



Network Redesign

# Metro Transit Network Redesign

## Draft Network Plan

JARRETT  
WALKER  
+ ASSOCIATES

Let's think about transit

Public Meeting Presentation  
Feb. 24, 2022

---

# Tonight's Agenda

1. Welcome
2. Zoom Meeting Protocols
3. Draft Network Plan Presentation
4. Discussion
5. Engaging the Community

---

# Zoom Meeting Protocols

- Please remain on Mute during the presentation.
- Use the Chat to ask questions during the meeting.
- To ask questions at the end of the presentation, click Participants and select Raise Hand.
- Introduce yourself before speaking.
- Once your question is addressed, lower your hand.
- If you called into the meeting, use \*9 to raise and lower your hand.

---

# Why are we here today?

- We are re-envisioning where and how often the bus operates in Madison.
- **Today, we will present the Draft Network Plan, respond to questions, and take public input.**
- This plan is an initial proposal, it is not final.
- Public input is critical to making sure we get the Final Network Plan right.

---

# How can you provide input?

- **Today:** you can ask questions or provide comment after the presentation.
- **After the meeting:** take the survey online!
  - Project Web Page: [mymetrobus.com/redesign](http://mymetrobus.com/redesign)
  - En Español: [mymetrobus.com/redesign\\_es](http://mymetrobus.com/redesign_es)
- **Anytime:** e-mail [MetroRedesign@cityofmadison.com](mailto:MetroRedesign@cityofmadison.com)








---

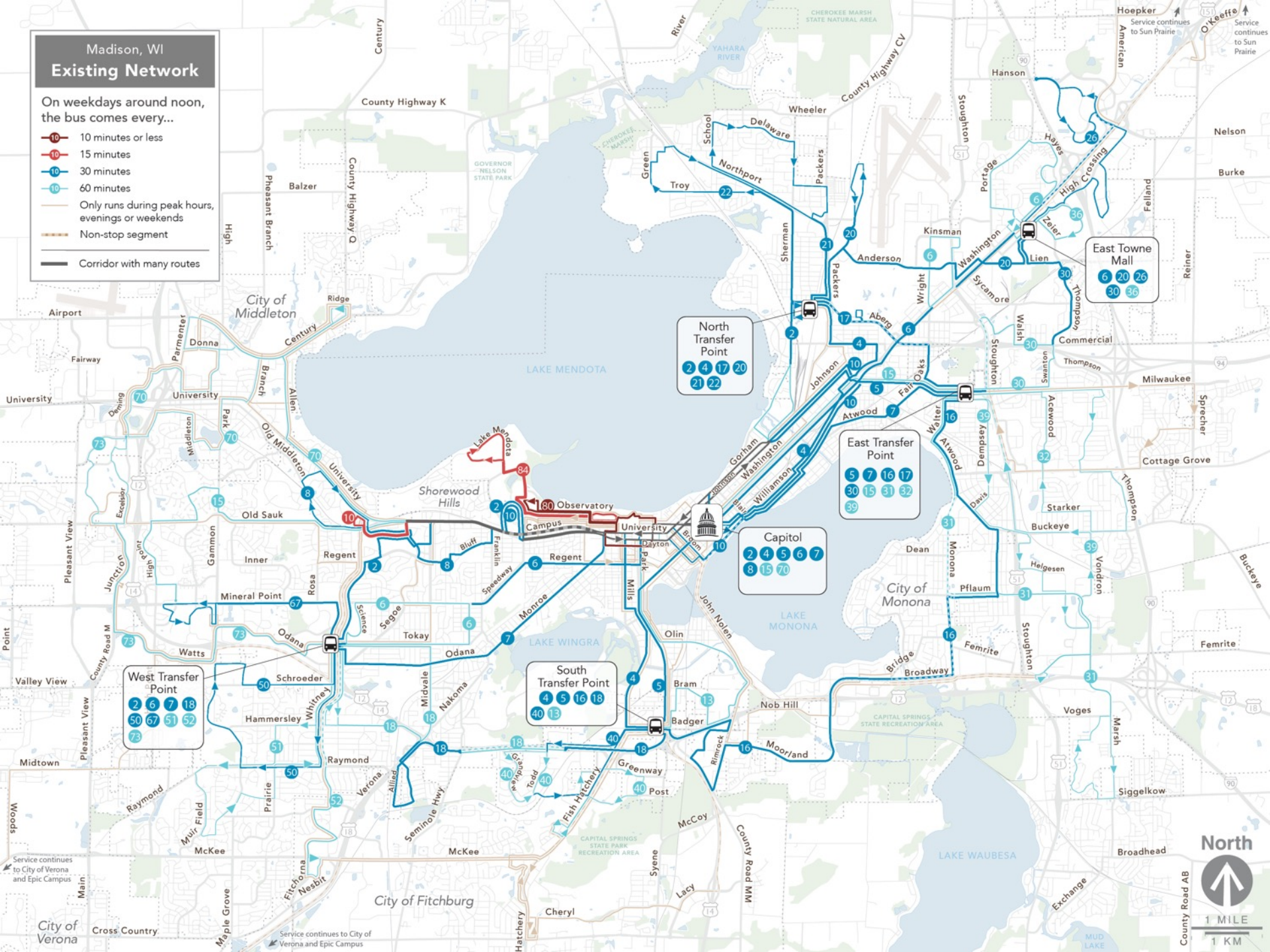
# The big picture

## Existing Network vs. Draft Plan

# 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



City of Verona

City of Fitchburg

City of Monona

City of Middleton

East Towne Mall  
6 20 26  
30 36

North Transfer Point  
2 4 17 20  
21 22

East Transfer Point  
5 7 16 17  
30 15 31 32  
39

Capitol  
2 4 5 6 7  
8 15 70

South Transfer Point  
4 5 16 18  
40 13

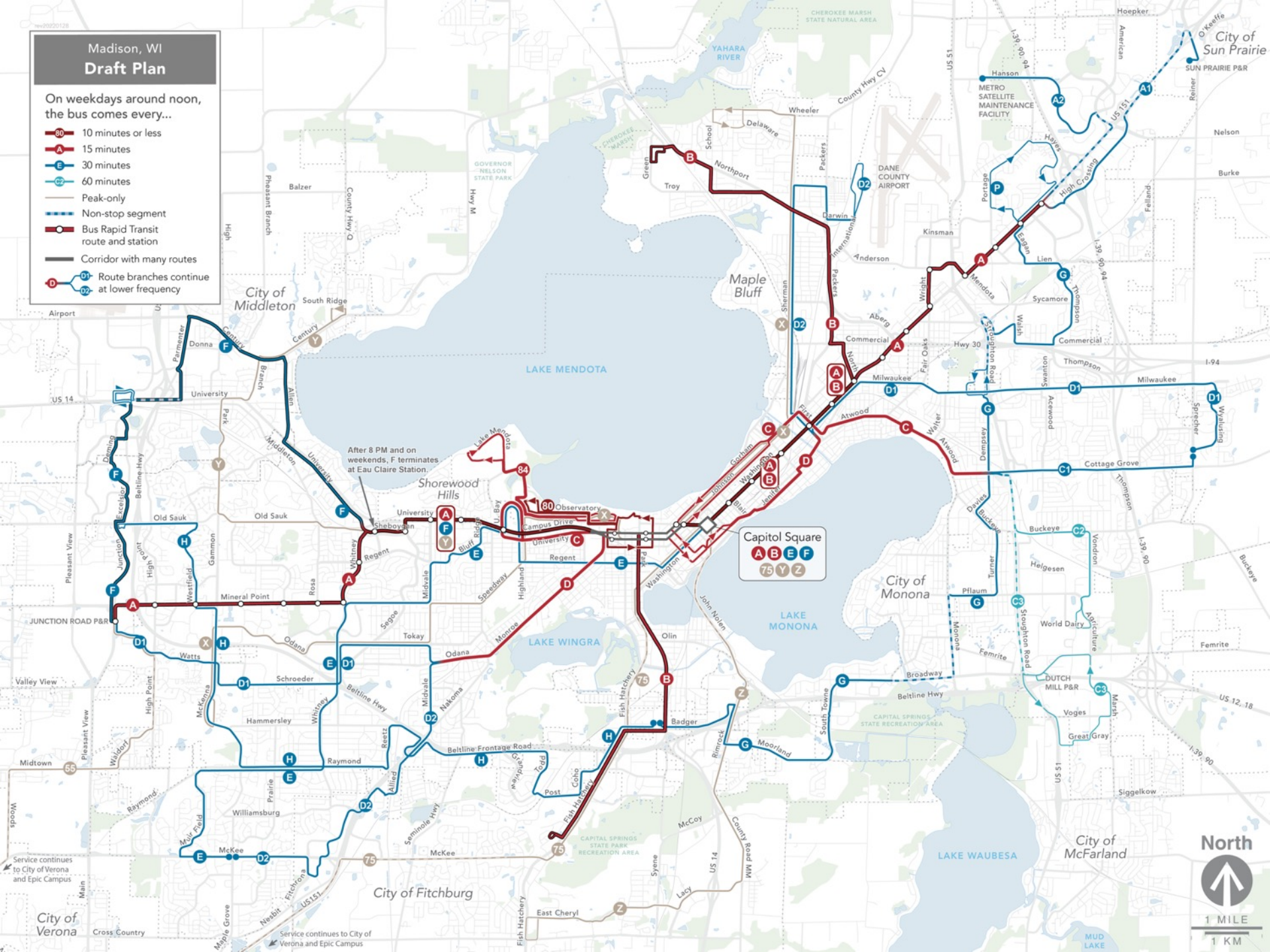
West Transfer Point  
2 6 7 18  
50 67 51 52  
73



# Madison, WI Draft Plan

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

- 10 minutes or less
- A 15 minutes
- E 30 minutes
- C2 60 minutes
- Peak-only
- Non-stop segment
- Bus Rapid Transit route and station
- Corridor with many routes
- D D1 D2 Route branches continue at lower frequency





---

# How did we get here?

# Plan Process

This plan is being developed with continuous public input.

- In Phase 1, we asked about people's values and priorities for transit.
- In Phase 2, we asked for people's opinion on two different network alternatives.
- Now, in Phase 3, we are seeking comment on an actual proposal.

In each phase, we are learning more about what the public wants and incorporating that into the plan.

We are here



---

# Values and Priorities

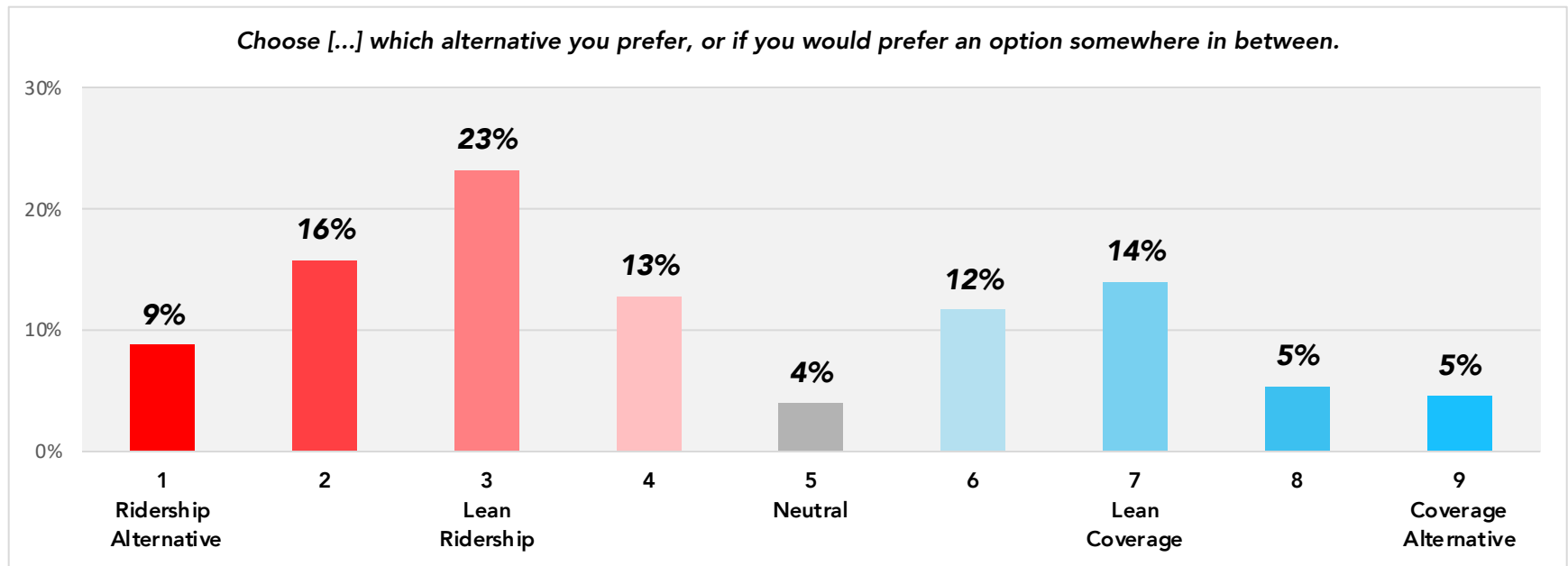
- In April and May 2021, we asked people about what objectives transit should adhere to.
  - Most people we heard from (80%) said the network needed changes, even if some people like the network as it is.
  - The following goals stood out as the top priorities for change:
    - **Expanded mobility for low-income people**
    - **Basic access for everyone who needs it, wherever they are**
    - **Maximize access to jobs and opportunities**

# Network Alternatives

- Last August, two contrasting alternatives were presented for public comment. Both were designed to expand mobility for low-income people, but differed on other goals.
  - The **ridership** alternative prioritized **total access to jobs and opportunity**:
    - Buses would come more often; routes would be faster and more direct.
    - But some areas would no longer receive service, and many people would walk farther to get service.
  - The **coverage** alternative prioritized ensuring **basic access for as many people as possible**:
    - Service would remain spread out to serve as many places as possible.
    - Routes would be somewhat more direct, but buses mostly would come at about the same frequency they do now.

