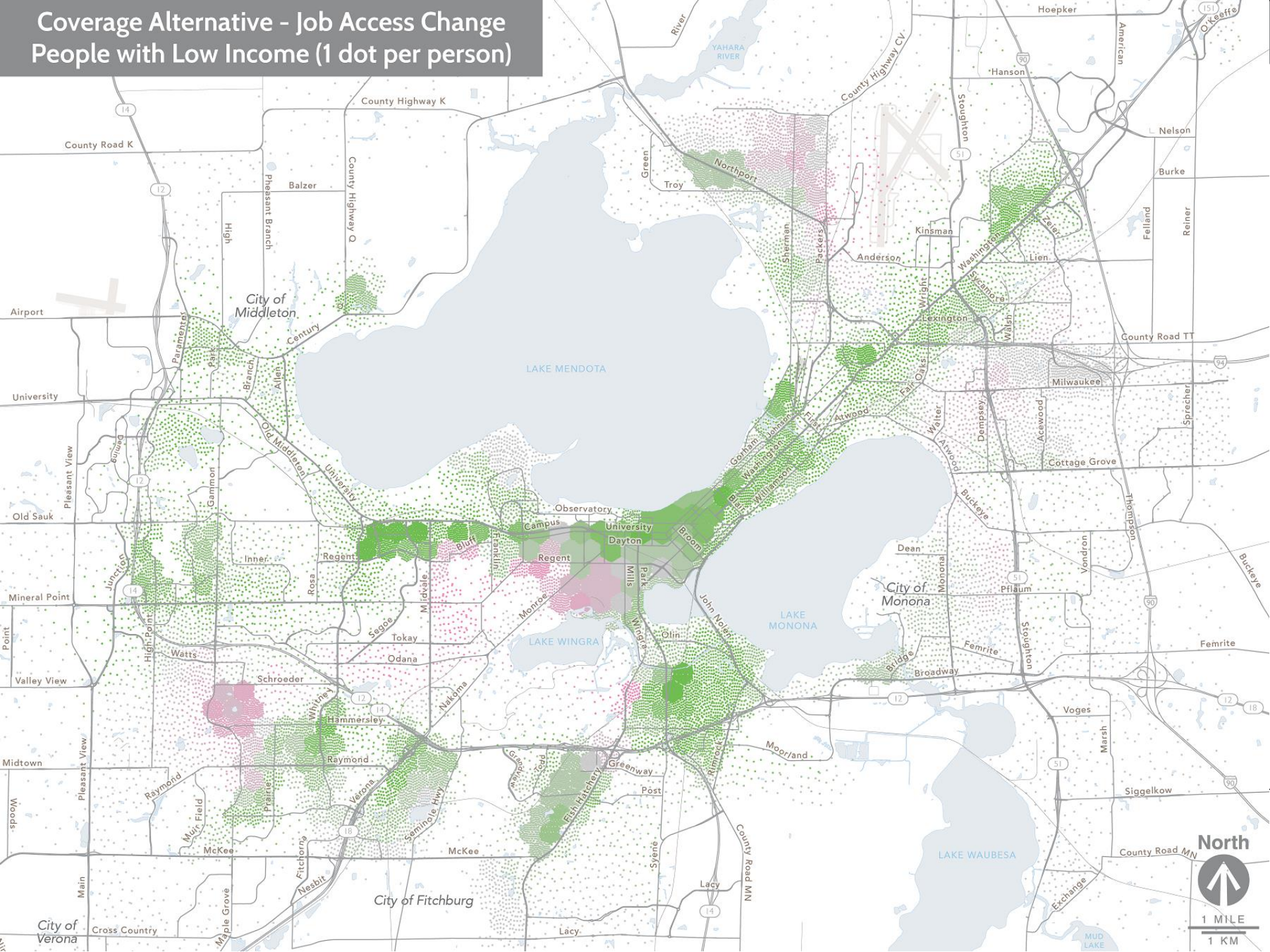
# Job Access Change

How many jobs can be accessed in 45 minutes with this network compared with the existing network?

