



Network Redesign

# Metro Transit Network Redesign

## Draft Network Plan

Presentation to TPPB

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WALKER  
+ ASSOCIATES

Let's think about transit

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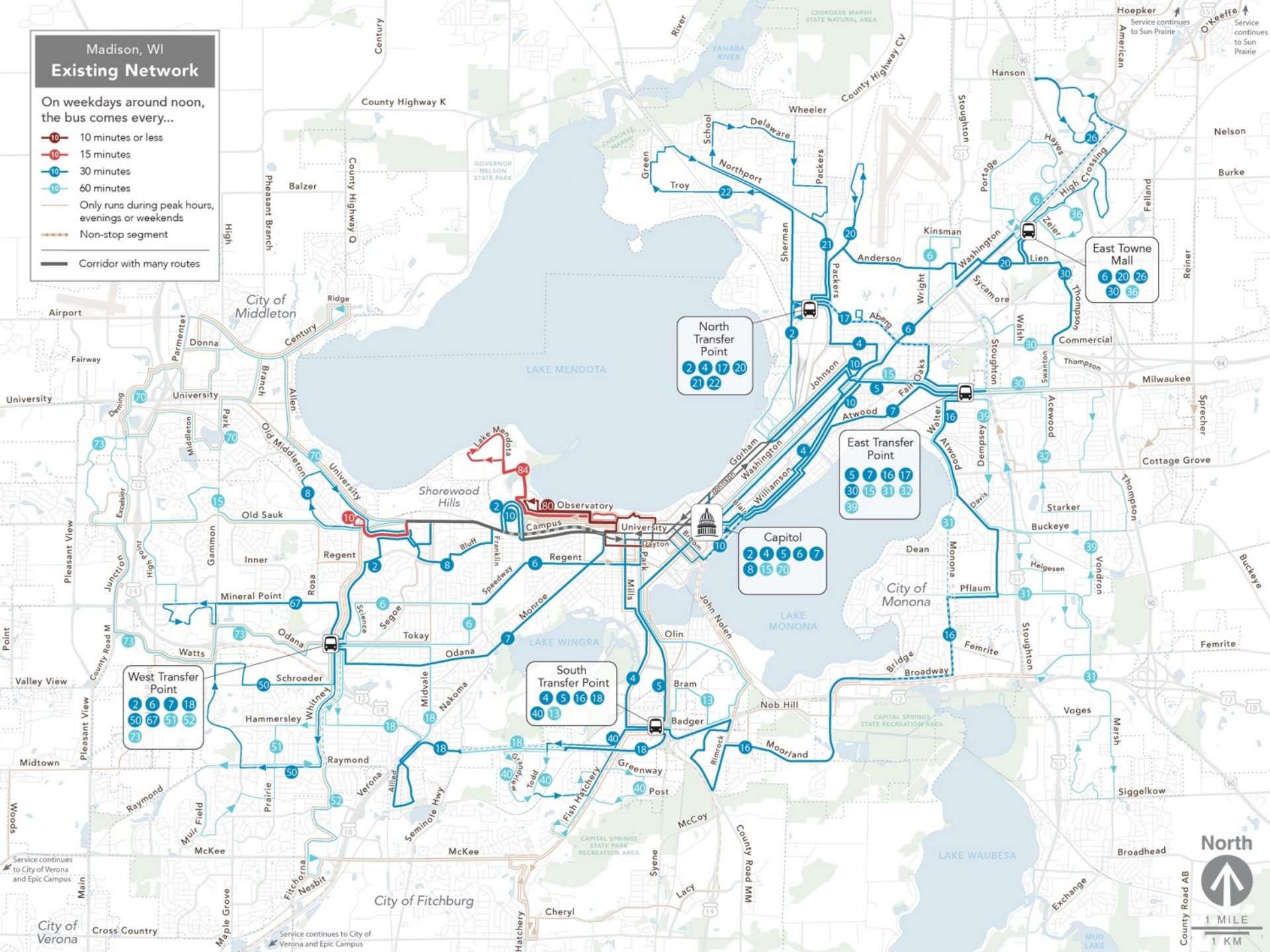
# Why are we here today?

- We are re-envisioning where and how often the bus operates in Madison.
- Two alternatives were presented for public comment.
  - The **ridership** alternative would focus frequent service on main streets.
  - The **coverage** alternative would spread service out to as many places as possible.
- In response to public comment, TPPB directed the project team to develop a plan based on the ridership alternative, but with a few changes to extend coverage to a few more areas.
- **Today, we present the Draft Plan and seek your approval to release it for public comment.**

# Madison, WI Existing Network

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

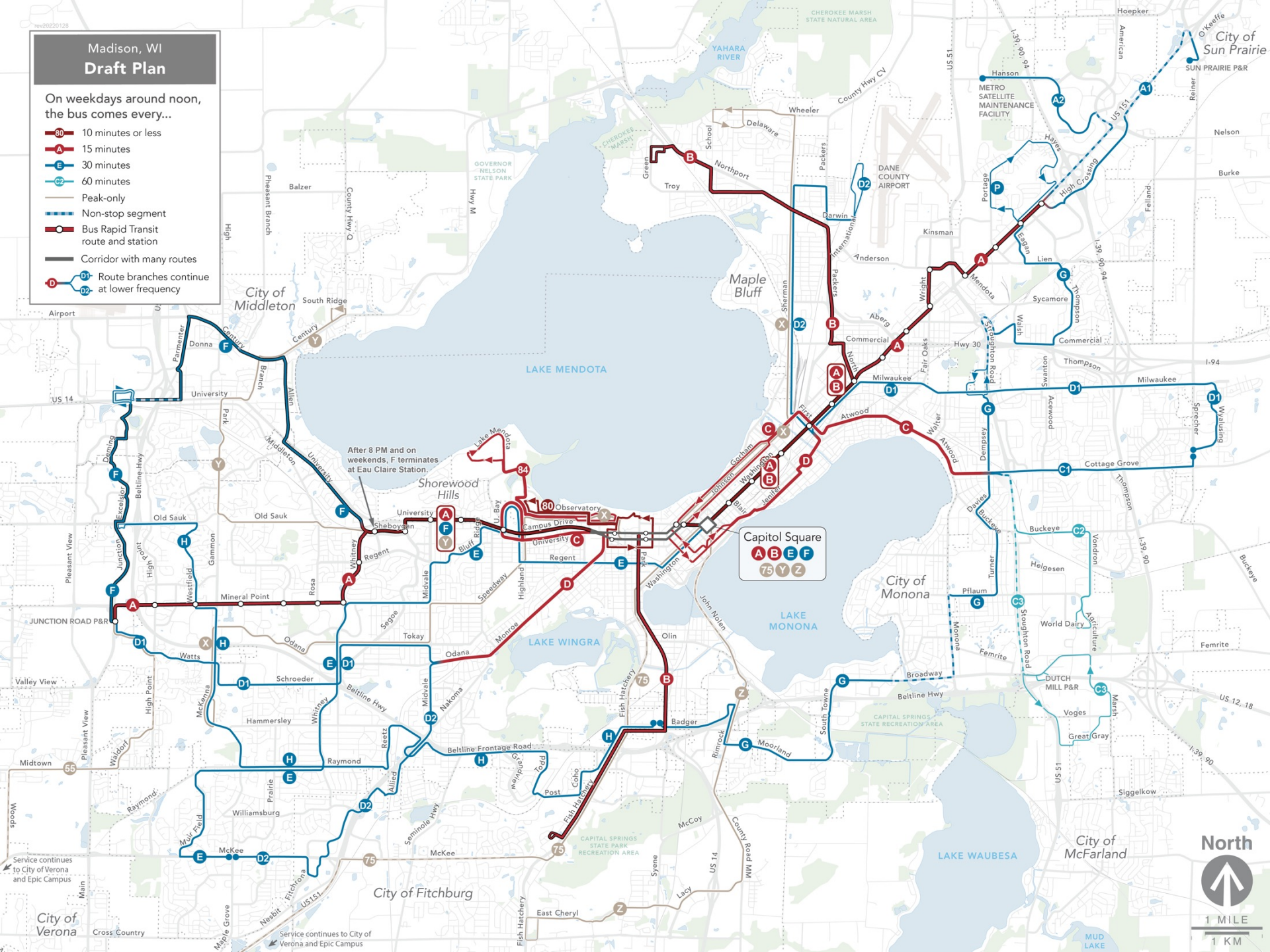
-  10 minutes or less
-  15 minutes
-  30 minutes
-  60 minutes
-  Only runs during peak hours, evenings or weekends
-  Non-stop segment
-  Corridor with many routes