# Draft Plan Direction

- Public comment leaned somewhat toward ridership.



- The Transportation Planning and Policy Board directed the project team to develop a plan mainly based on the ridership alternative, but with a few changes to extend basic coverage to more people.



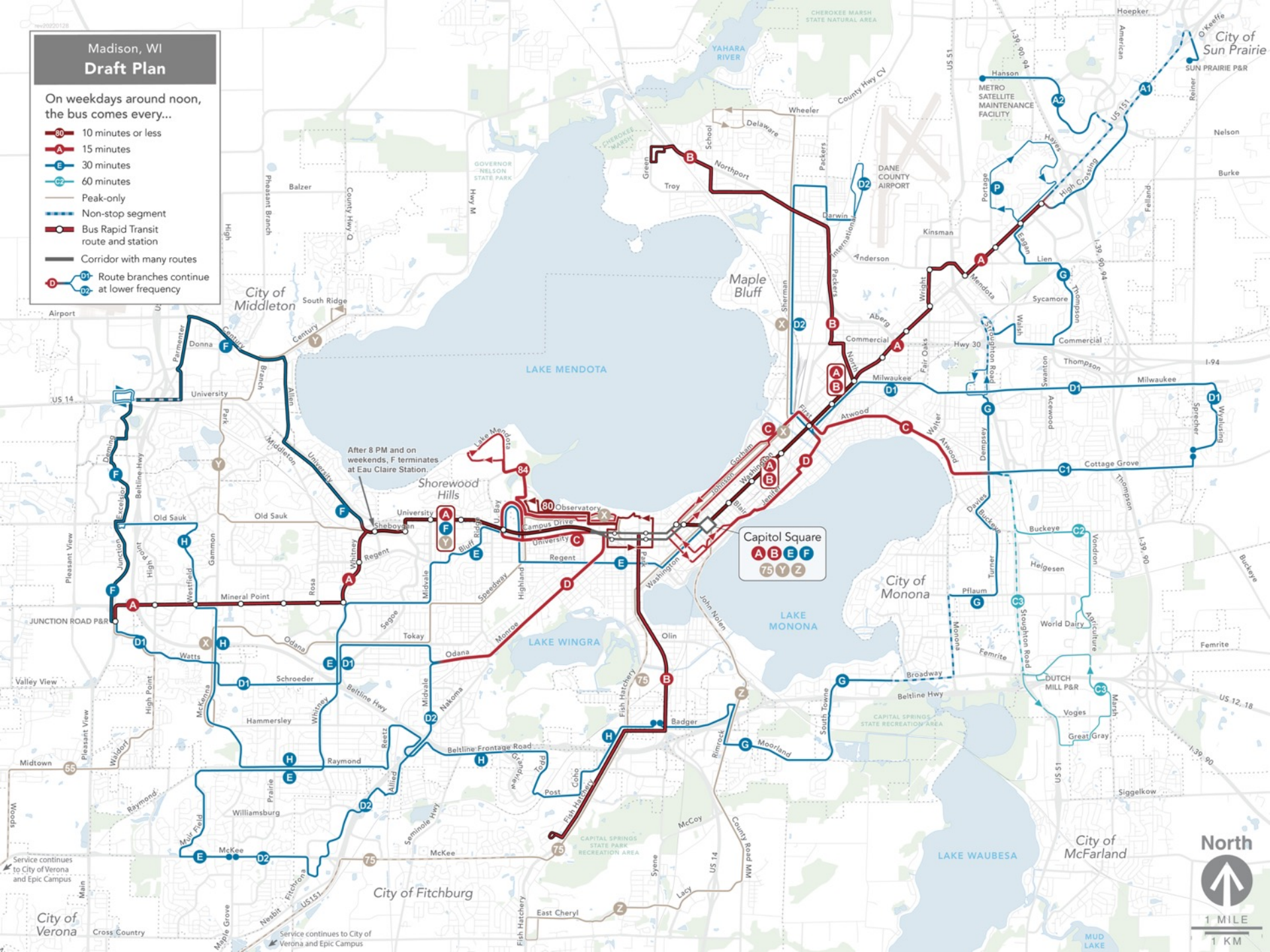
---

# What's in the Draft Network?

# Madison, WI Draft Plan

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

- 10 minutes or less
- A 15 minutes
- E 30 minutes
- C2 60 minutes
- Peak-only
- Non-stop segment
- Bus Rapid Transit route and station
- Corridor with many routes
- D D1 D2 Route branches continue at lower frequency



Capitol Square

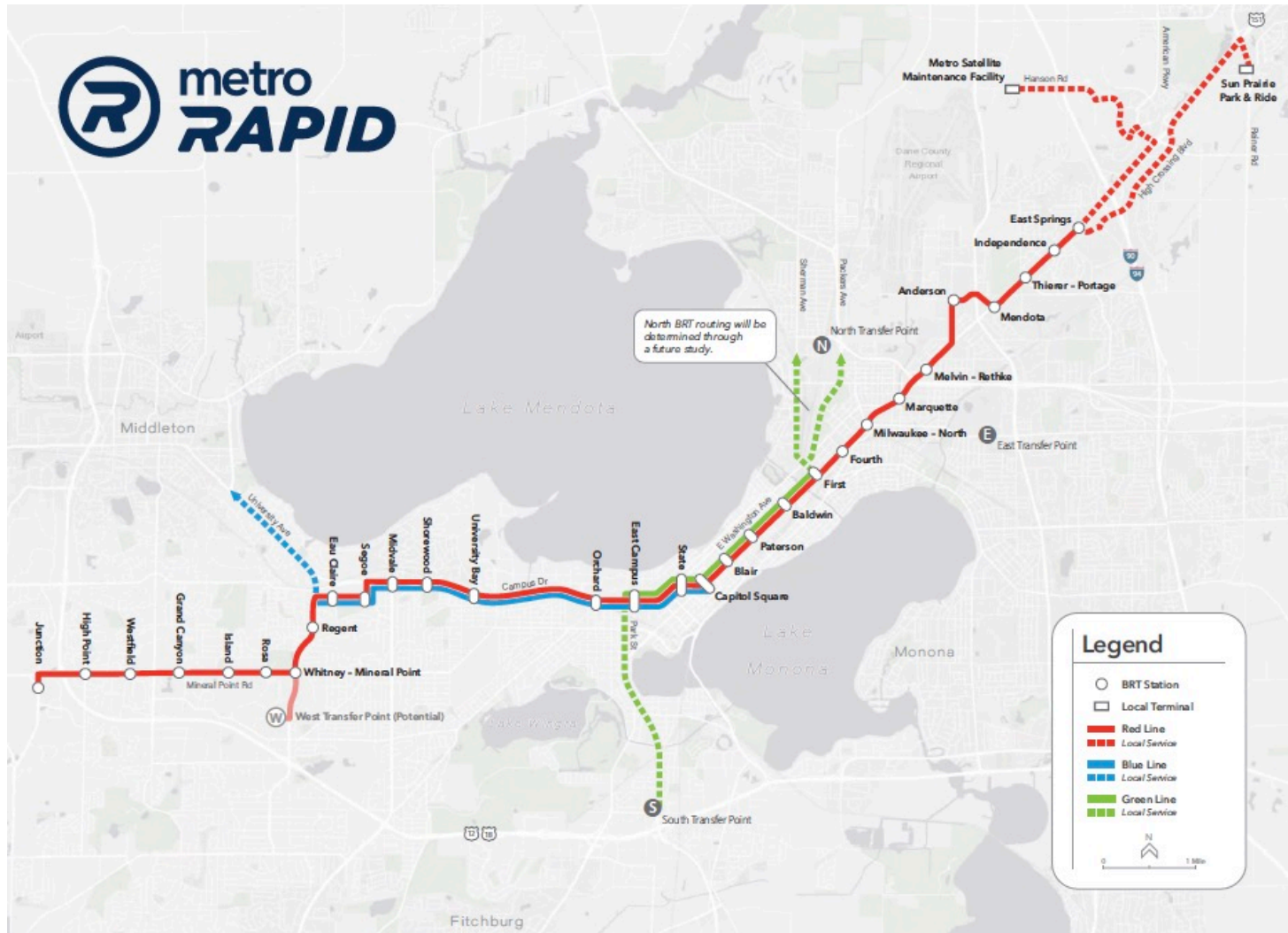
|    |   |   |   |
|----|---|---|---|
| A  | B | E | F |
| 75 | Y | Z |   |

After 8 PM and on weekends, F terminates at Eau Claire Station.

Service continues to City of Verona and Epic Campus

Service continues to City of Verona and Epic Campus

# Context: Planned BRT Lines



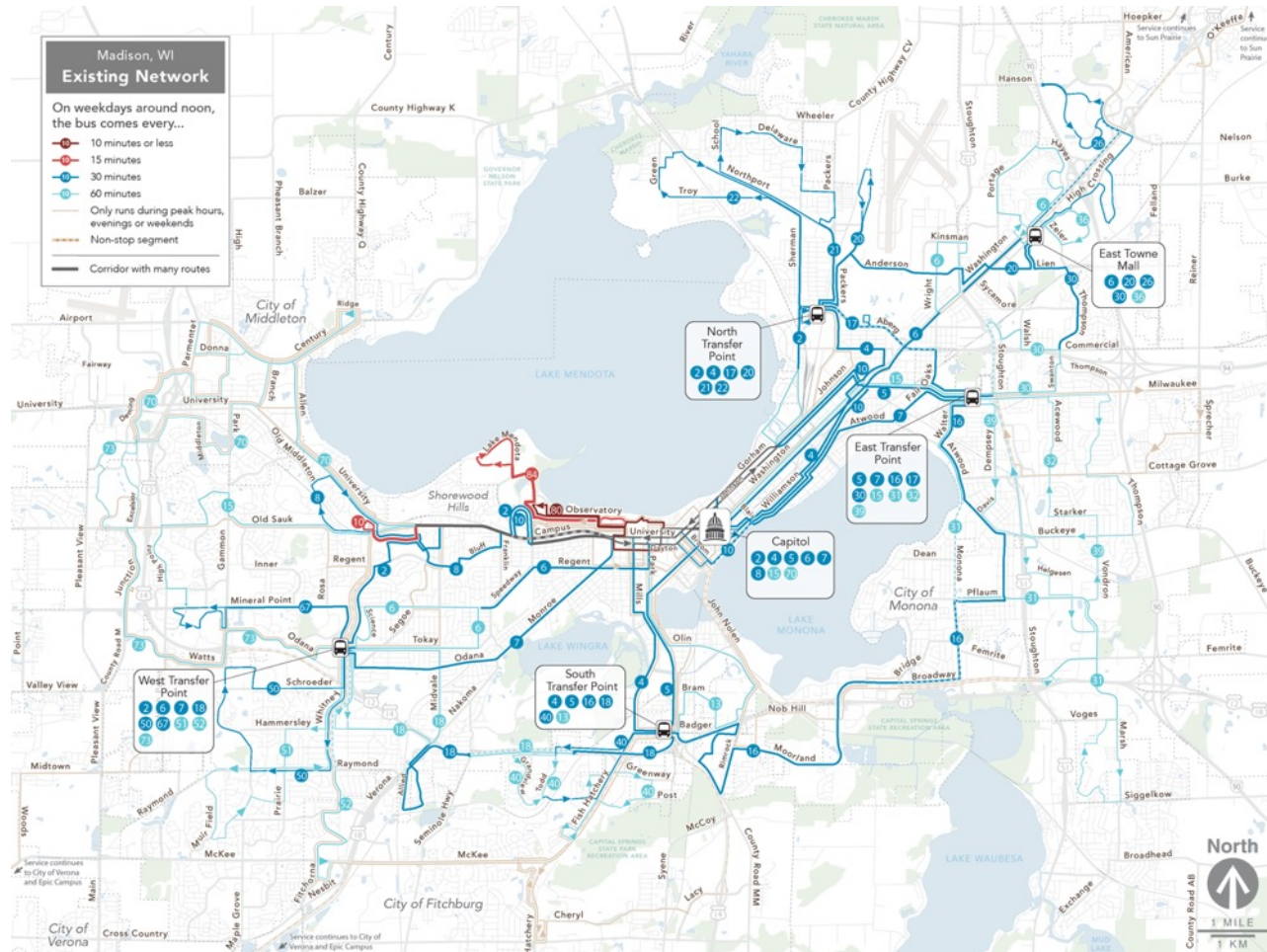
---

# Assumption: Service at 2019 levels

- This matches available operating funds.
- This means that:
  - There isn't infinite room to go more places and provide more frequent service.
  - Any decision to run more service in one location than in 2019, is a decision to run less service in some other location.