- Access Gain**
- ◆ Better than + 15,000
  - ◆ + 10,000 to 15,000
  - ◆ + 5,000 to 10,000
  - ◆ + 1,000 to 5,000
  - ◆ Similar to Existing
- Access Loss**
- ◆ - 1,000 to 5,000
  - ◆ - 5,000 to 10,000
  - ◆ - 10,000 to 15,000
  - ◆ Worse than -15,000

Source: Greater Madison MPO 2016 TAZ Model;  
US Census 2018 ACS 5-Year Summary File

One dot represents five residents





# Ridership Alternative - Job Access Change

People with Low Income (1 dot per person)

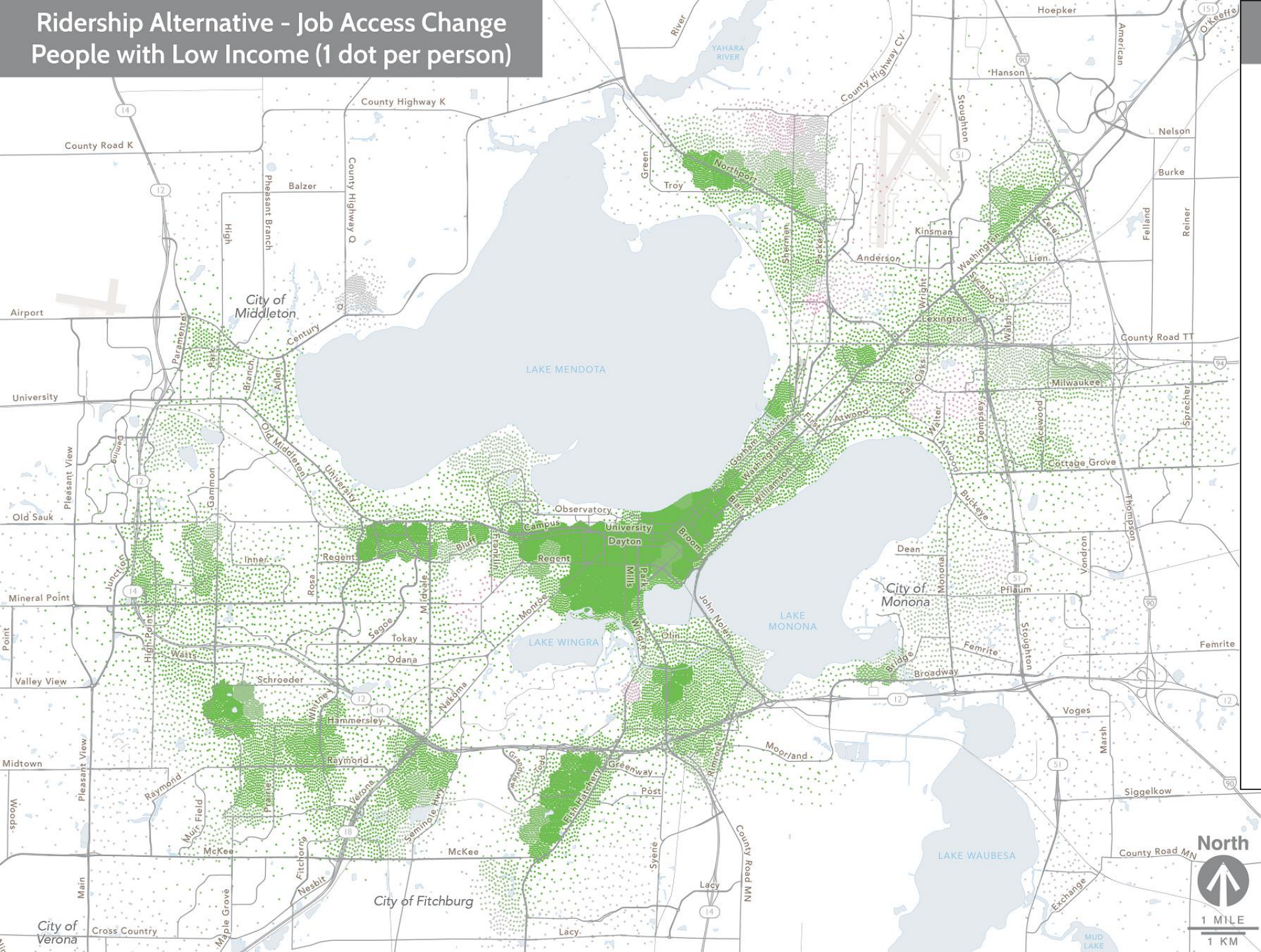
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# Policy Direction









1. Ridership, definitely. Minor corrections only.
2. Ridership, mostly. Some lower frequencies to reach a few more places.
3. Coverage, mostly. Just a little less coverage to so we can get a few higher frequencies.
4. Coverage, definitely. Minor corrections only.