**Madison, WI  
Draft Plan**

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

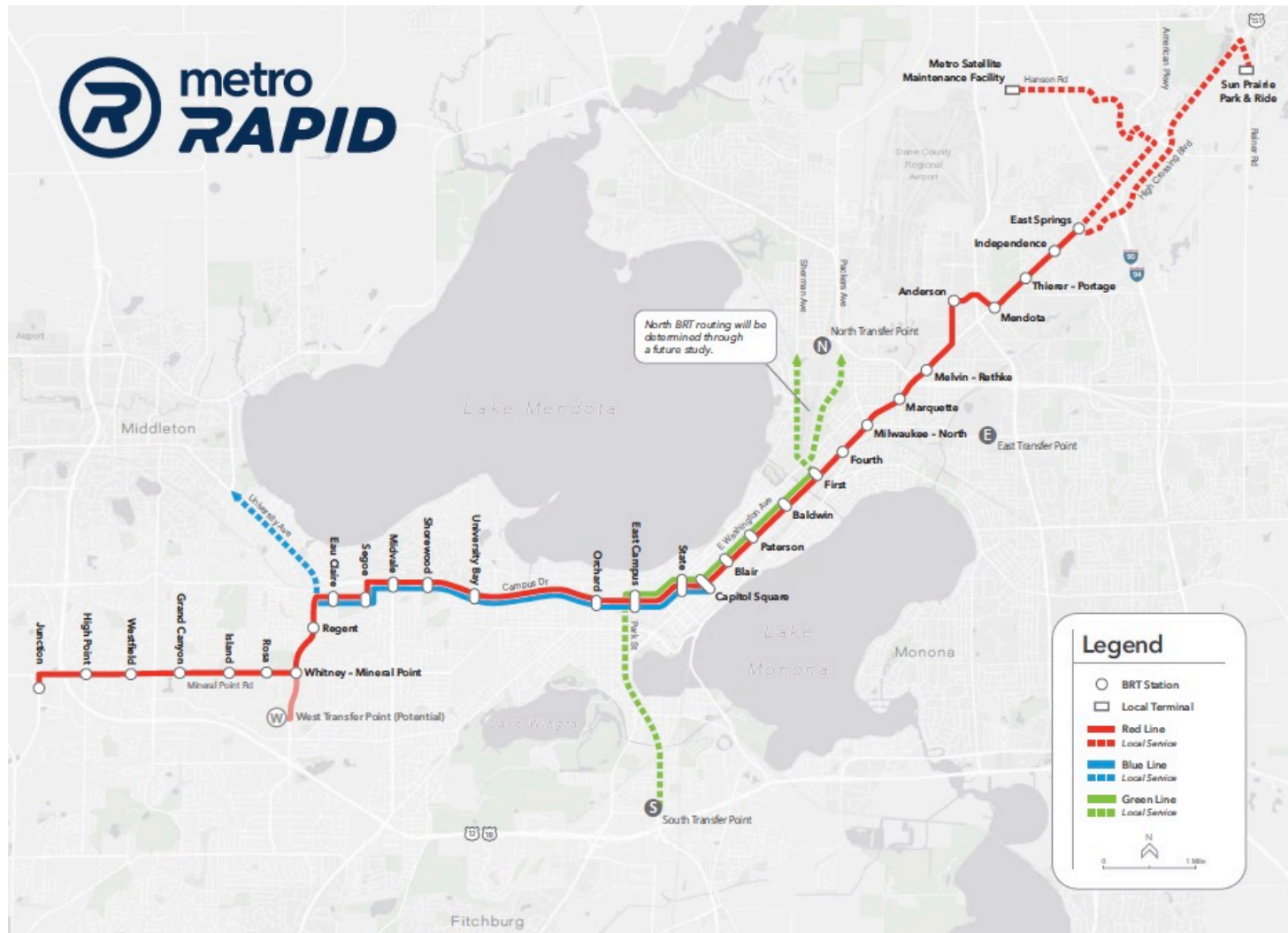
- 10 minutes or less
- A 15 minutes
- E 30 minutes
- C2 60 minutes
- Peak-only
- - - Non-stop segment
- Bus Rapid Transit route and station
- Corridor with many routes
- D D1 Route branches continue at lower frequency



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# What's in the Draft Network?

# Assumption: BRT moves forward.

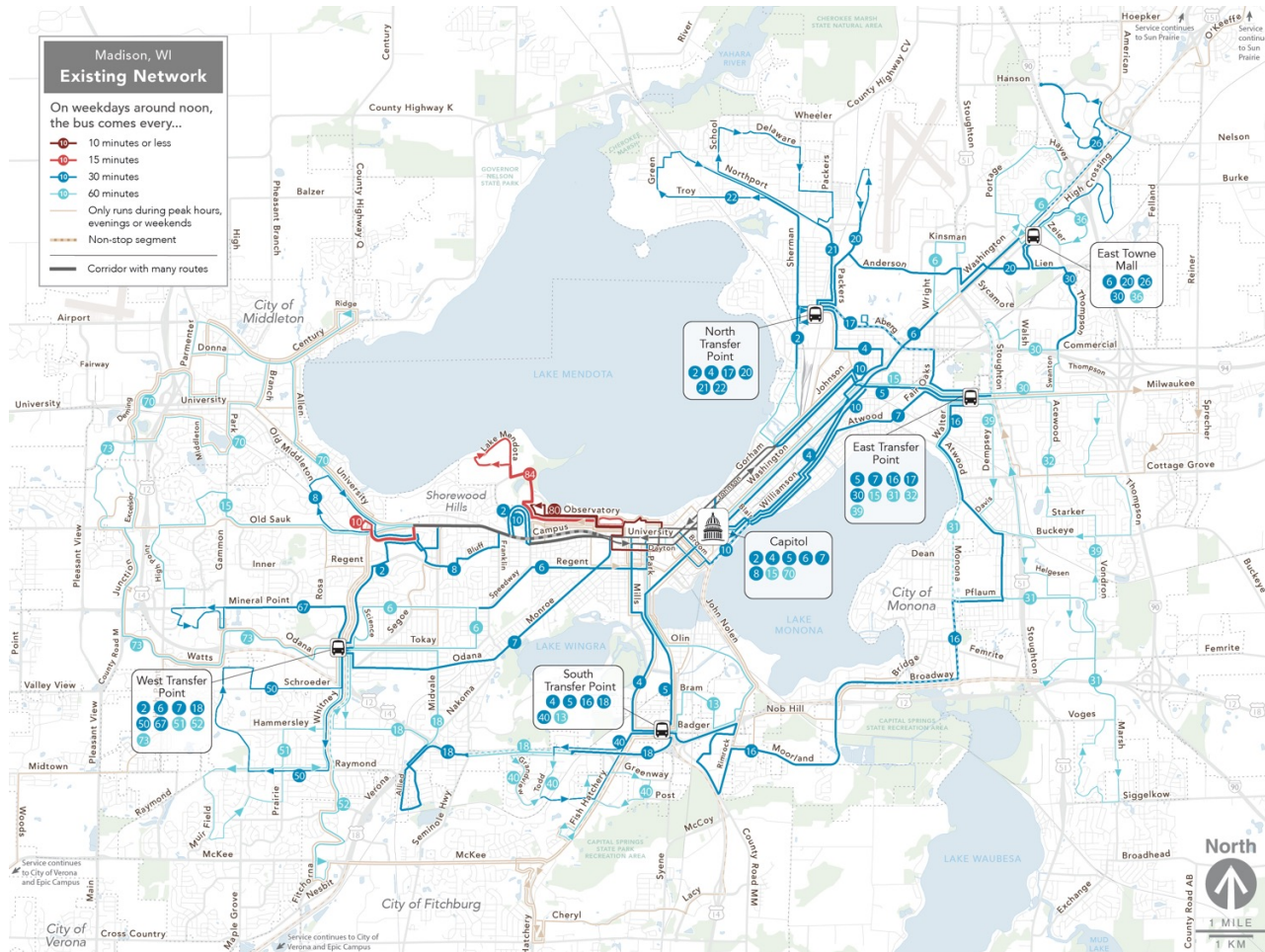


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# Assumption: Service at 2019 levels

- 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.