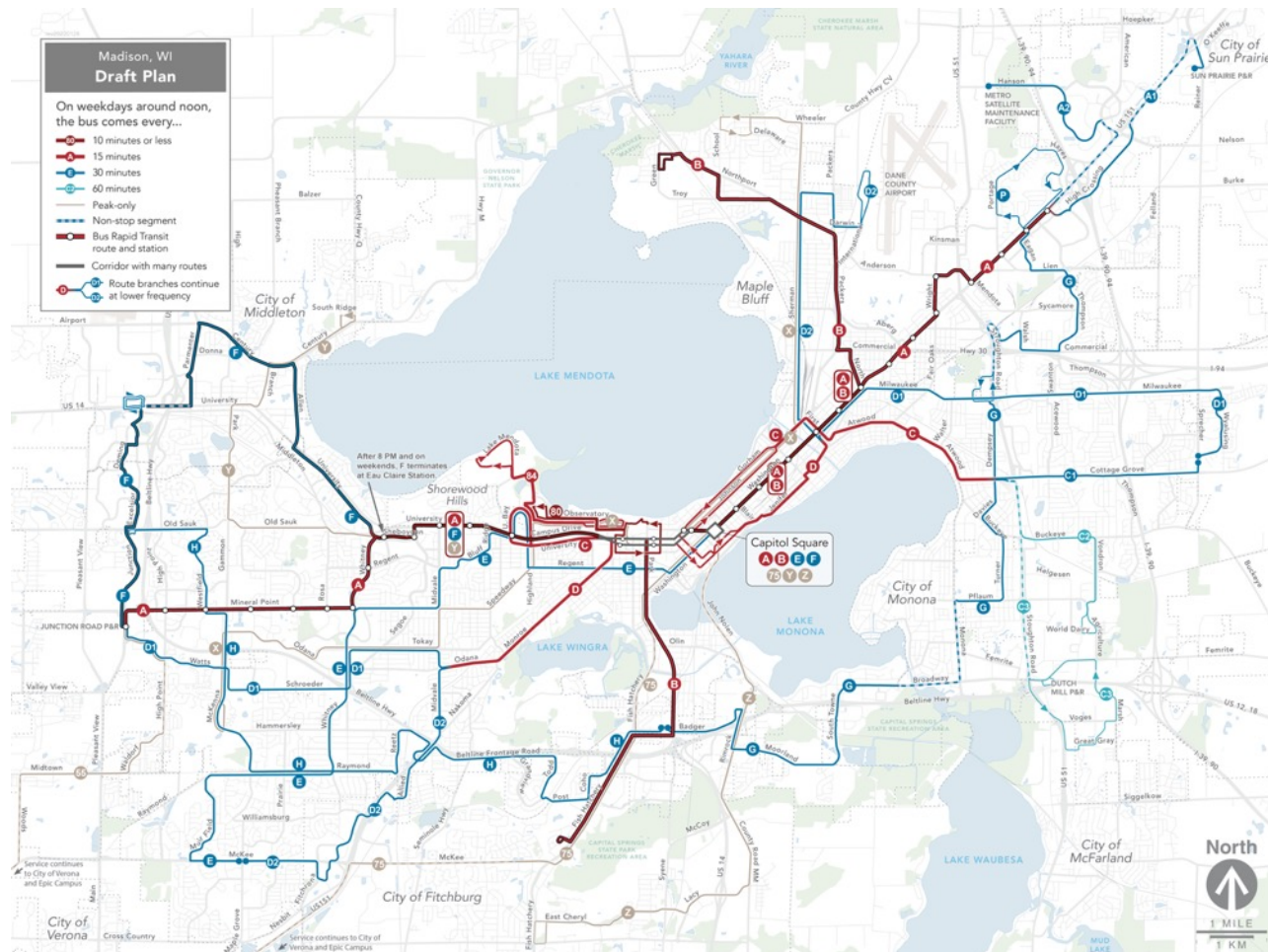
# More frequent routes



In existing service, most routes run every 30 minutes, and many run just once an hour, often on one-way loops.



# More frequent routes



In the Draft Plan, about half the routes would run every 15 minutes, and half would run every 30 minutes.

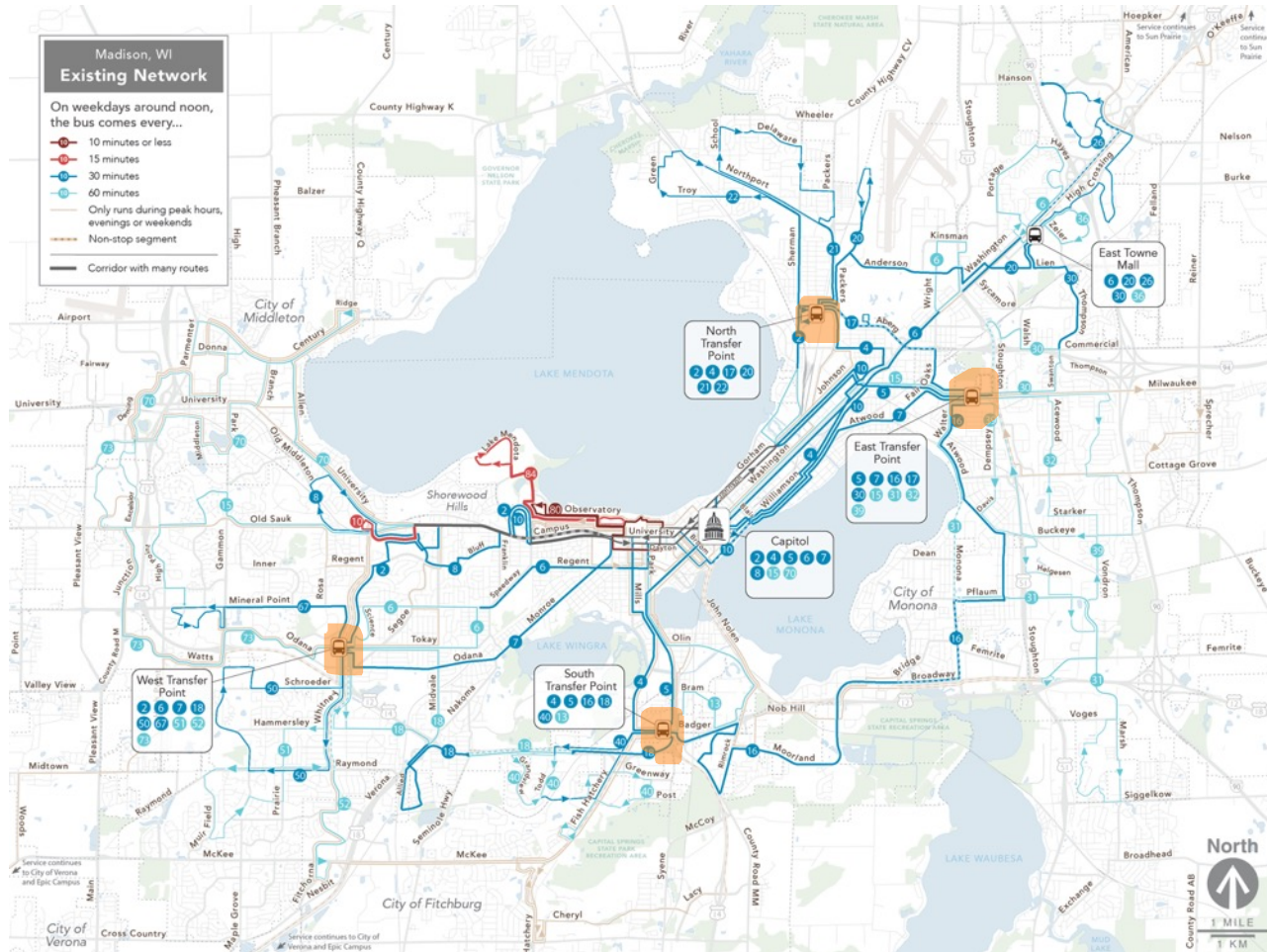
# Why does higher frequency matter?



Imagine a gate at the end of your driveway that only opens once an hour!

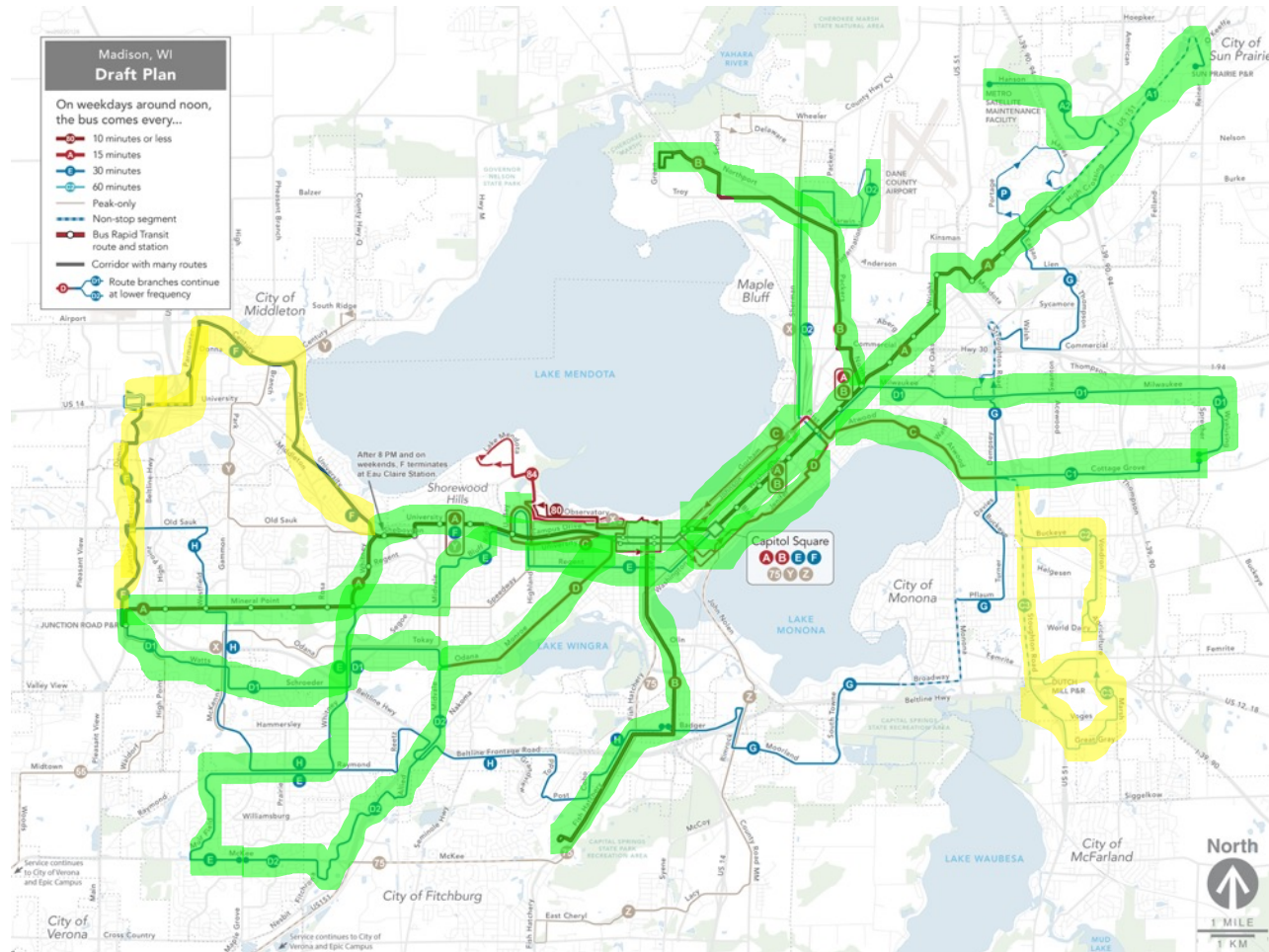


# More direct service



In existing service, passengers from outlying areas are directed to transfer points, where they have to switch buses to get closer in.

# More direct service



In the Draft Plan, most routes run to and through central Madison either **all of the time**, or on **weekdays from 6 AM to 7 PM**.

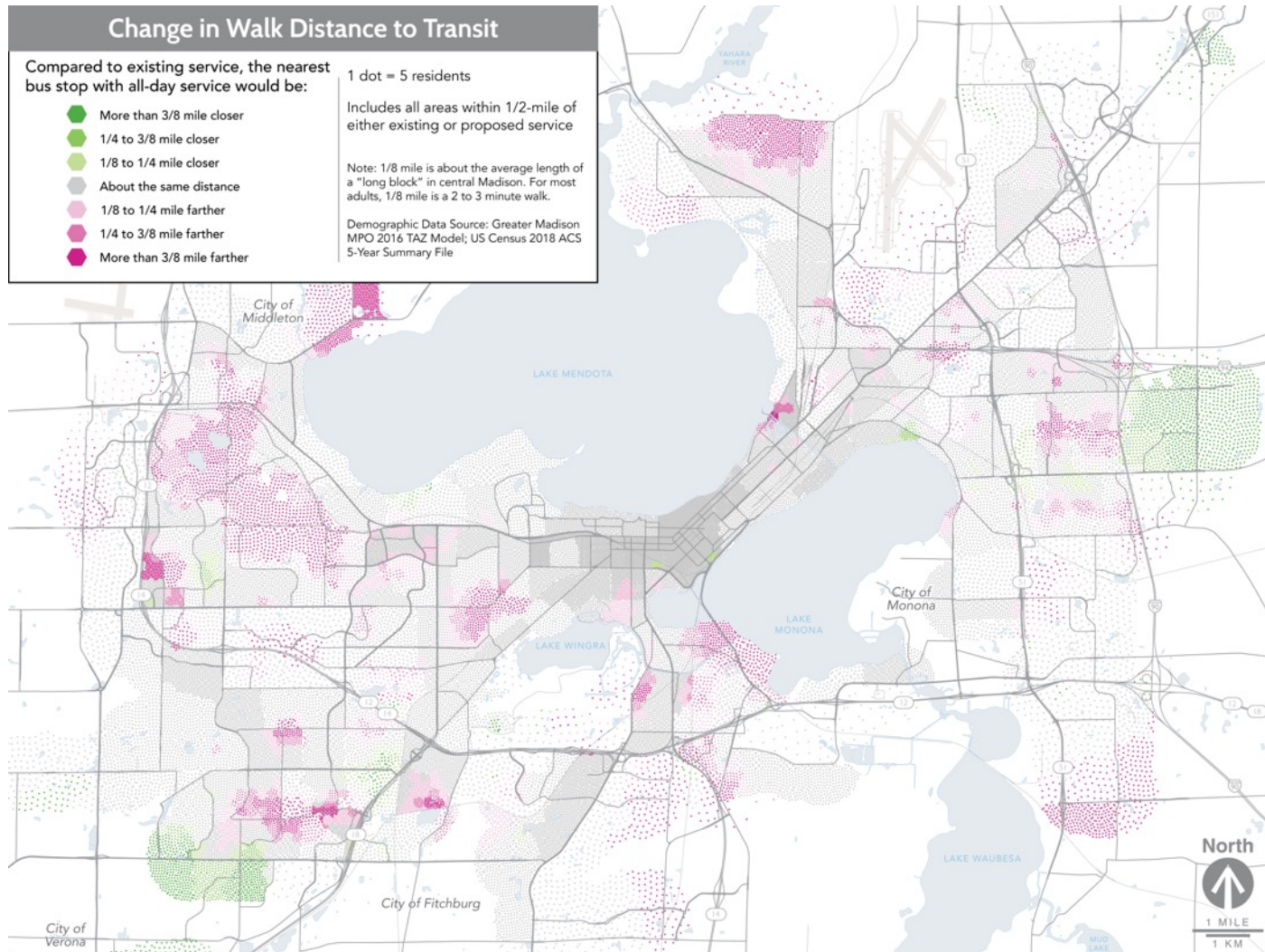
---

# Service on fewer streets

- Achieving higher frequencies without significantly expanding the service budget means providing fewer routes.
- However, the vast majority of people near service today would remain near service under this Draft Plan.
- The median walk to the nearest bus stop would become about 300 feet longer.