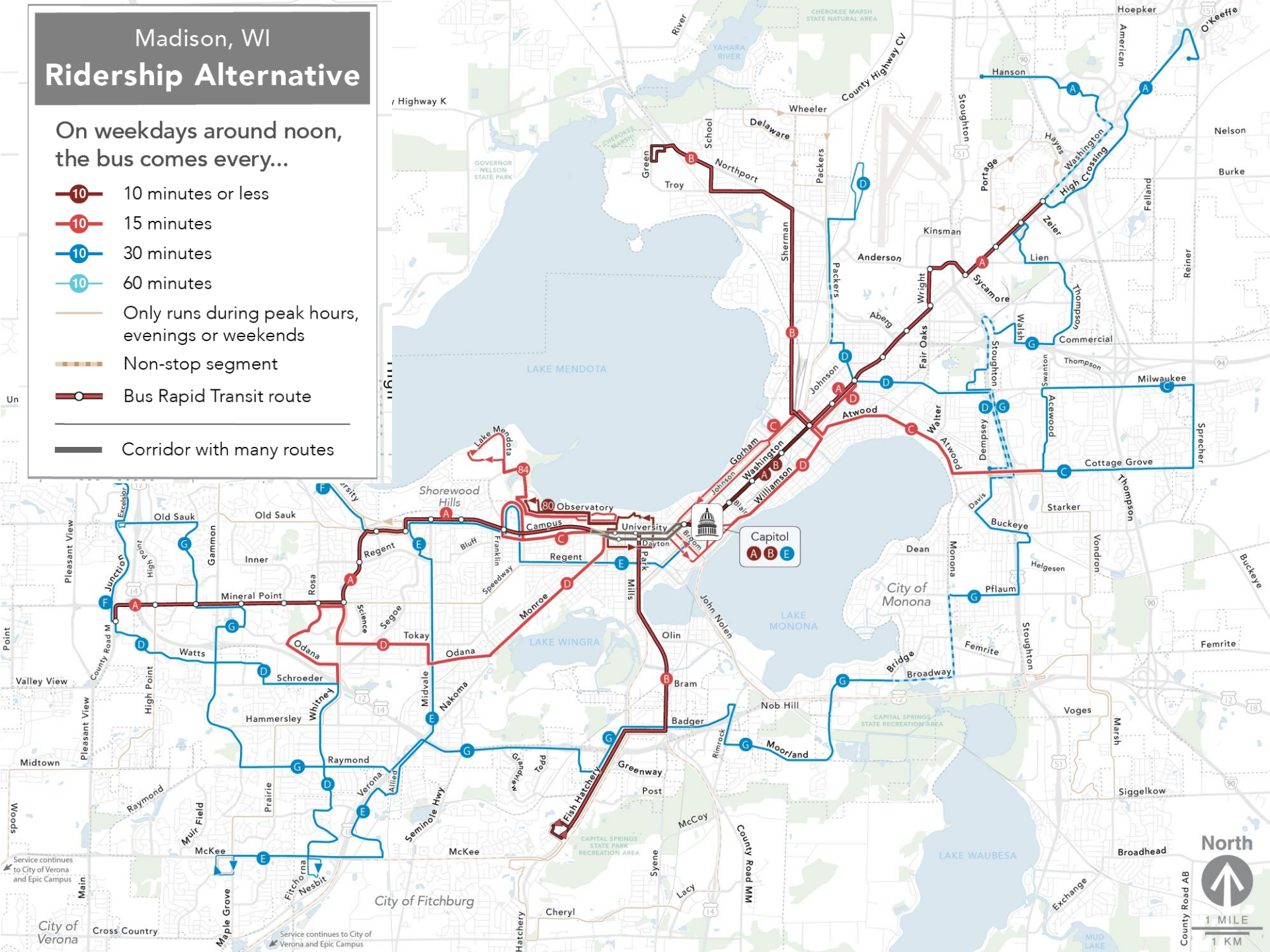


# Ridership Alternative

## Madison, WI Ridership Alternative

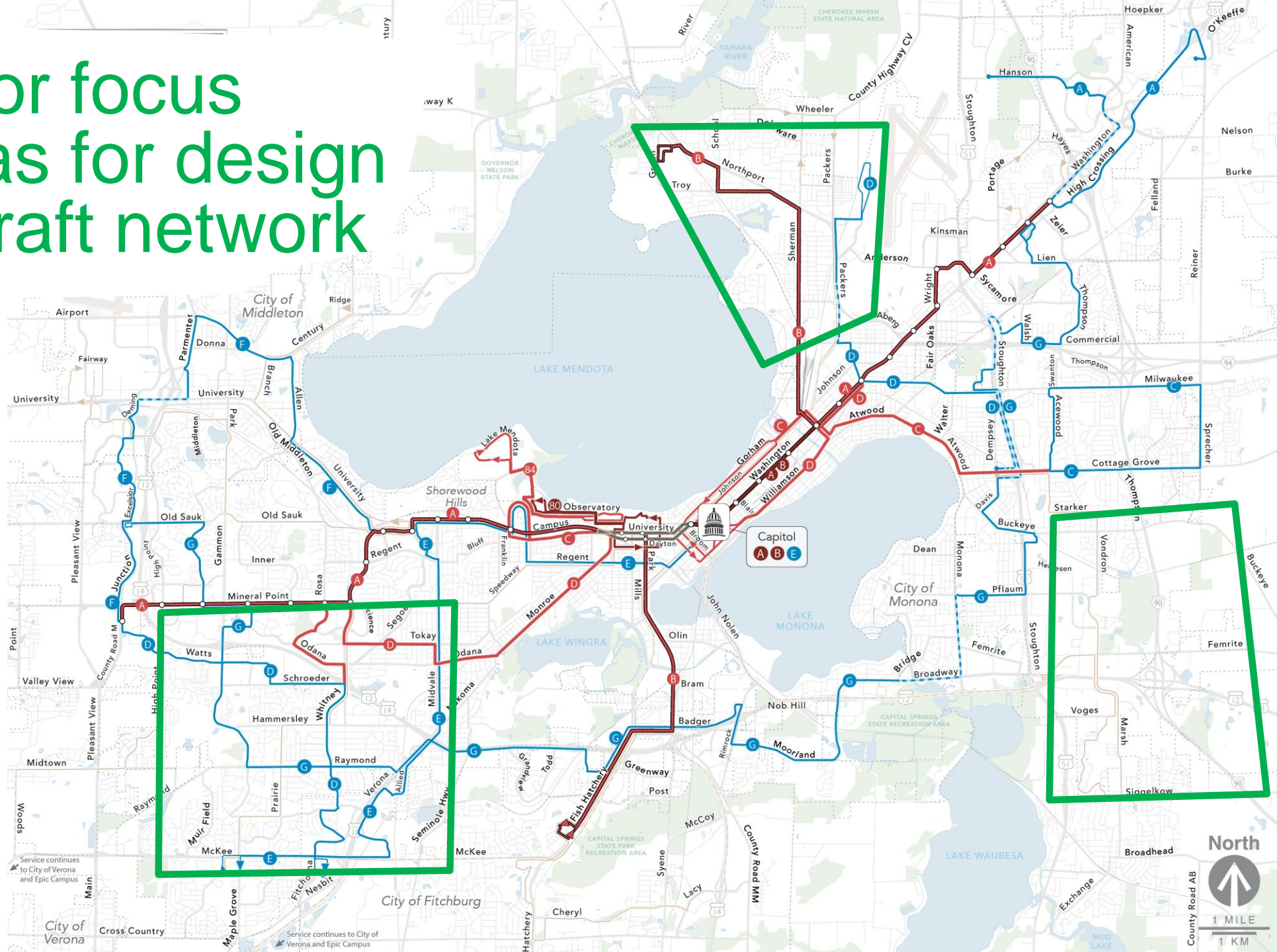
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# Major focus areas for design of draft network





# Key Take-Aways

- Bus routes will be designed to be longer, straighter, and more frequent
- Majority of lower income residents in peripheral neighborhoods will experience less waiting, and barriers to accessing jobs and other destinations will be reduced
- Transfer points will be eliminated, eliminating unnecessary delays and indirection

# Key Take-Aways

- Bus service will not be reduced in neighborhoods to support the BRT system. BRT service is a reorganization of service hours already in the corridors.
- Most routes will continue downtown and will not force transfers to BRT. BRT and local service will form a single, cohesive network.



# Key Take-Aways

- The redesigned network will be less oriented around the downtown 8-5 commute, and will be more useful for retail jobs, hospitality jobs, and other jobs that follow less predictable schedules
- The system overall will be far simpler, more logical, and easier to use.

# What we've heard

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- The public generally supports the “mostly ridership” approach
- Some people would like to see pre-COVID routes restored
- Staff are collecting all comments and answering questions. Requests will be analyzed based on their merit from a system perspective with an equity lens.



# Next Steps

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- Draft network design at Transportation Policy and Planning Board January 31, 2022
- Virtual public information meeting and online survey
- Geographic virtual meetings and/or open houses to focus on sub-areas of the city
- Draft network modified based on feedback and approved by TPPB
- New network implemented in summer 2023



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