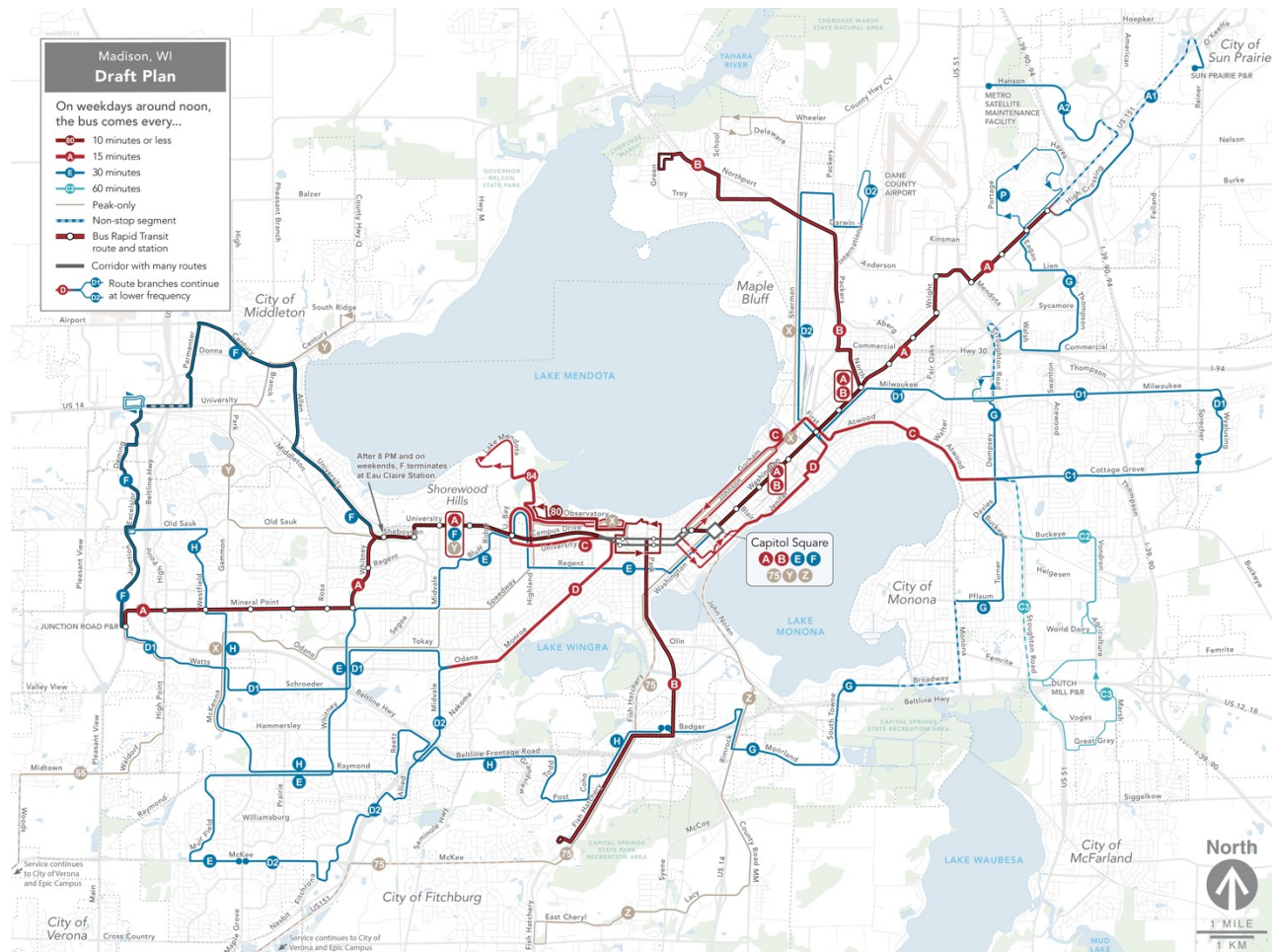
# More frequent routes



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

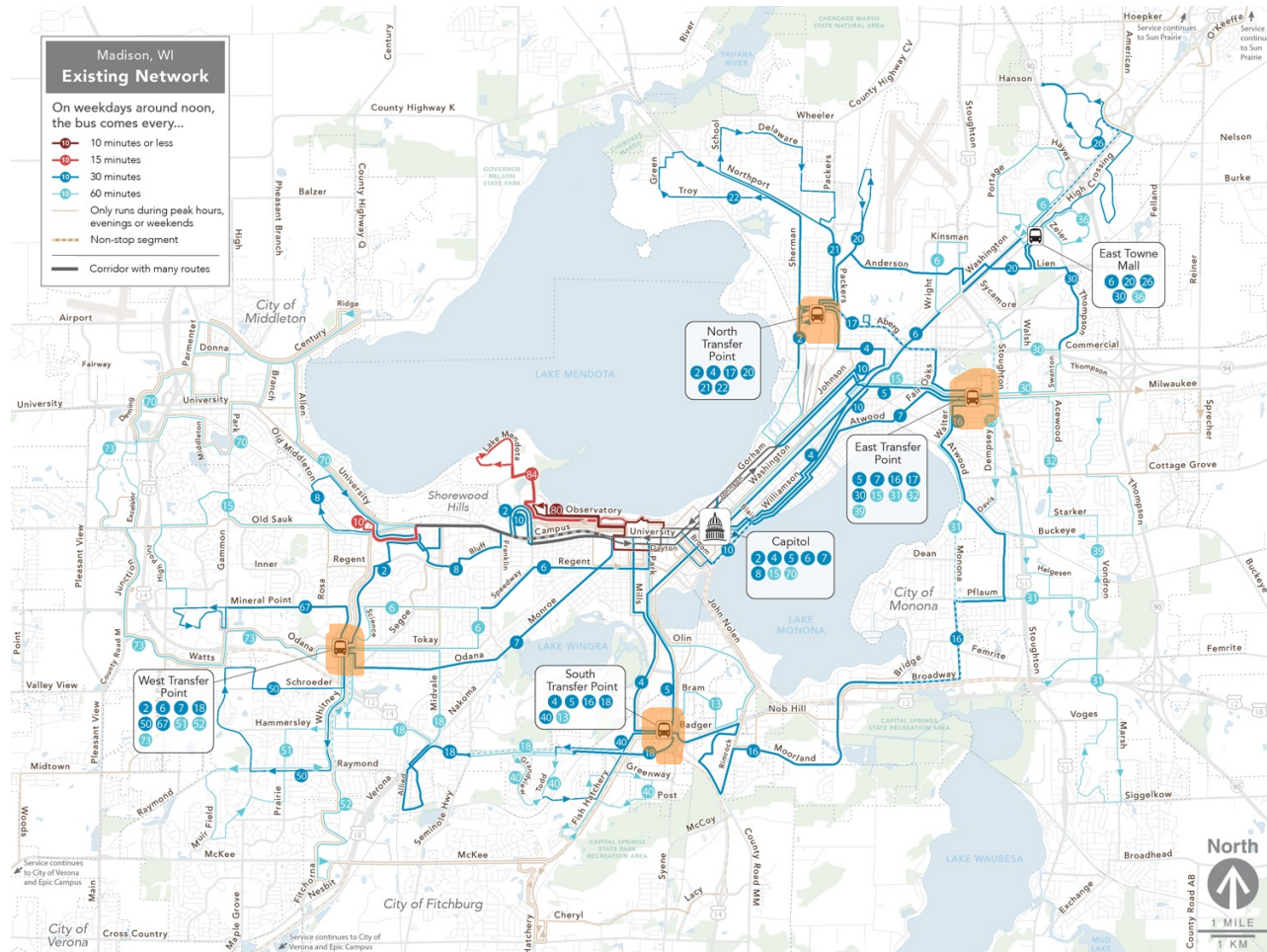


# More frequent routes



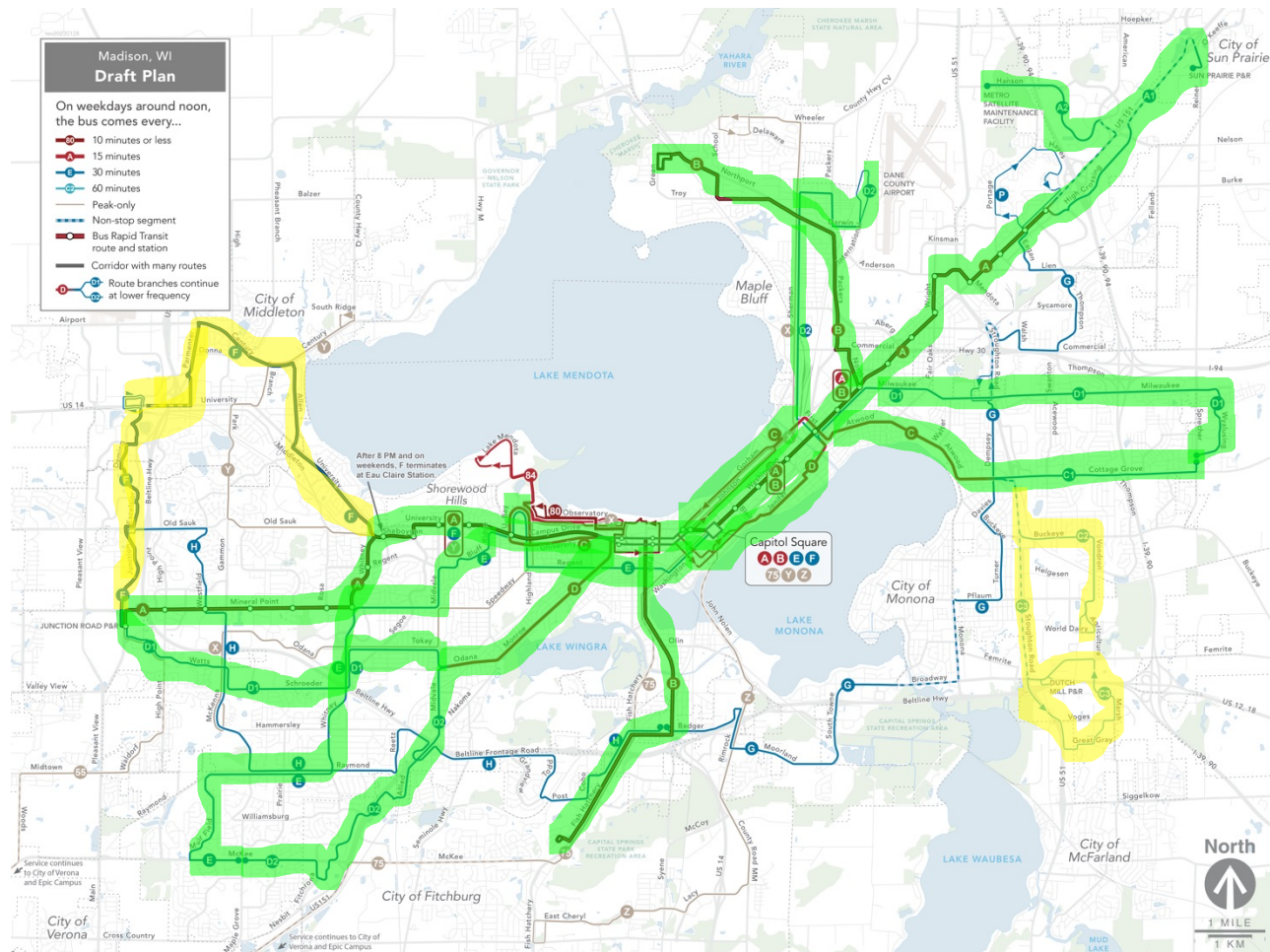
In the Draft Plan, about half the routes would run every 15 minutes, and half would run every 30 minutes.

# 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



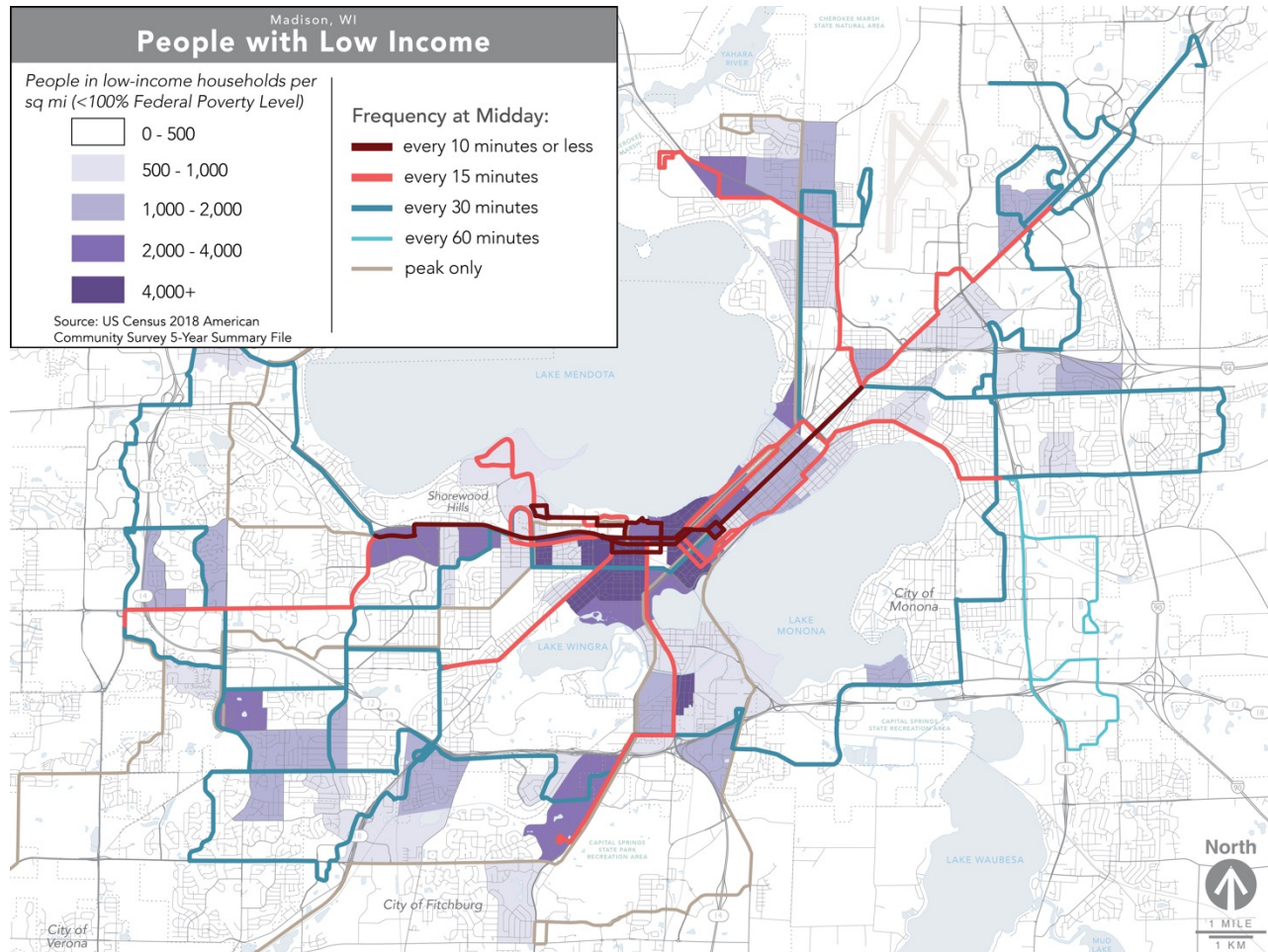
In the Draft Plan, most routes run to and through central Madison either **all of the time**, or on **weekdays from 6 AM to 7 PM**.