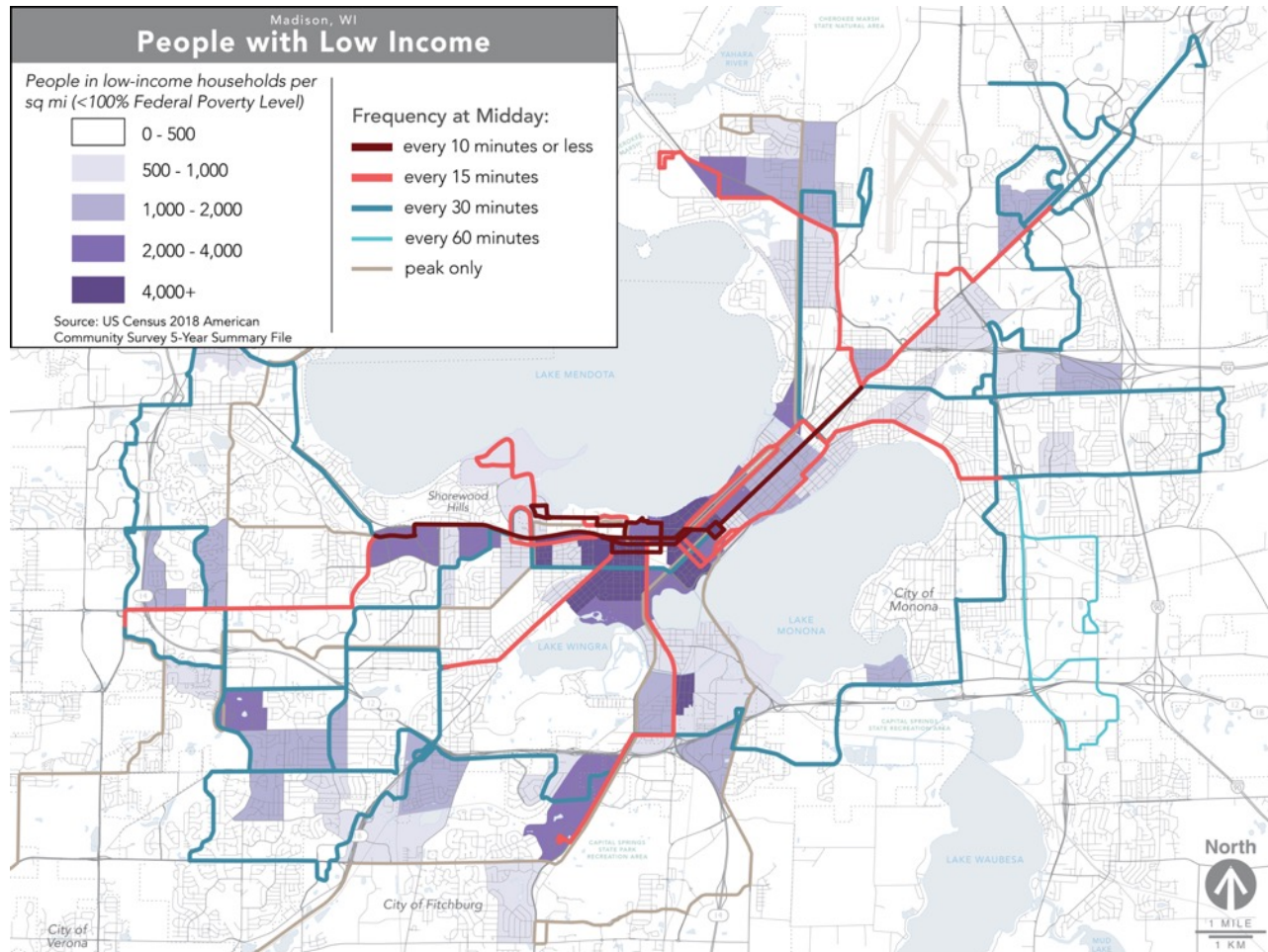


# Some people would have to walk farther to get to a bus stop.



For most adults, 1/8-mile is a 2 to 3 minute walk.  
It's about the same length as a "long block" in central Madison.

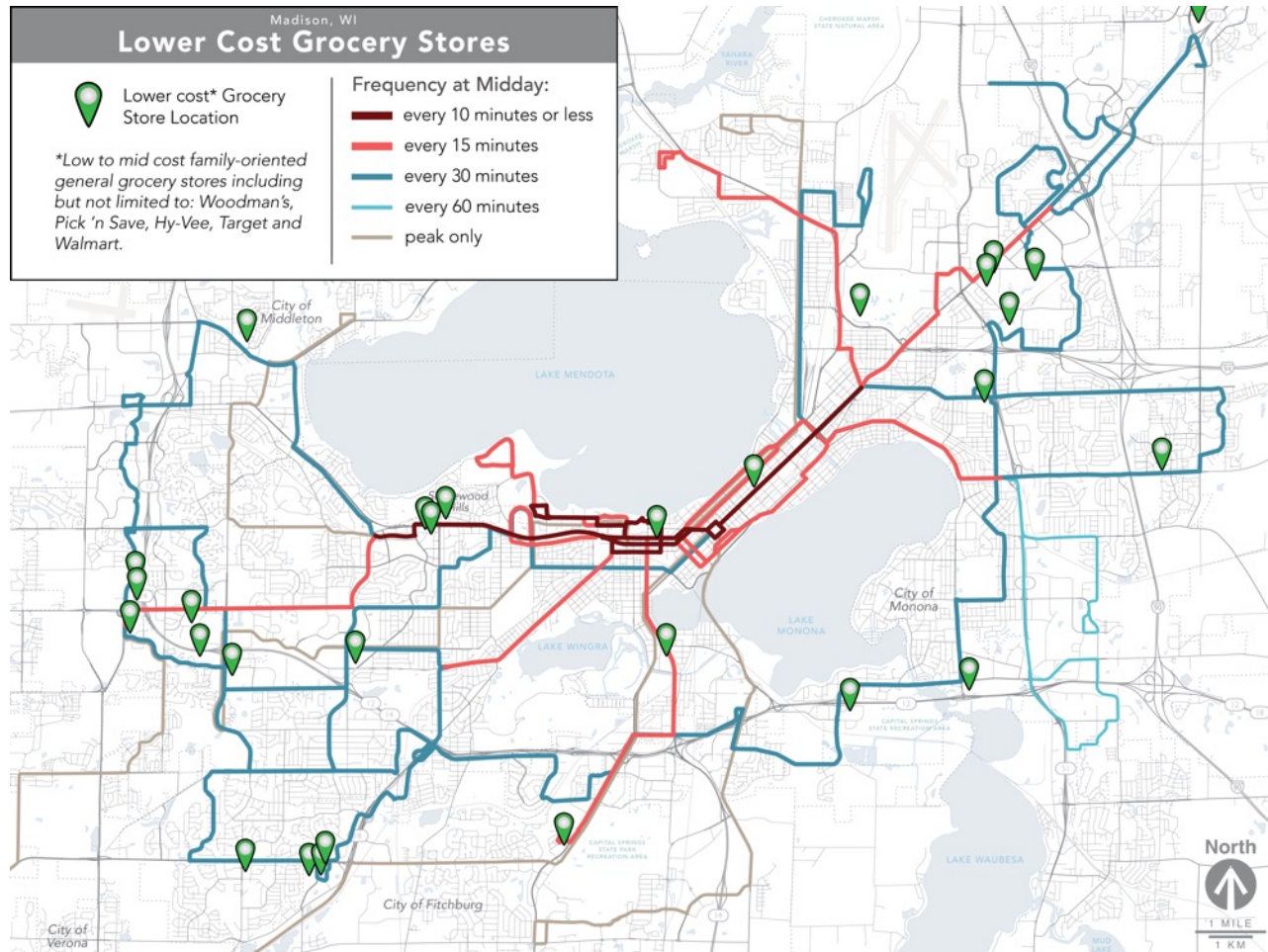
# Service designed with equity in mind



Service to all areas in Madison with concentrated low-income populations.