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# Service on fewer streets

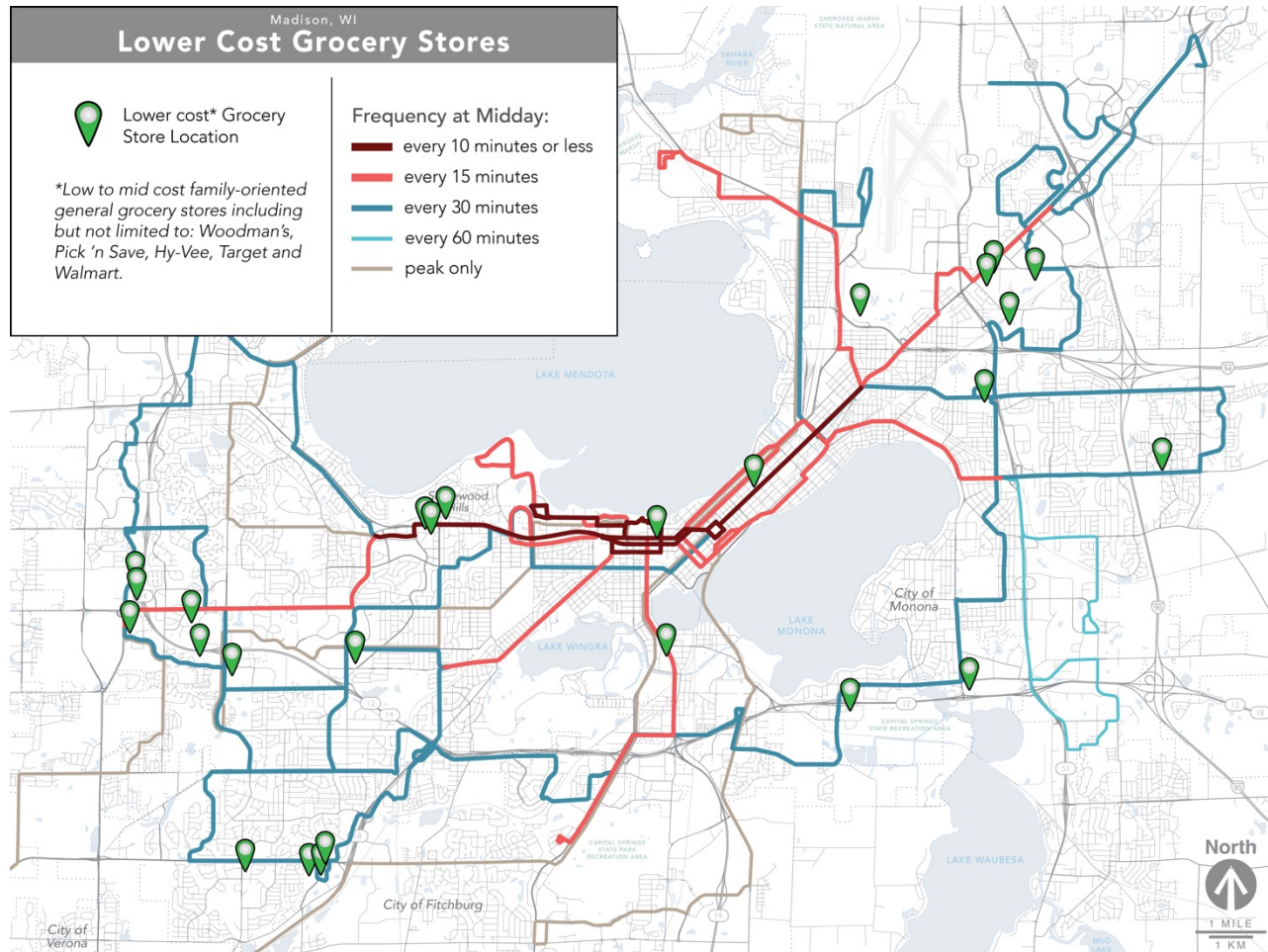
- Achieving higher frequencies without significantly expanding the service budget means providing fewer routes.
- However, the vast majority of people near service today would remain near service under this Draft Plan.
- The average walk to the nearest bus stop would become about 300 feet longer.

# Service designed with equity in mind



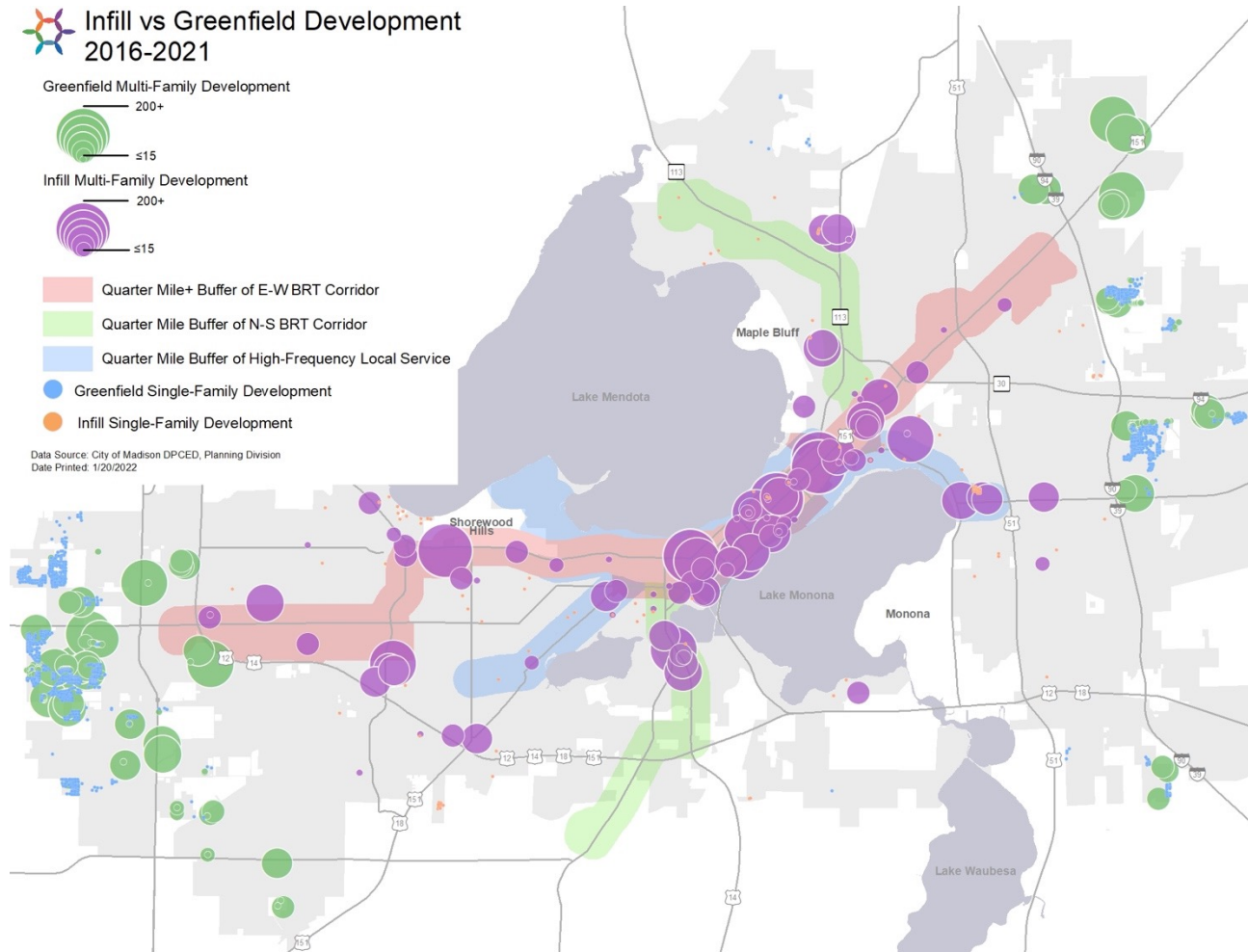
Service to all areas in Madison with concentrated low-income populations.

# Service designed with equity in mind



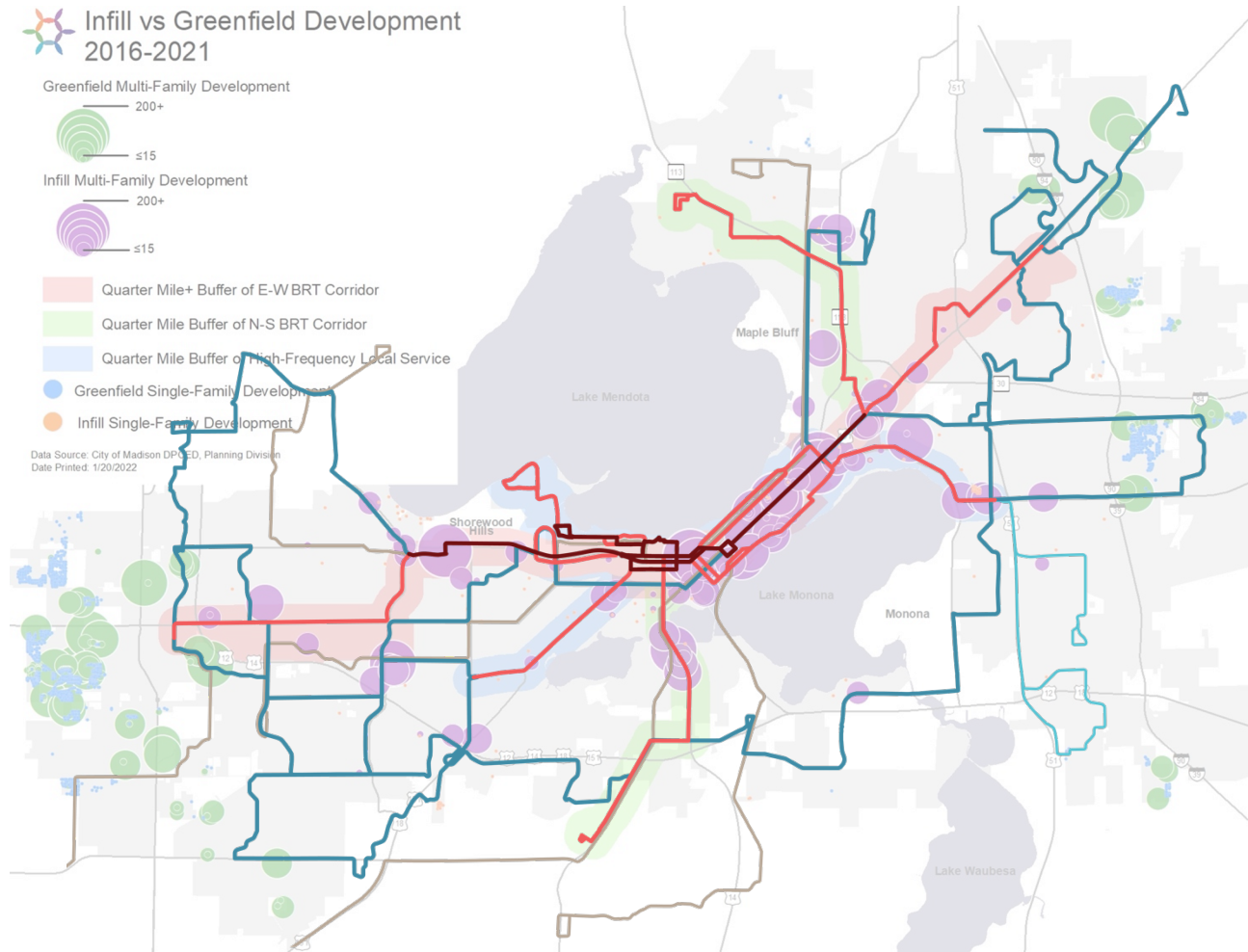
Routes designed to serve places where low-income people need to go on a regular basis.