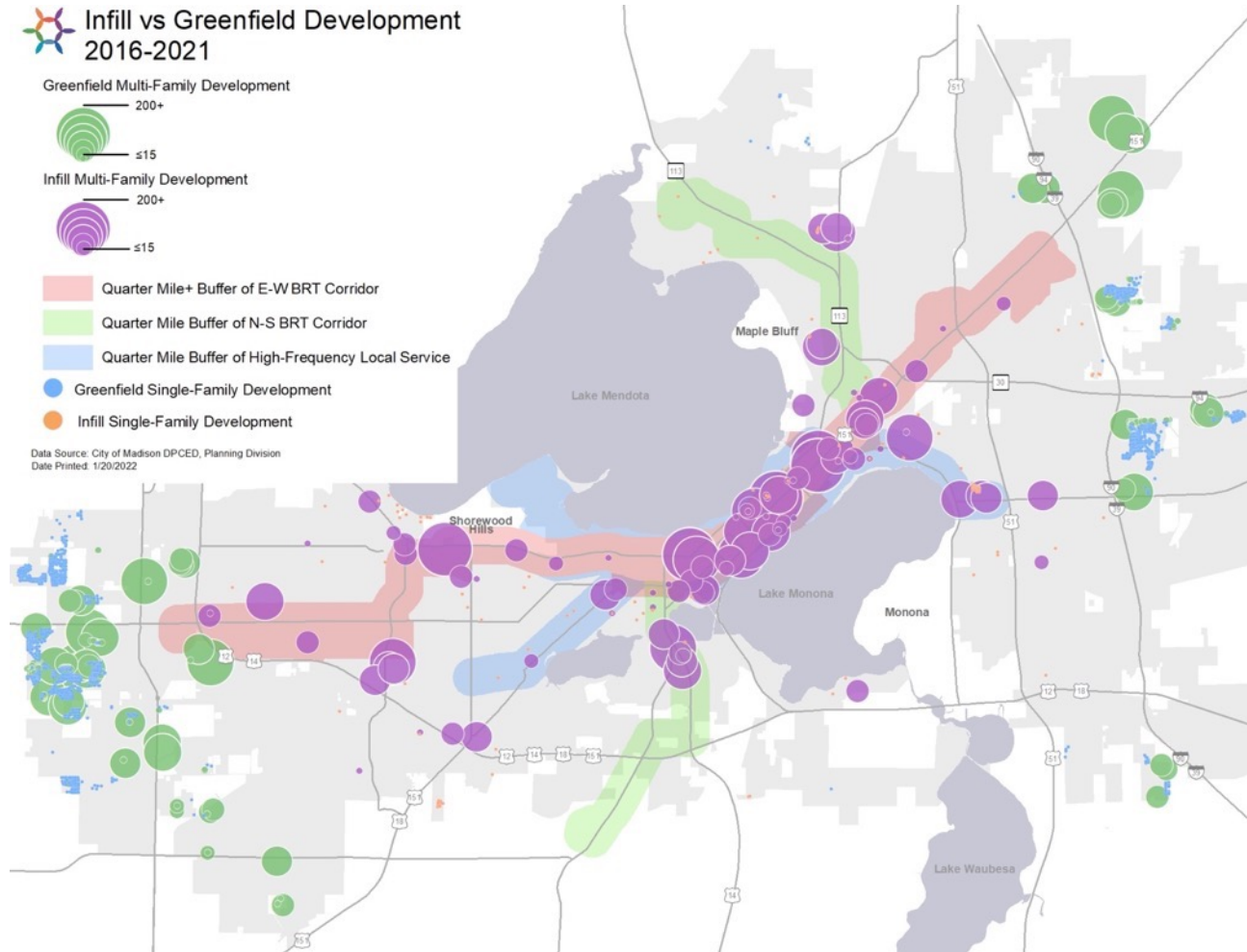


# Service designed with equity in mind



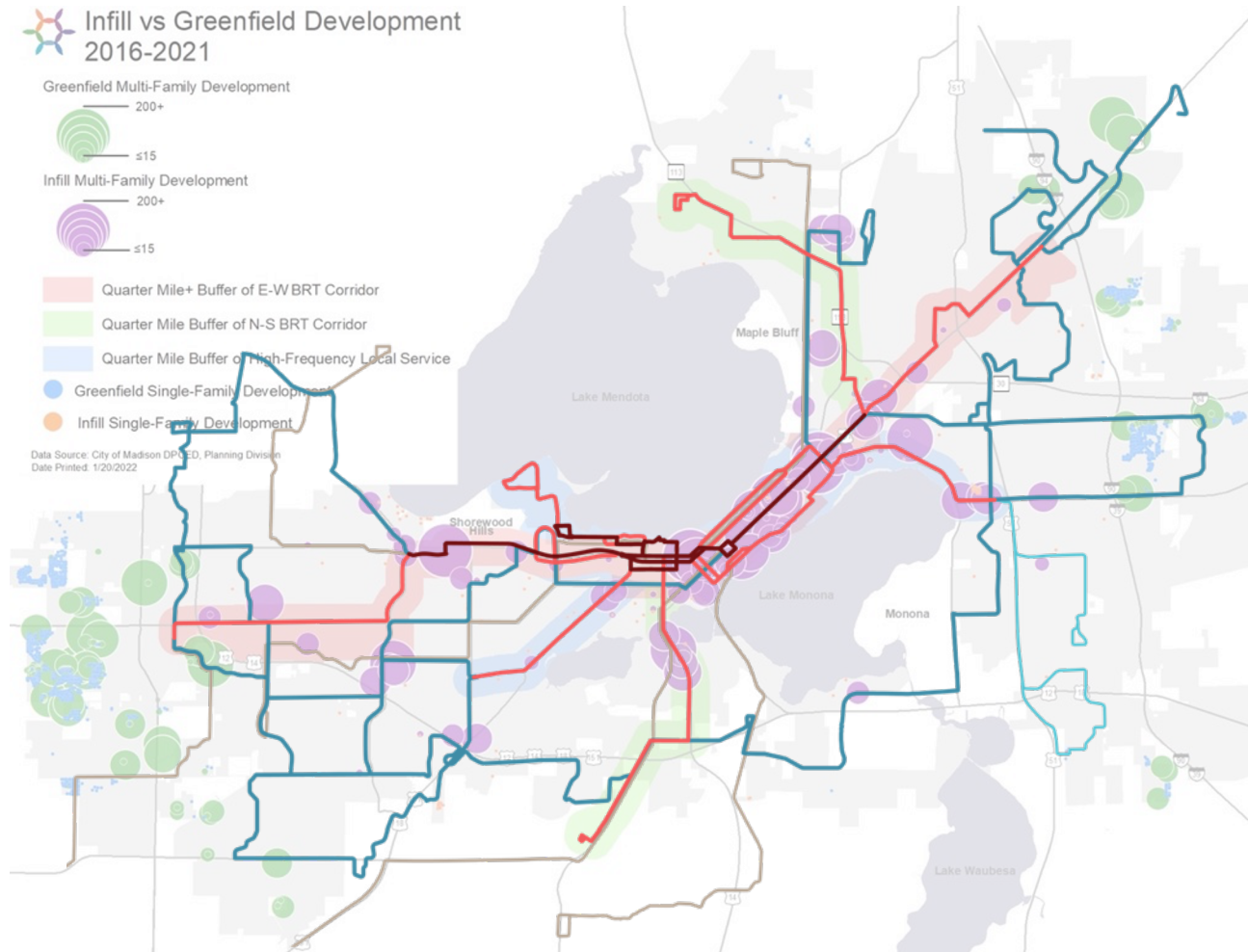
Routes designed to serve places where low-income people need to go on a regular basis.

# Proposed service and ongoing development



The frequent network would match and anticipate patterns of infill development.

# Proposed service and ongoing development



The full network would serve outlying developments that are located adjacent to areas that are already built up.



---

# Comparing Key Outcomes Proximity to Service

# Proximity

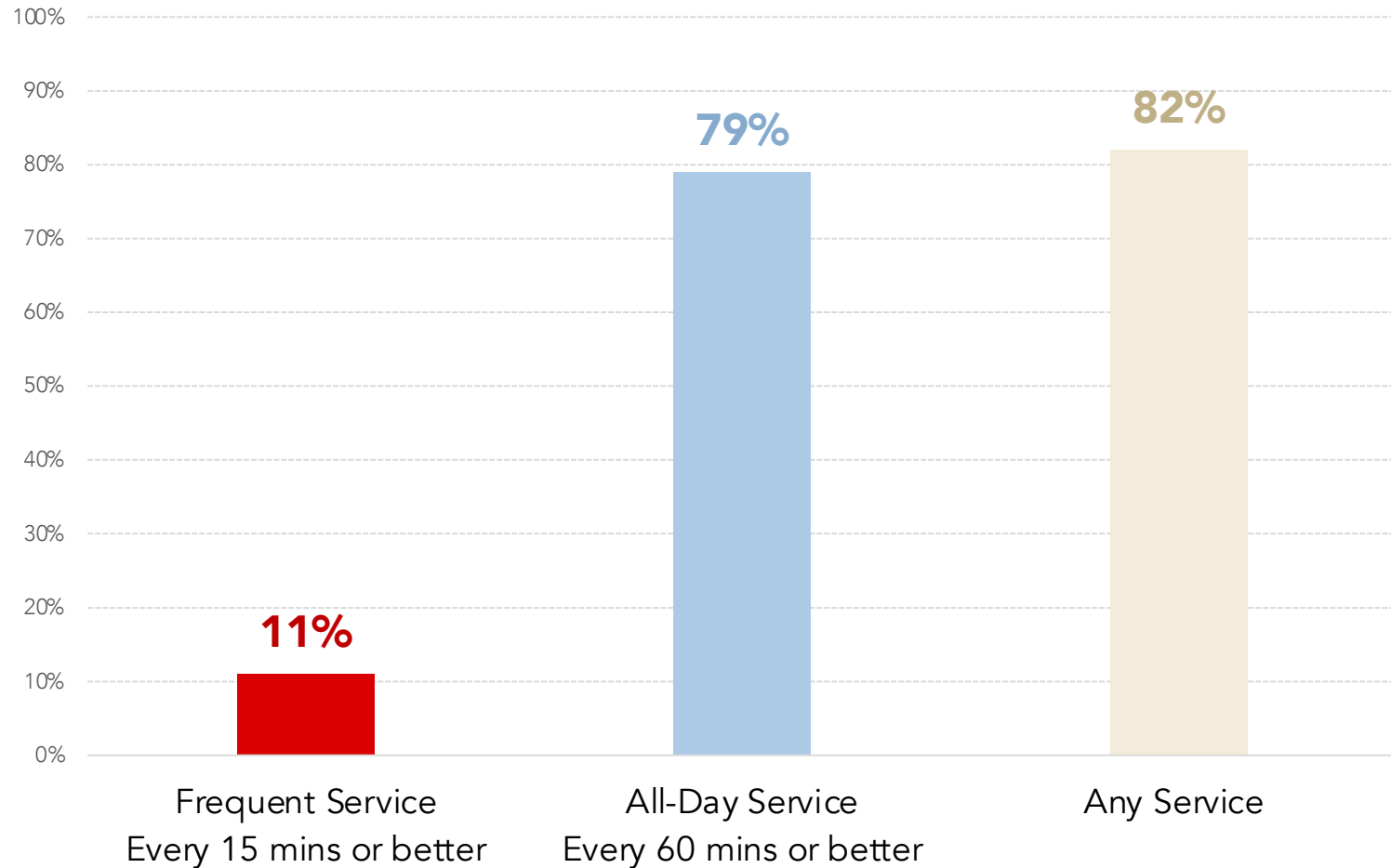
How many people are near transit service in Madison?

- The charts in the following slides estimate **how many people in the City of Madison would live within a 1/4-mile walk of a bus stop**, and how often the bus comes by.
- This is a measure of **coverage**.
  - It tells us whether people have some level of insurance against isolation in their neighborhood.
  - It does not tell us whether anybody would find the service useful on a regular basis.

# Proximity

How many people are near transit service in Madison?

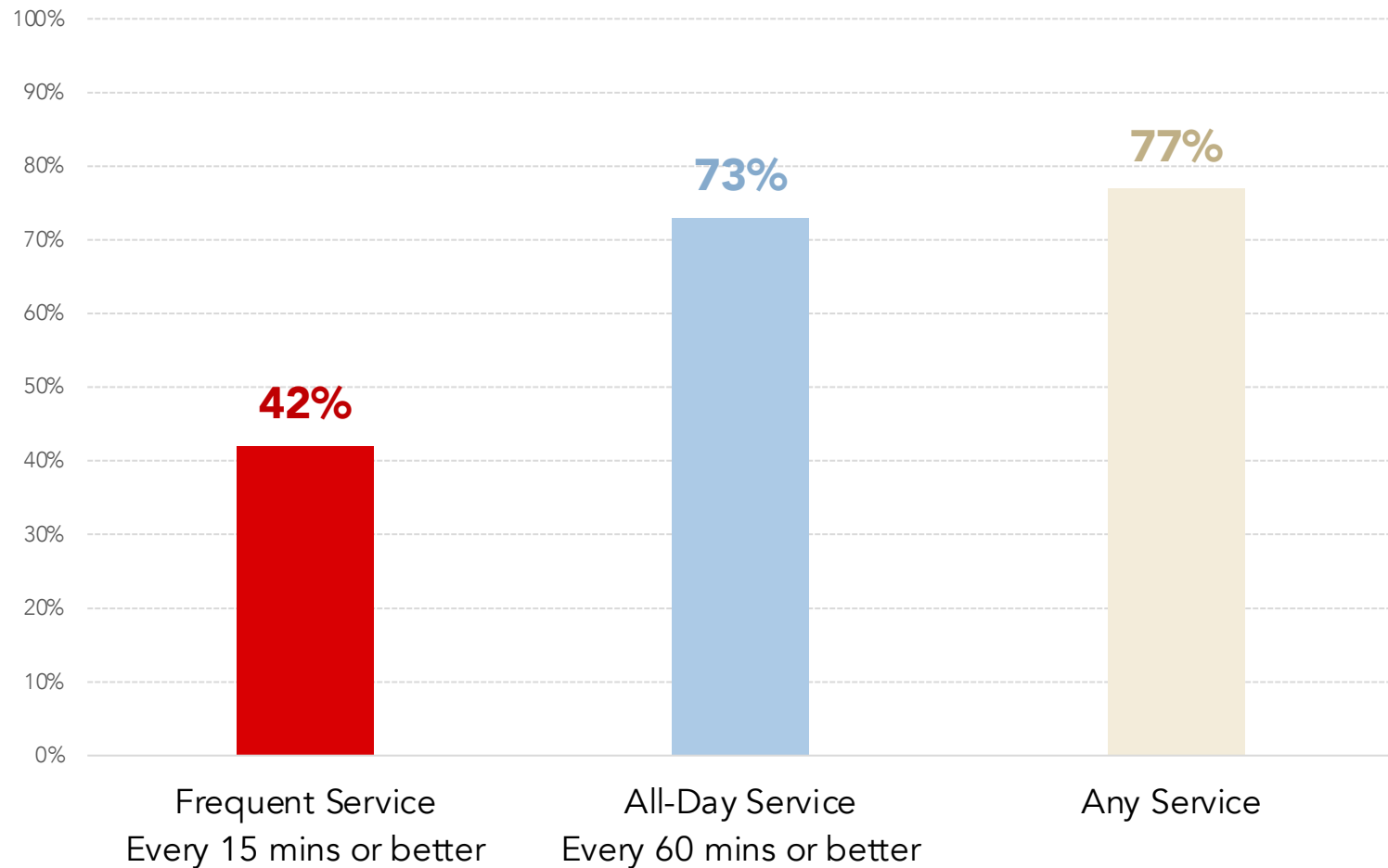
## Existing Network - All Residents



# Proximity

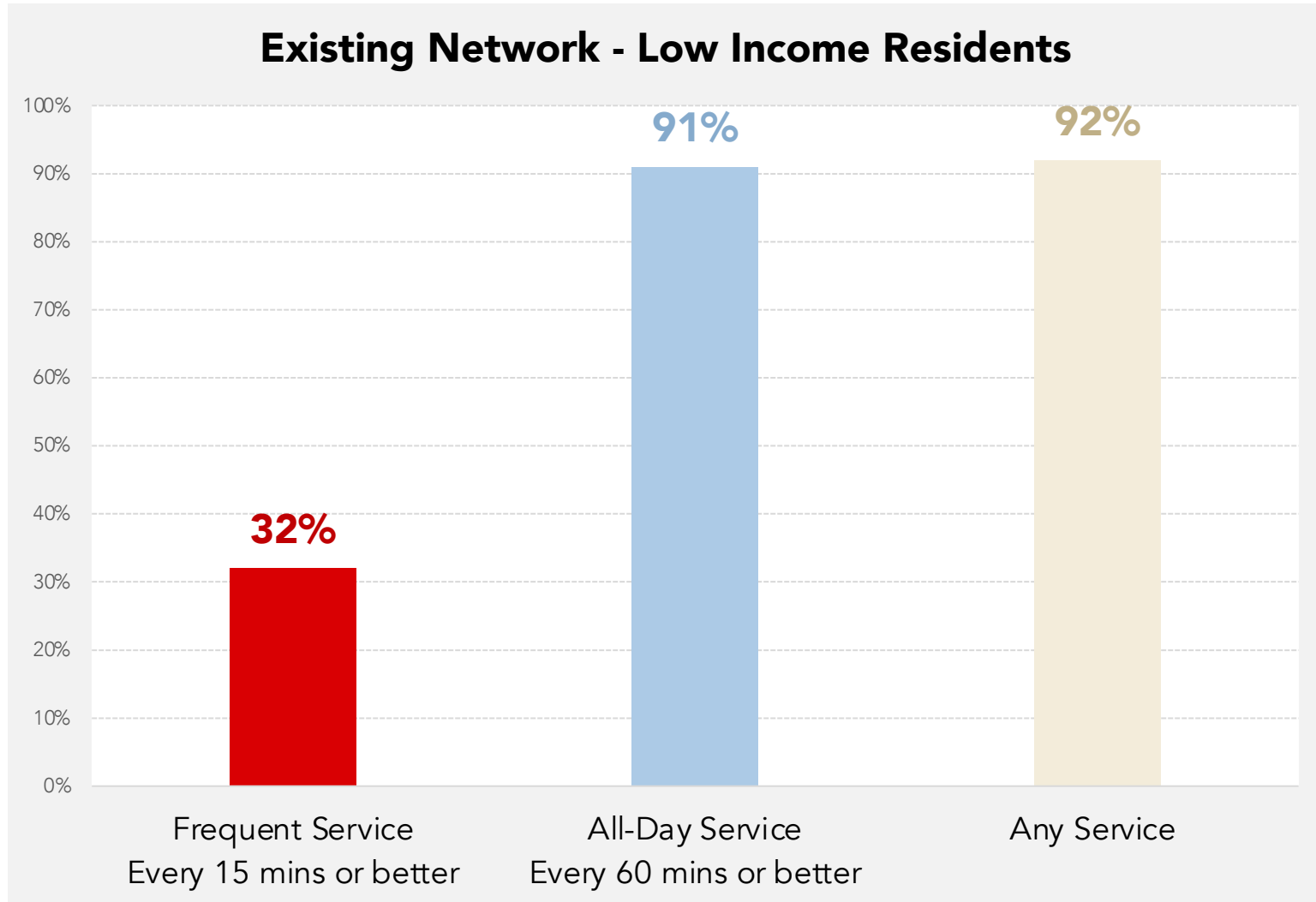
How many people are near transit service in Madison?