# 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.



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# 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

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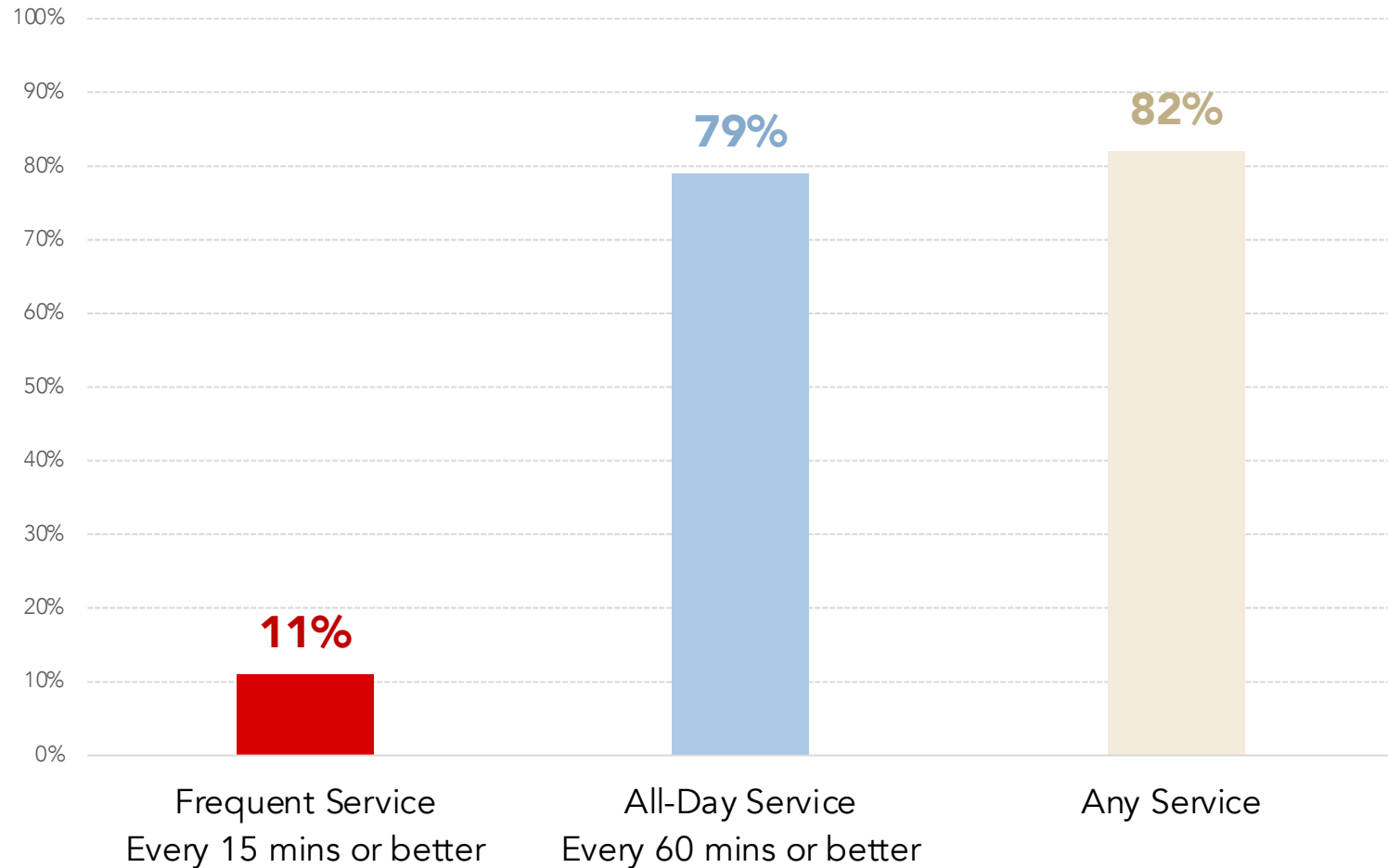
How many people are near transit service in Madison?

- Please note:
  - All of the measures shown in this presentation are for weekdays, during the middle of the day.
  - Service levels are likely to be higher at peak times, and lower on weekends and evenings.

# Proximity

How many people are near transit service in Madison?