## Draft Plan - All Residents



# Proximity + Equity

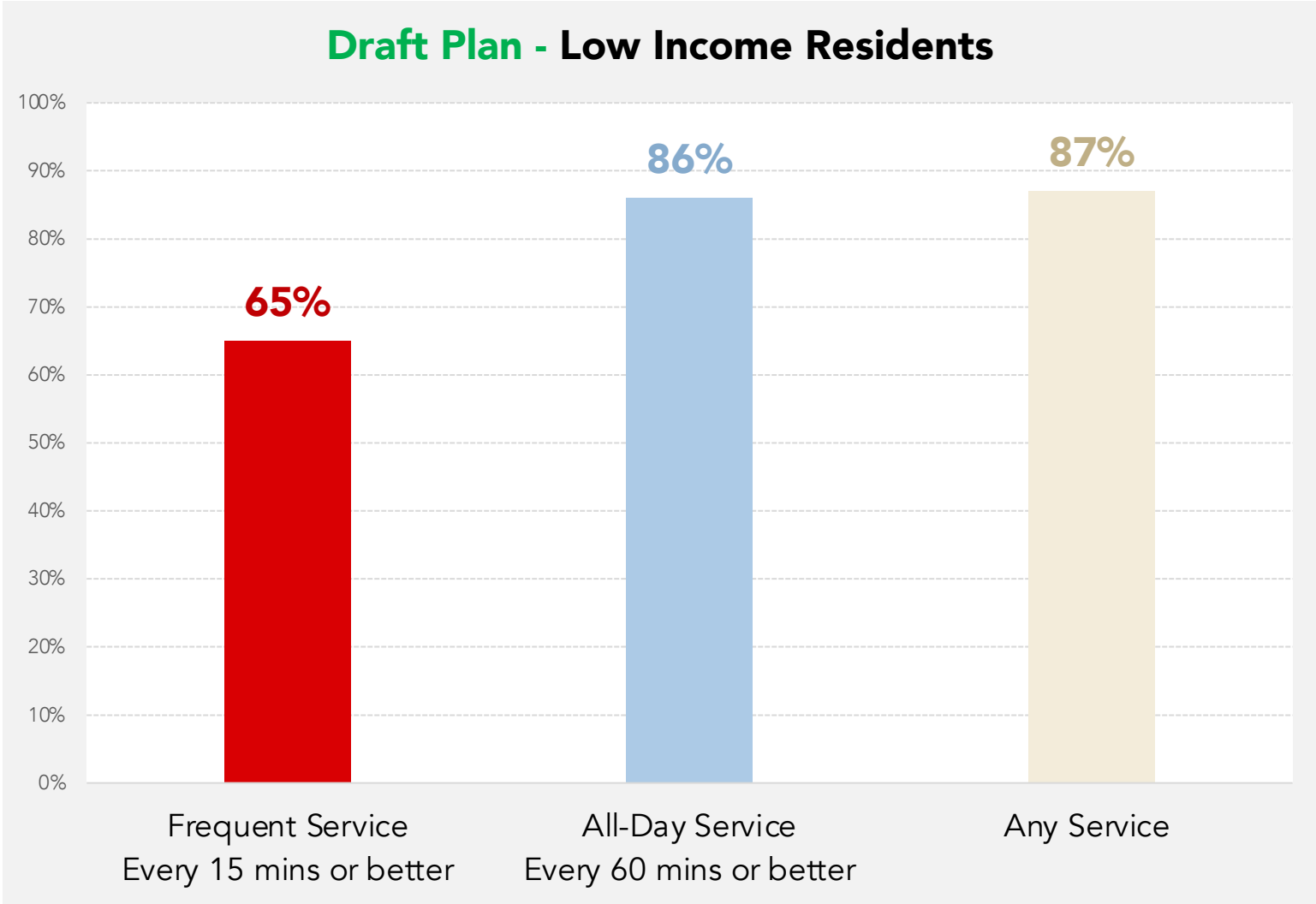
How many people are near transit service in Madison?





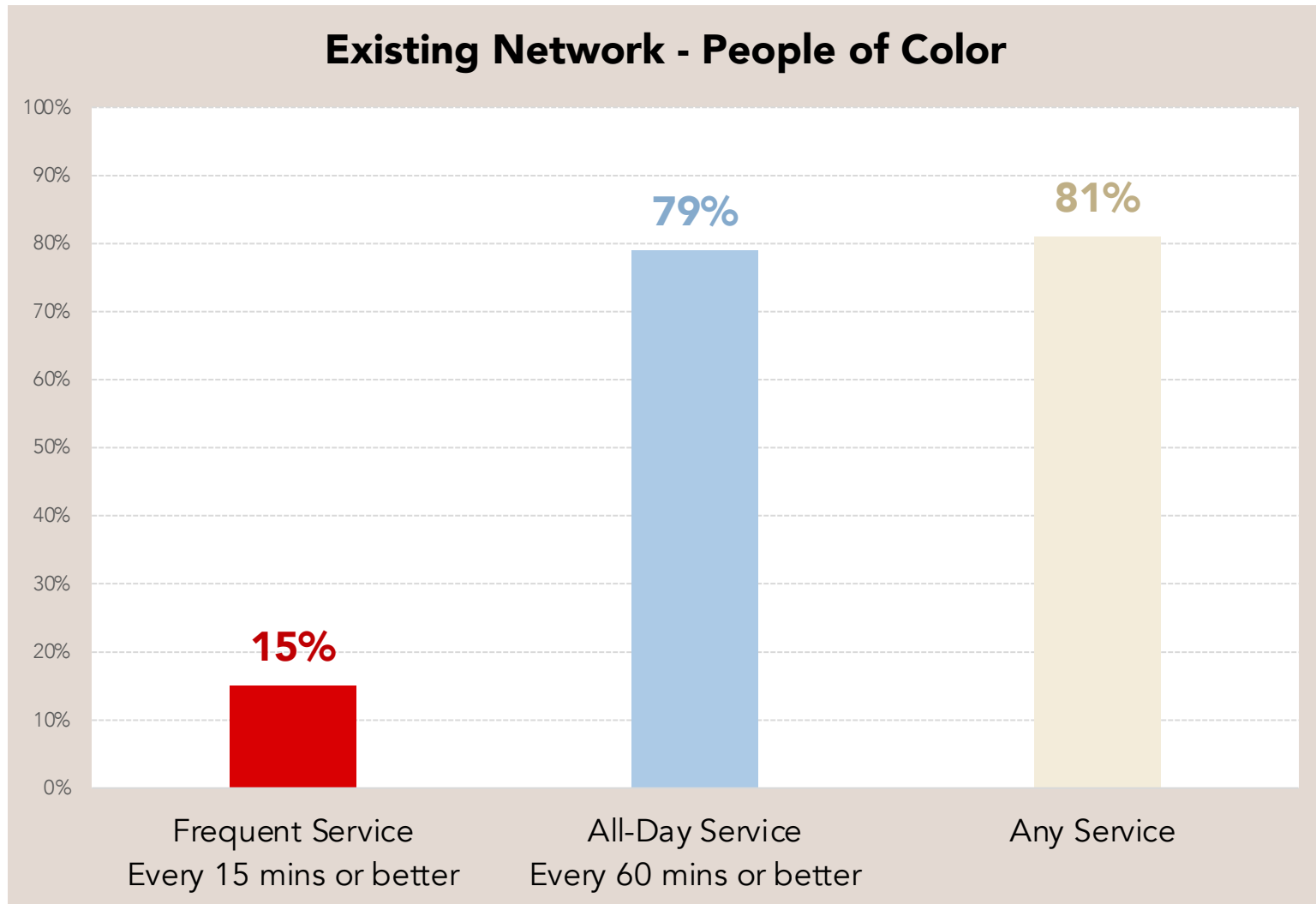
# Proximity + Equity

How many people are near transit service in Madison?



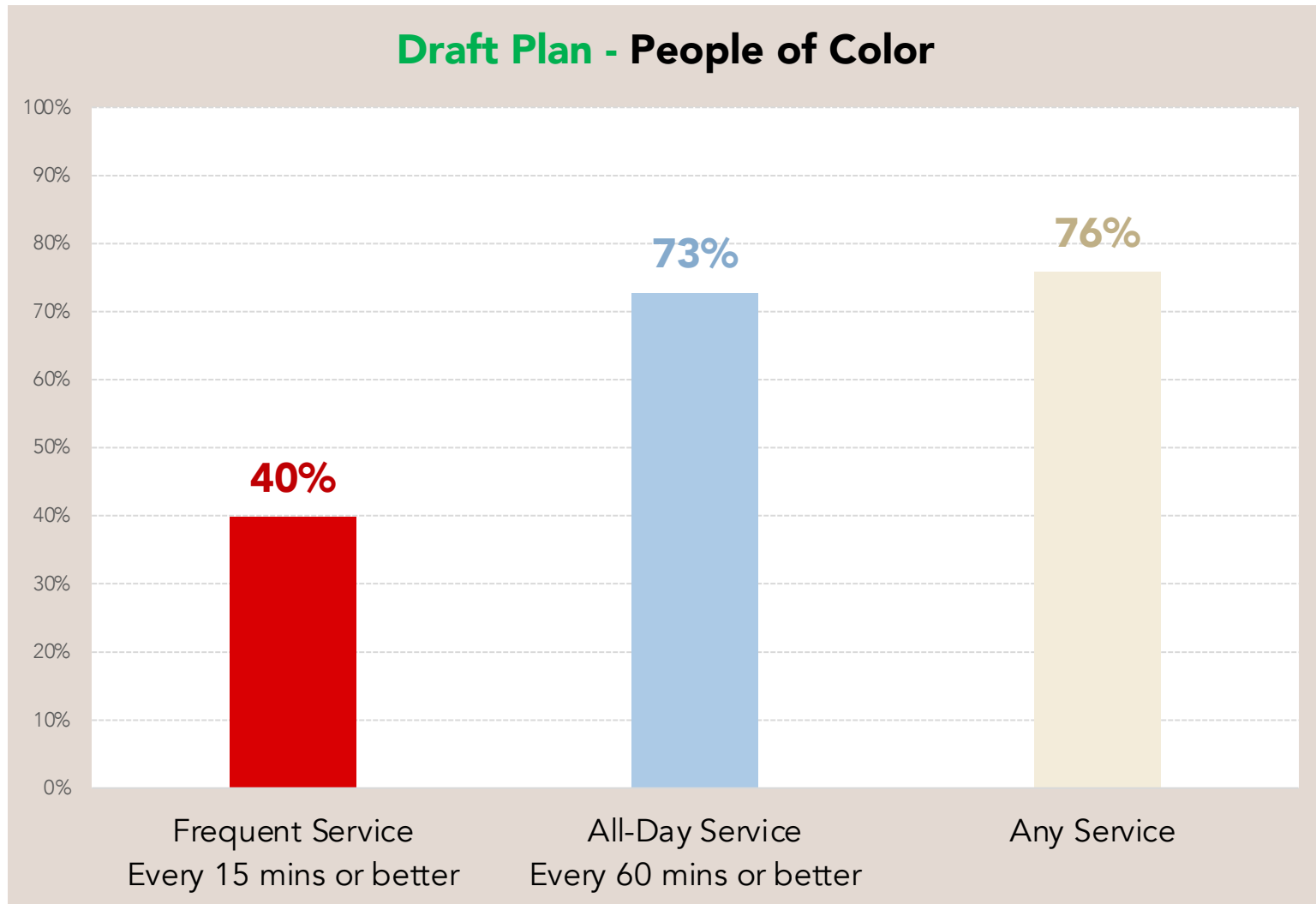
# Proximity + Equity

How many people are near transit service in Madison?



# Proximity + Equity

How many people are near transit service in Madison?



---

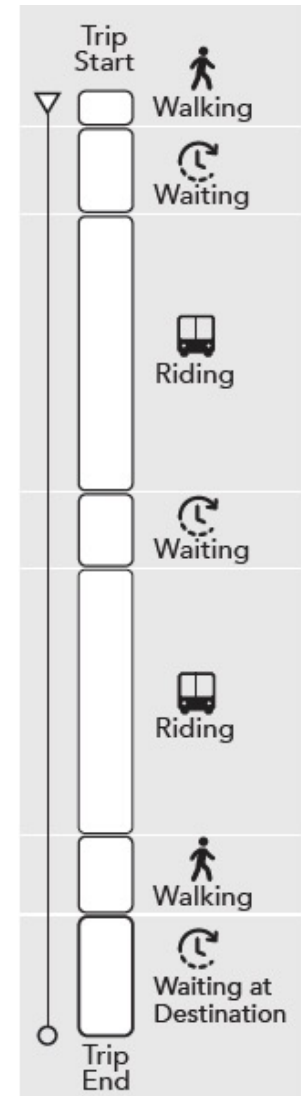
# Comparing Key Outcomes

## Access to places within 45 minutes

# Access

How many places can you reach within 45 minutes?