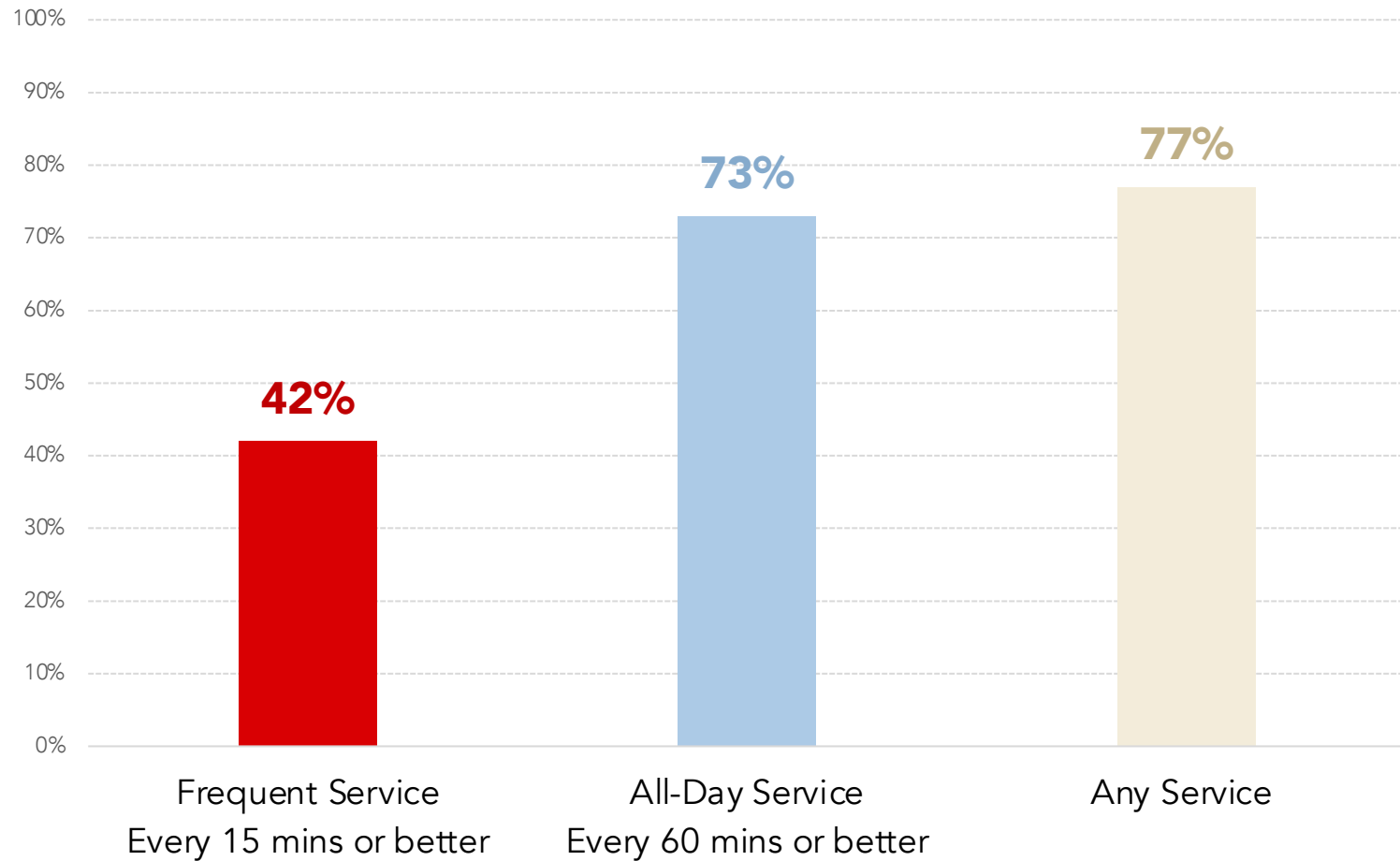
## Existing Network - All Residents



# Proximity

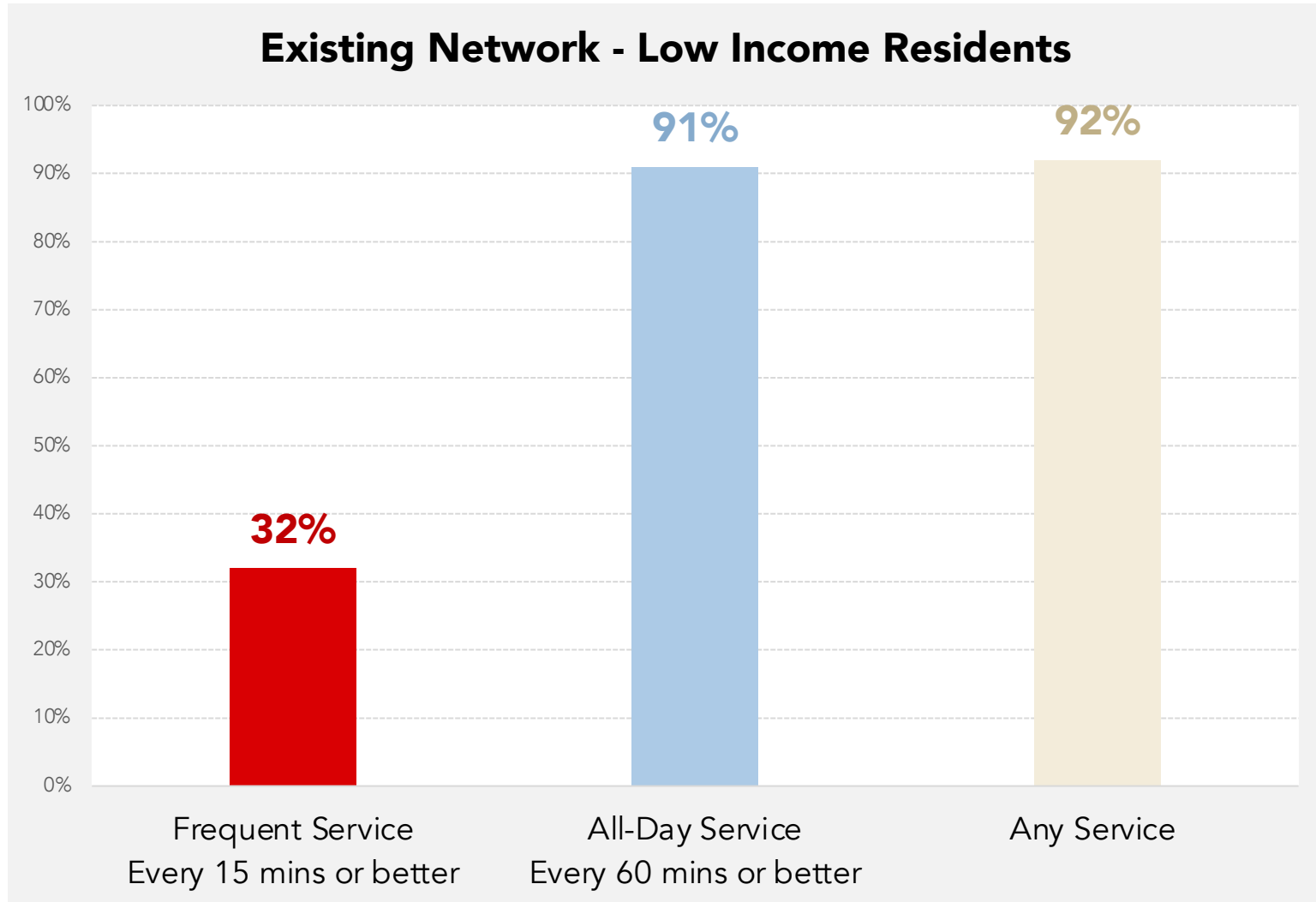
How many people are near transit service in Madison?

## Draft Plan - All Residents



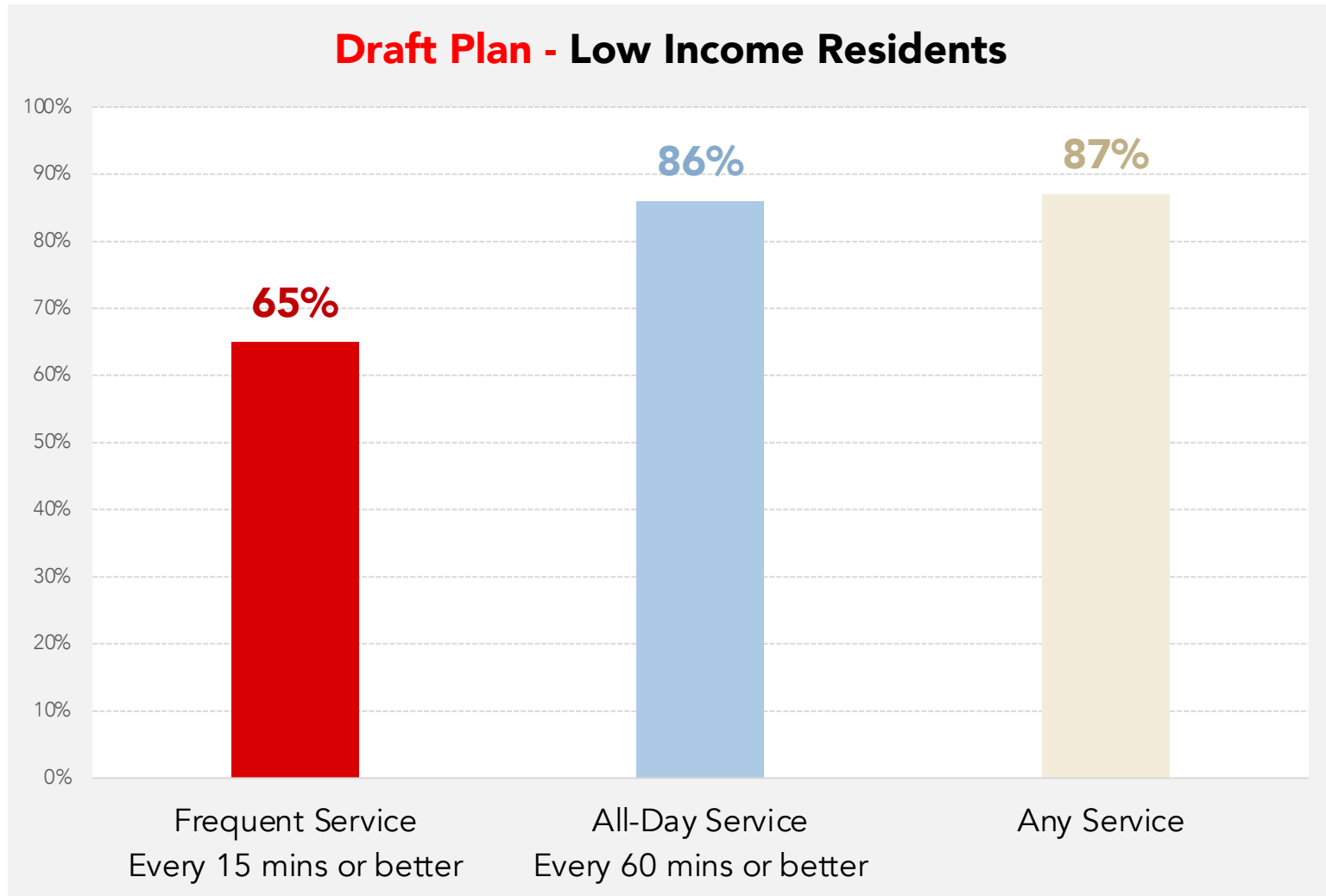
# Proximity + Equity

How many people are near transit service in Madison?



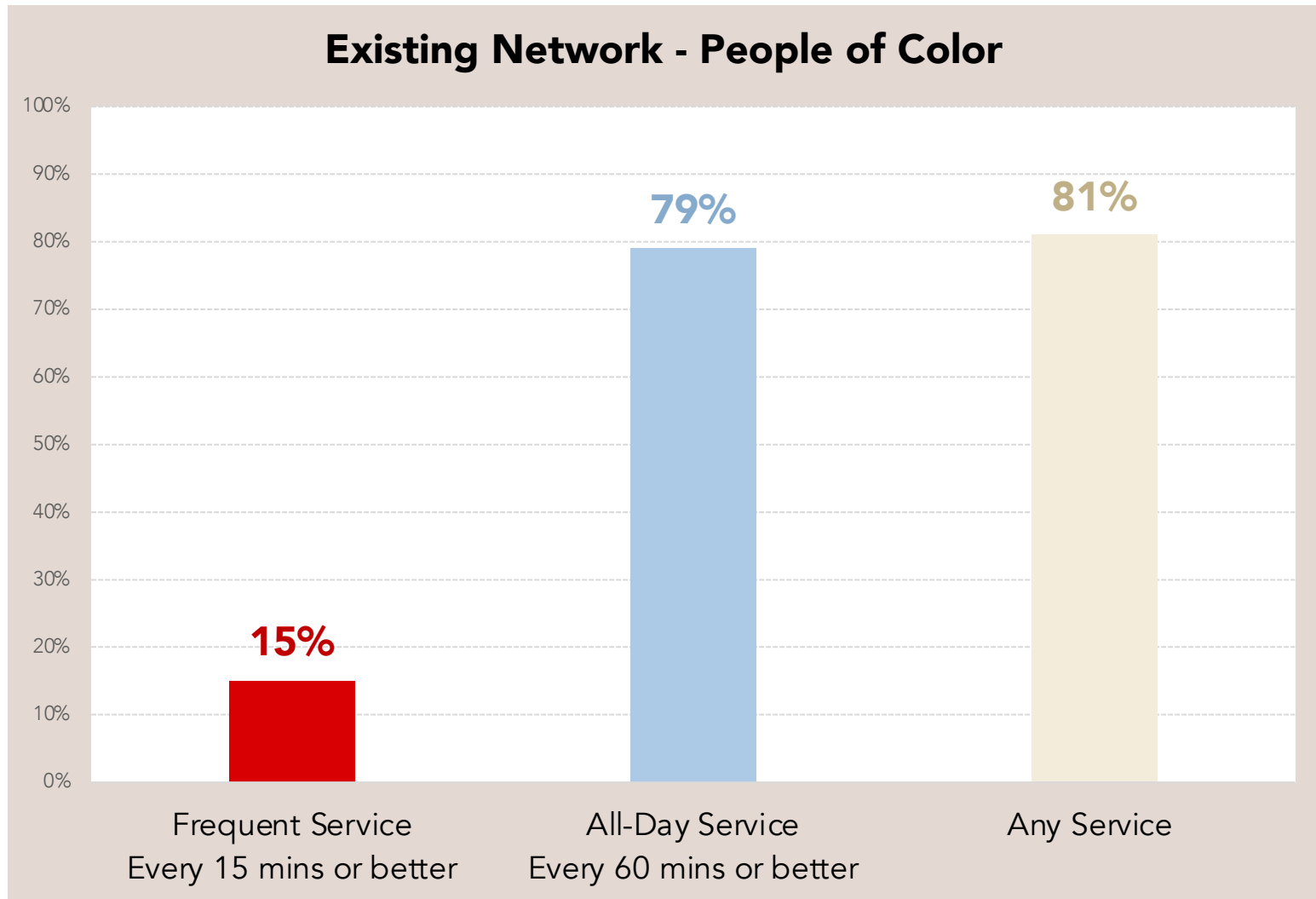
# Proximity + Equity

How many people are near transit service in Madison?