- When we say you can get somewhere in 45 minutes, that includes the time it takes to:
  - **Walk** to the nearest bus stop.
  - **Wait** for the next bus to come.
  - **Ride** the bus.
  - **Walk** to your destination.
  - Make any **transfers**.
- We're interested in how many places you can get to in 45 minutes, because that's about the amount of time it takes to drive from one end of Madison to the other.



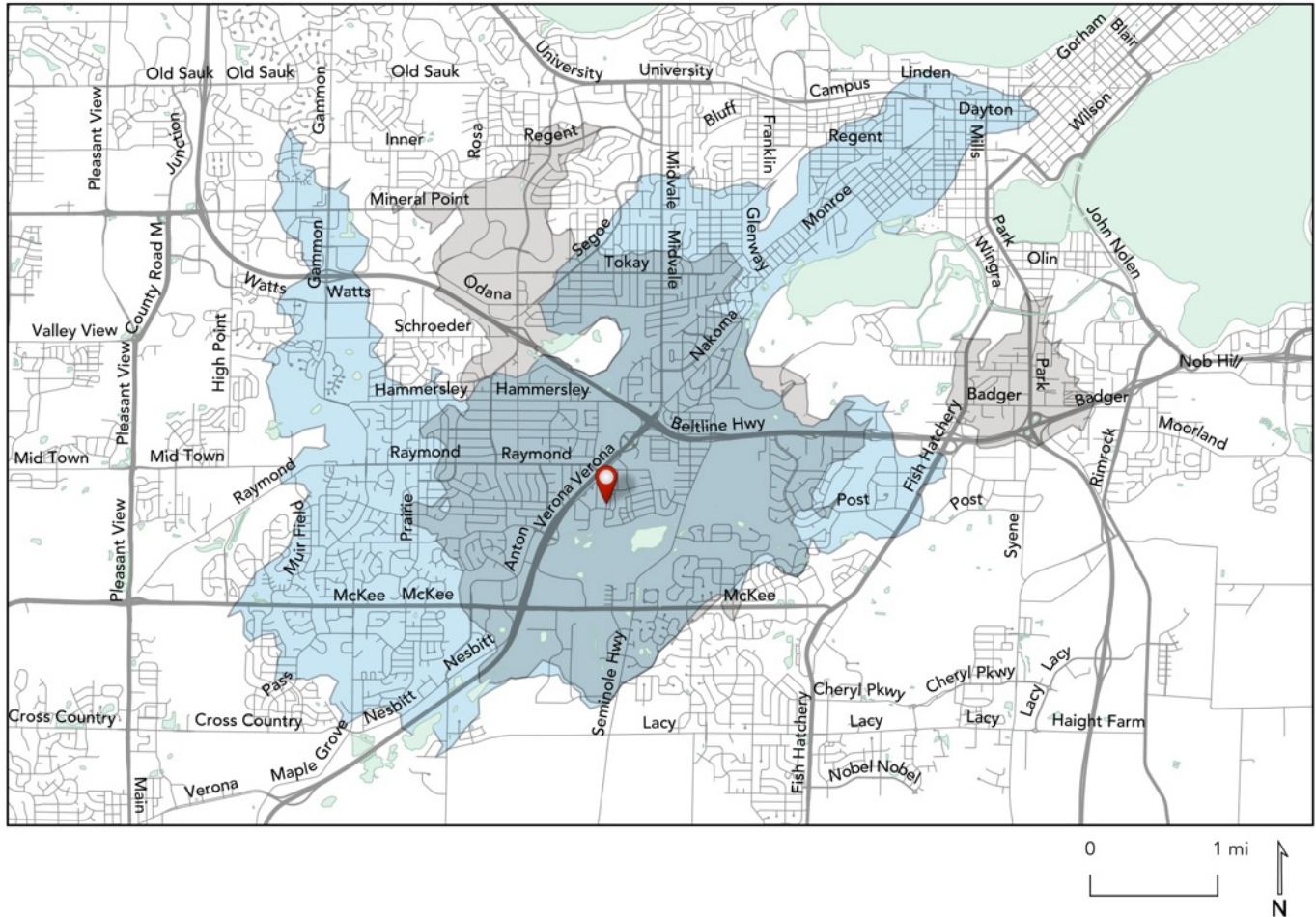
# Example of access change – Allied & Lovell

For someone located at Allied Dr & Lovell, able to walk or take the bus, this map shows how the Draft Plan would change access within 45 minutes:

In light blue, improvement.  
Areas newly reachable in 45 minutes or less.

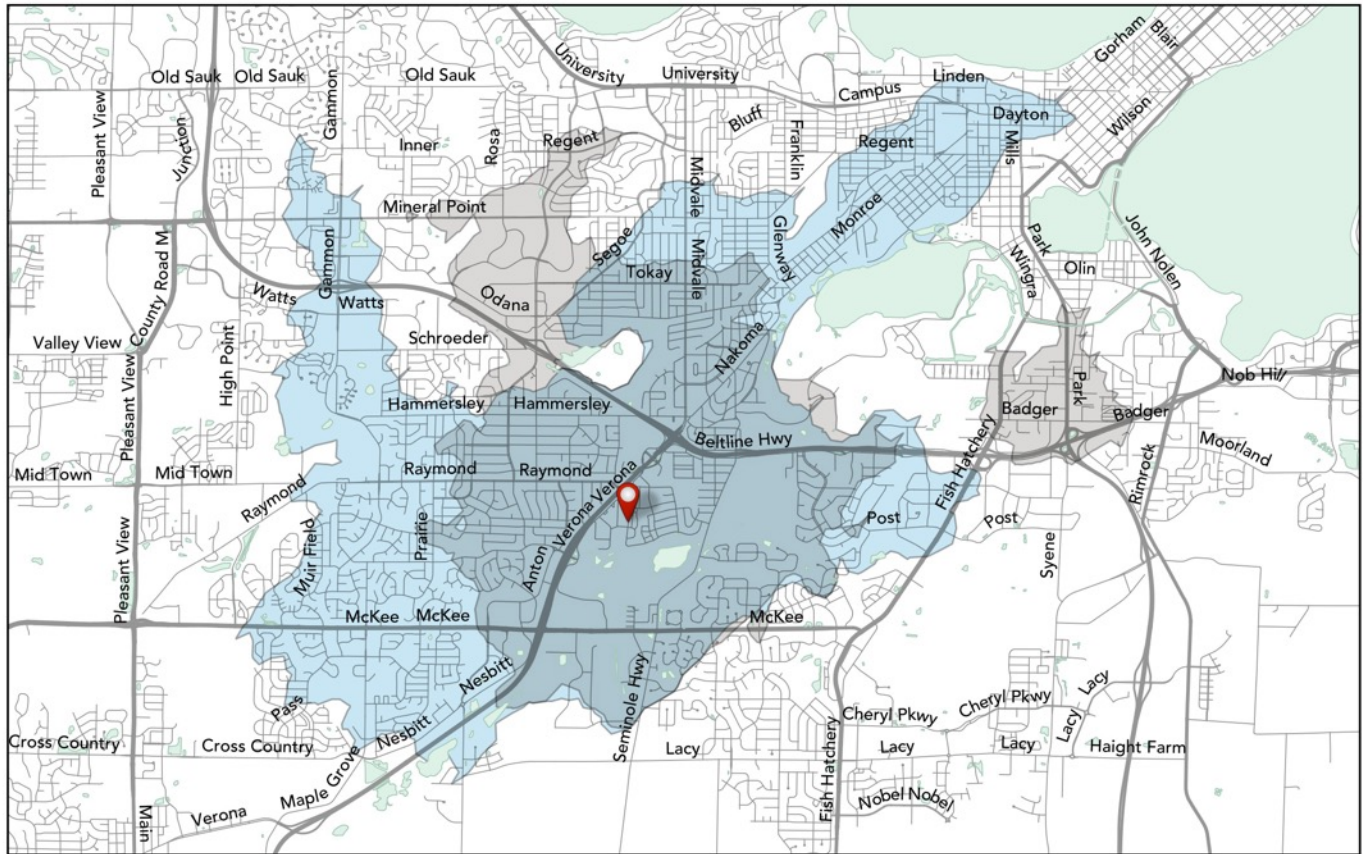
In dark blue, no change.  
Areas still reachable in 45 minutes or less.

In gray, losses.  
Areas no longer reachable in 45 minutes or less.





# Example of access change – Allied & Lovell



*We can calculate how many people and jobs are in those areas, to understand the overall impact.*

|   | Existing Network | Draft Plan Network | <b>Change</b>  | <b>% Change</b> |
|---|------------------|--------------------|----------------|-----------------|
| <b>Residents Accessible in 45 minutes or less</b> | 34,900           | 73,900             | <b>+39,000</b> | <b>+111.5%</b>  |
| <b>Jobs Accessible in 45 minutes or less</b>      | 21,300           | 39,800             | <b>+18,500</b> | <b>+87.0%</b>   |

---

# Access to Jobs

How many jobs can you reach within 45 minutes?

- The maps on the following slides estimate **how many more jobs someone could reach within 45 minutes by transit** and walking, for each alternative, compared to today.
- This is a measure of the service's usefulness; **transit needs to be useful to generate ridership.**

---

# Access

How many places can you reach within 45 minutes?

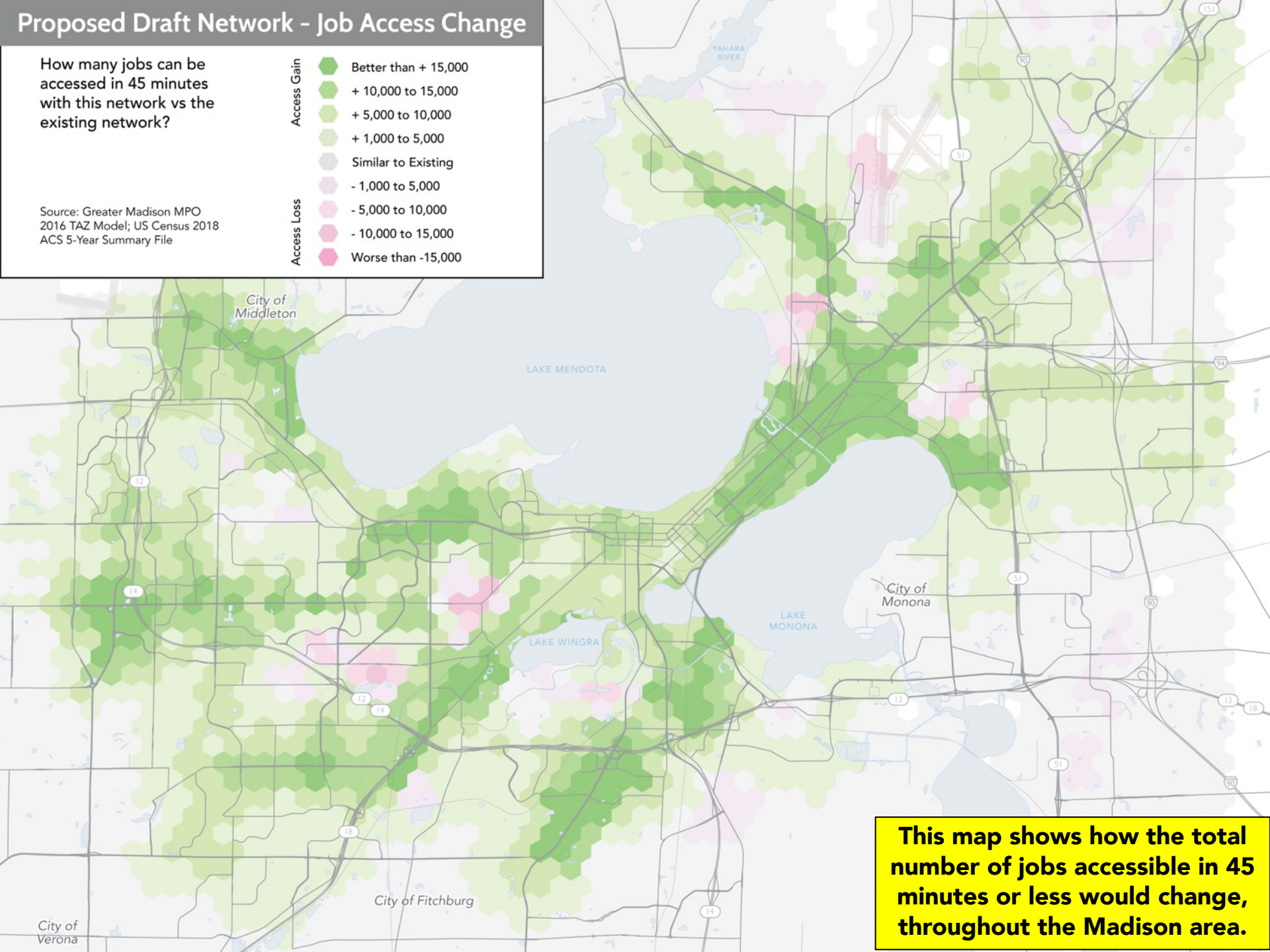
- We measure access to jobs because we have good data on jobs, not because we think transit's main purpose is commuting.
- Access to jobs matters for many trips, because most of the places people need to go are places of employment.
- **This measure is not a prediction of ridership change.**

# Proposed Draft Network - Job Access Change

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

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

- 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



**This map shows how the total number of jobs accessible in 45 minutes or less would change, throughout the Madison area.**



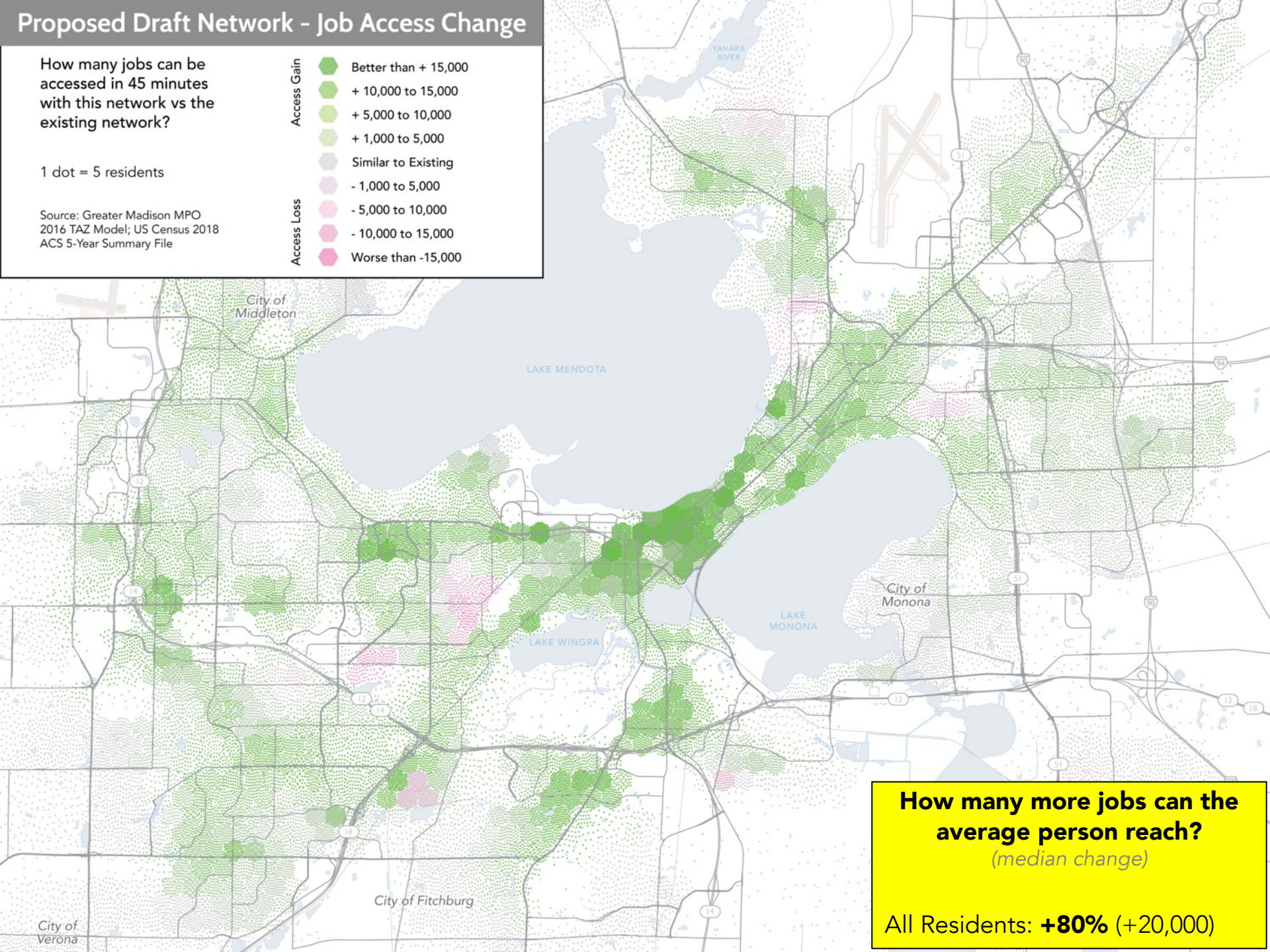
# Proposed Draft Network - Job Access Change

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

1 dot = 5 residents

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

- 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



**How many more jobs can the average person reach?**  
*(median change)*

**All Residents: +80% (+20,000)**



# Proposed Draft Network - Job Access Change People of Color (1 dot per person)

**Job Access Change**

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

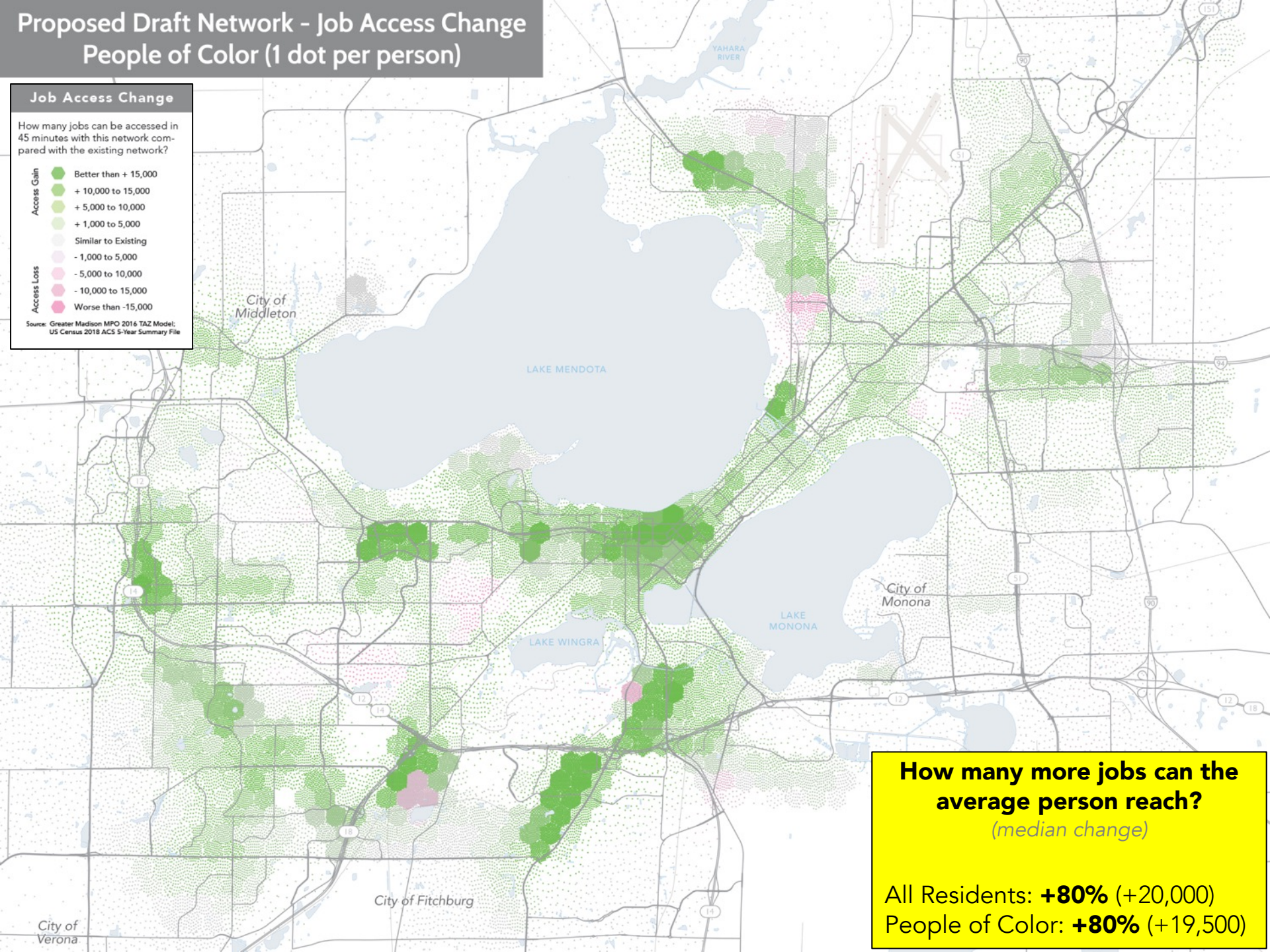
**Access Gain**

- 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



**How many more jobs can the average person reach?**  
*(median change)*

All Residents: **+80%** (+20,000)  
People of Color: **+80%** (+19,500)



# Proposed Draft Network - 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?

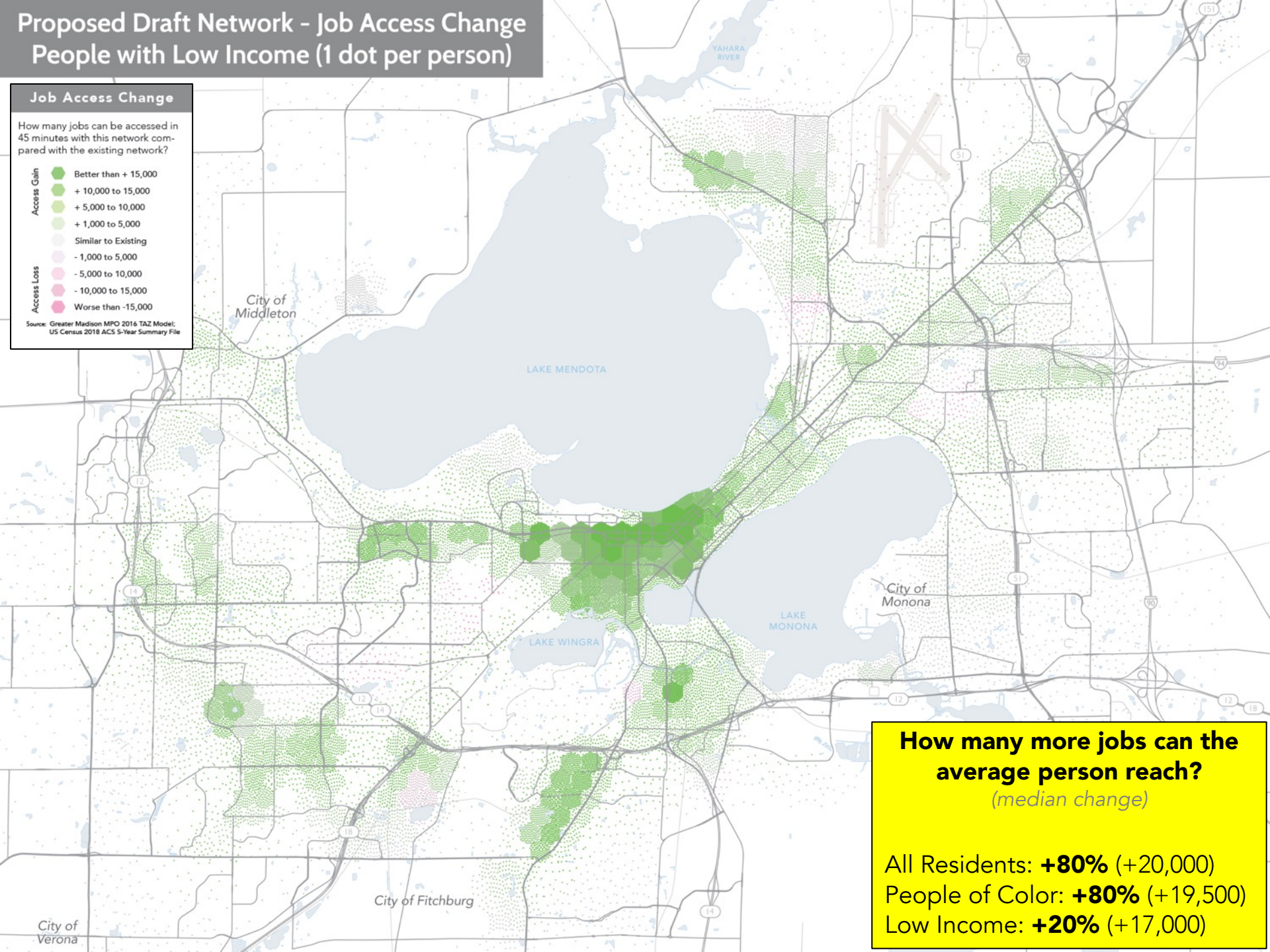
**Access Gain**

- 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



**How many more jobs can the average person reach?**  
*(median change)*

All Residents: **+80%** (+20,000)  
 People of Color: **+80%** (+19,500)  
 Low Income: **+20%** (+17,000)

---

# Next Steps

# What happens next?

## *Phase 1 (Fall 2020 – Winter 2021)*

Nov – Feb 2020  
Analyze Service, Demand, and Needs

March 2021  
Choices Report

Mar-Apr 2021  
What should our priorities be?

## *Phase 2 (Spring – Summer 2021)*

Apr – Jul 2021  
Alternatives to Illustrate Trade-offs

August 2021  
Alternatives Report

Aug – Sep 2021  
Which alternative is closer to what we want?

## *Phase 3 (Fall 2021 – Winter 2022)*

Oct – Dec 2021  
Draft Plan

January 2022  
Draft Plan Report

Feb-Mar 2022  
Did we get the plan right?

Final Plan

Implementation - Summer 2023

---

# How can you provide input?

- **Today:** you can ask questions or provide comment after the presentation.
- **After the meeting:** take the survey online!
  - Project Web Page: [mymetrobus.com/redesign](http://mymetrobus.com/redesign)
  - En Español: [mymetrobus.com/redesign\\_es](http://mymetrobus.com/redesign_es)
- **Anytime:** e-mail [MetroRedesign@cityofmadison.com](mailto:MetroRedesign@cityofmadison.com)



# Network Redesign

## Project Website

<http://mymetrobus.com/redesign>

[http://mymetrobus.com/redesign\\_es](http://mymetrobus.com/redesign_es)

## Project E-mail

[MetroRedesign@cityofmadison.com](mailto:MetroRedesign@cityofmadison.com)

We appreciate your time and participation today.

# Thank you!