# Proximity + Equity

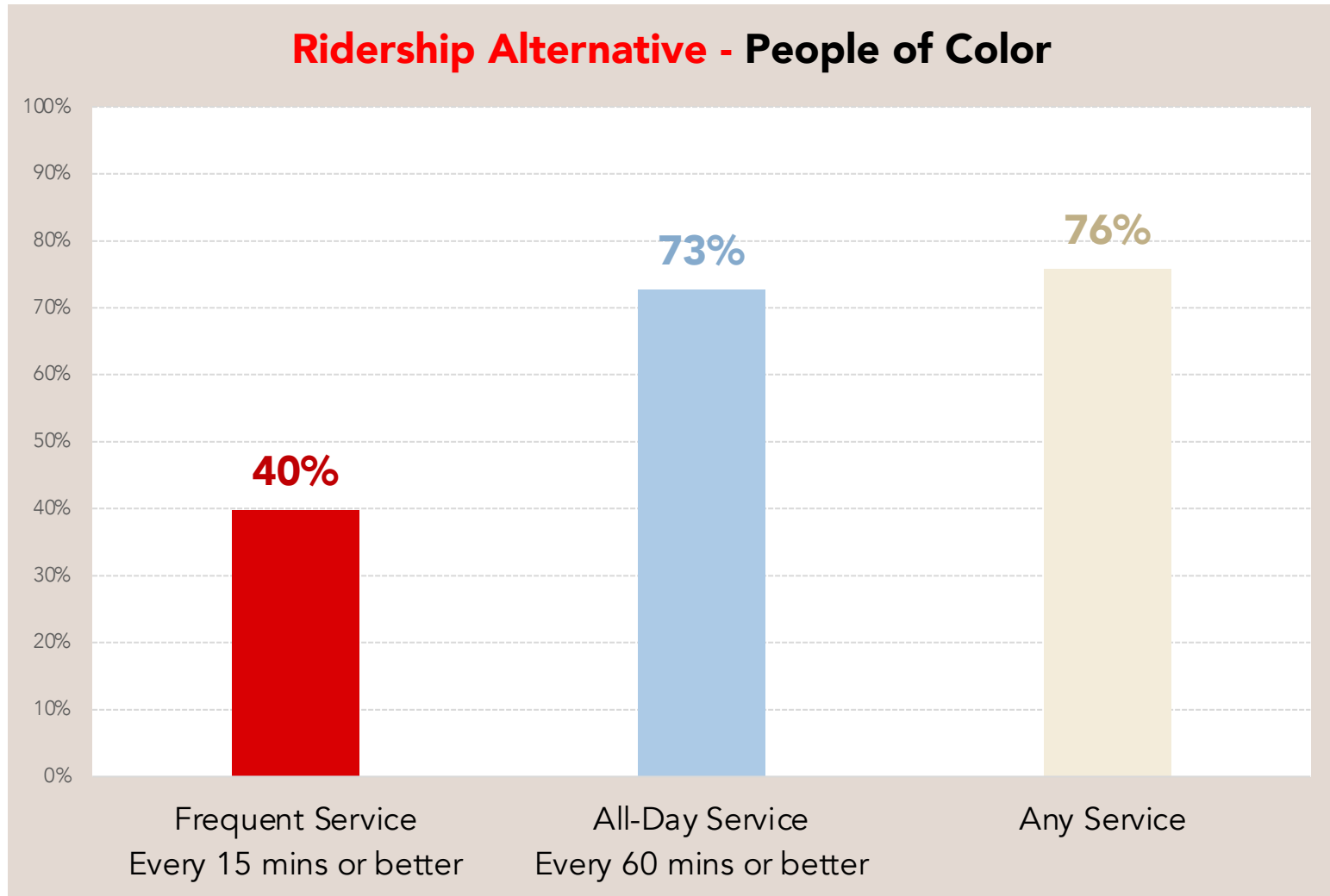
How many people are near transit service in Madison?





# Proximity + Equity

How many people are near transit service in Madison?



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# Comparing Key Outcomes

## Access to jobs within 45 minutes

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# Access

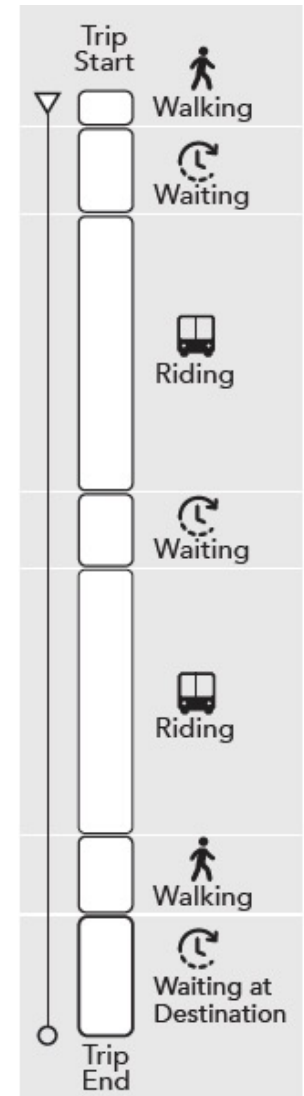
How many places can you reach within 45 minutes?

- 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.**
  - We measure access to jobs because we have good data on jobs, not because 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.**

# 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.

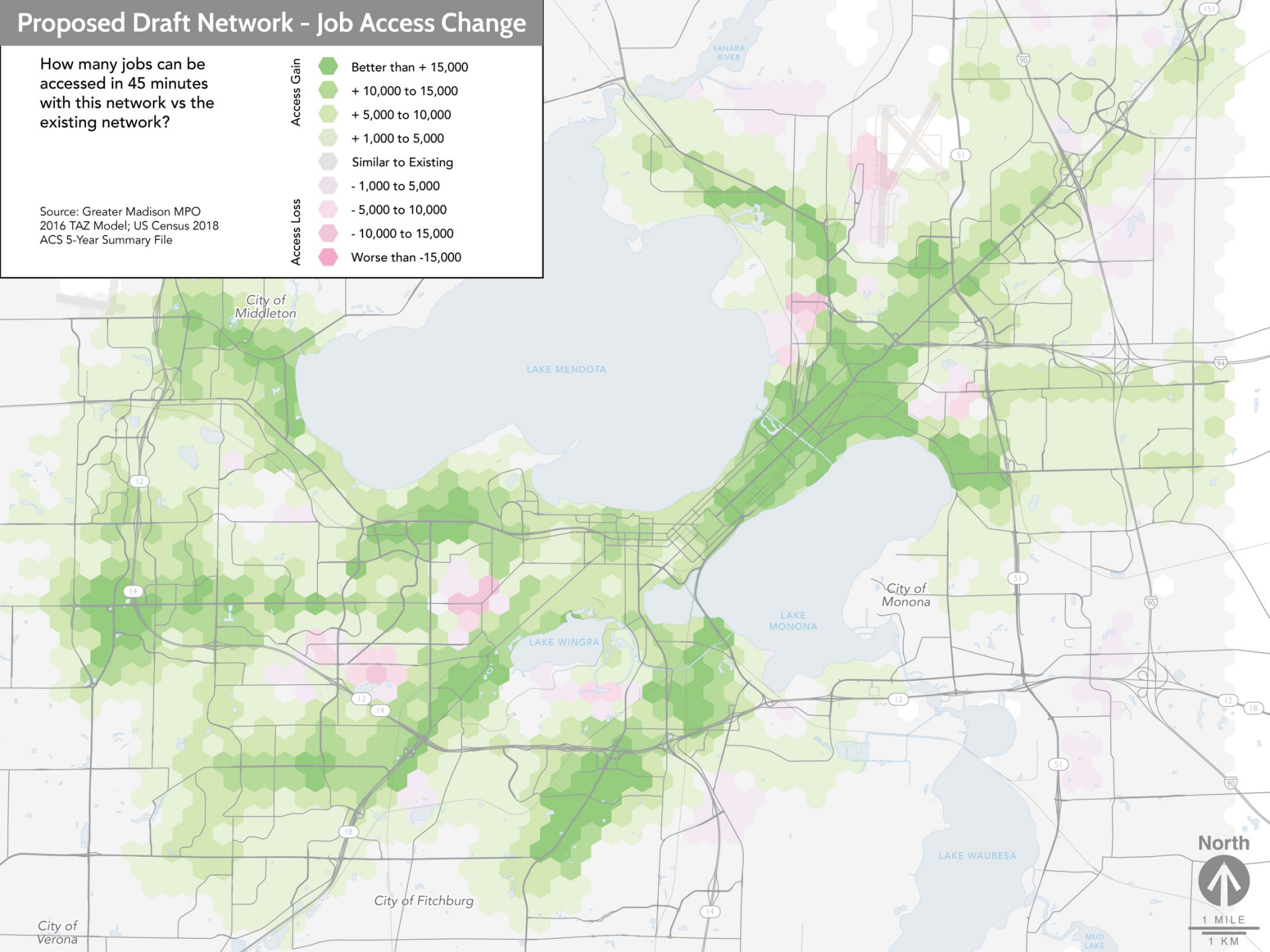


# Proposed Draft Network - Job Access Change

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
- Access Loss**
  - Similar to Existing
  - 1,000 to 5,000
  - 5,000 to 10,000
  - 10,000 to 15,000
  - Worse than -15,000



North

1 MILE  
1 KM

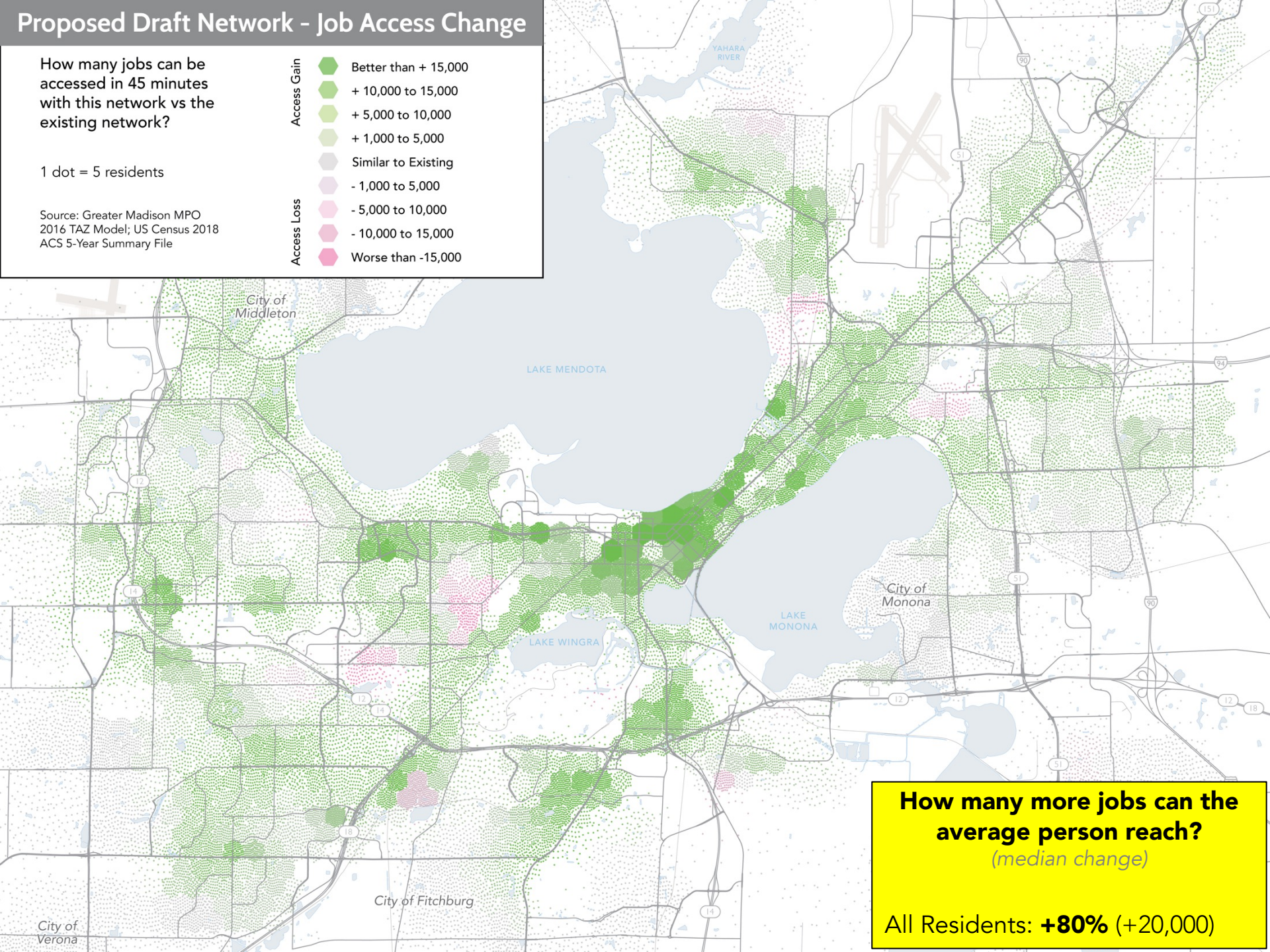
# Proposed Draft Network - Job Access Change

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?

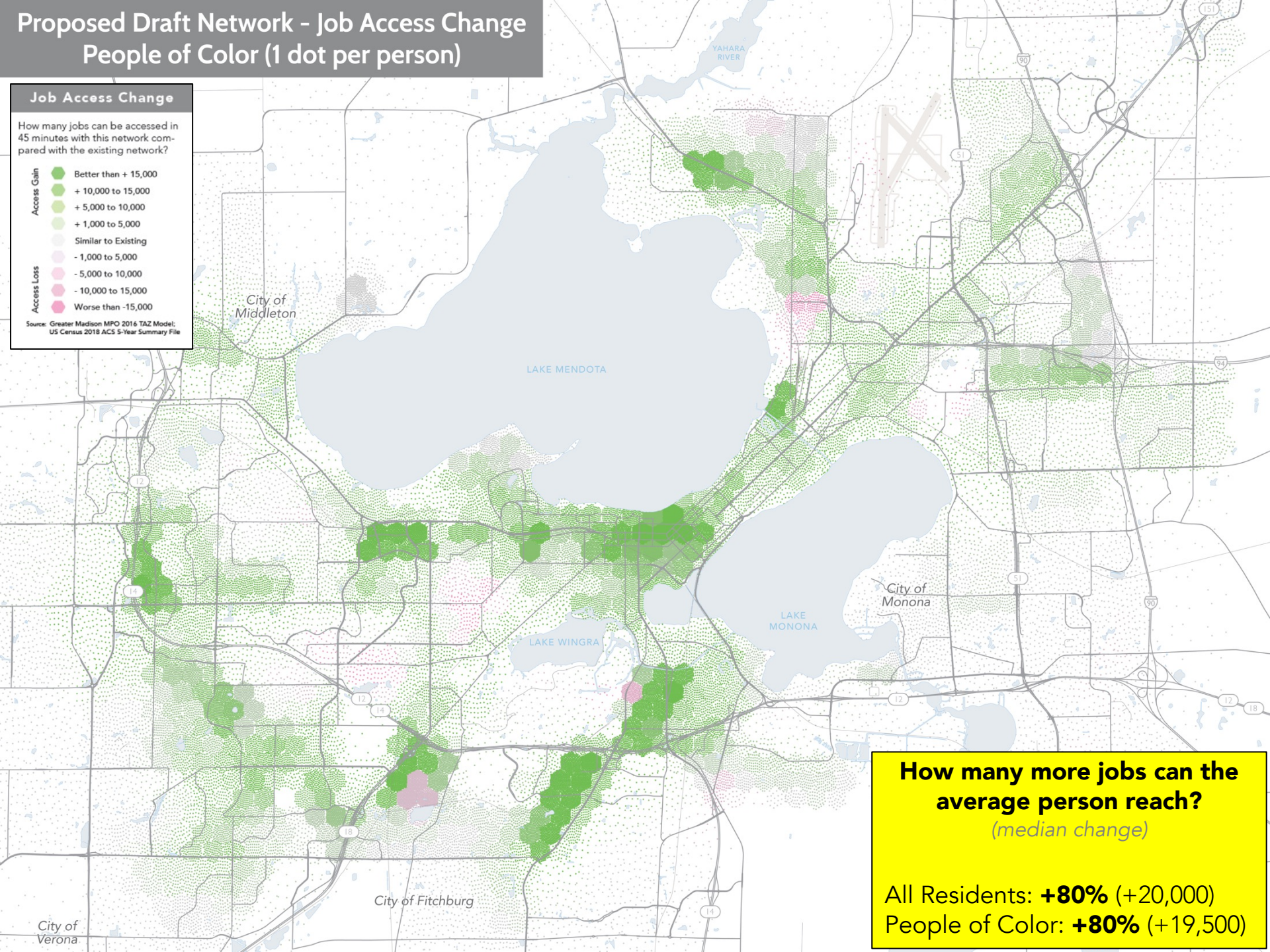
**Access Gain**

- 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?

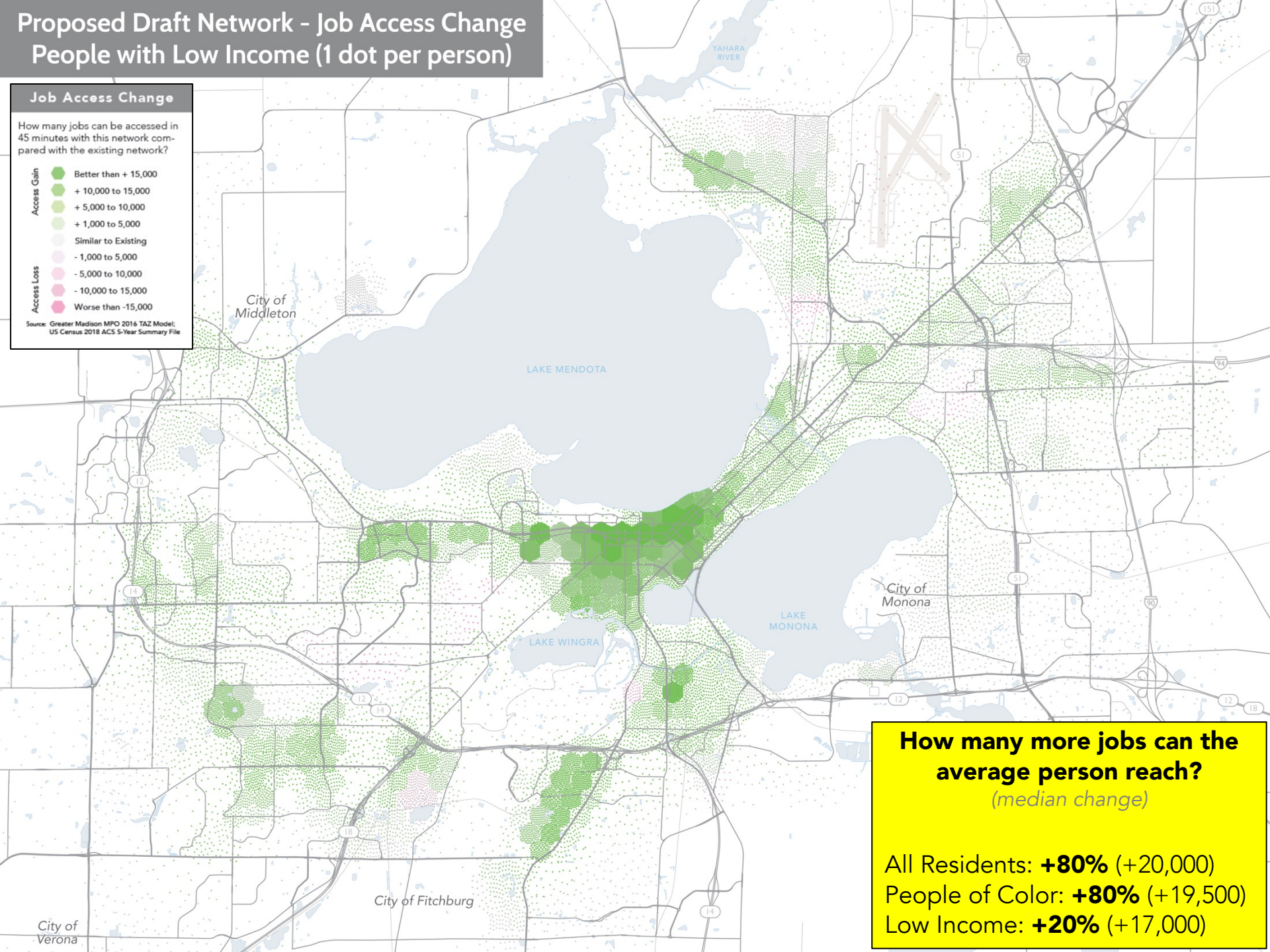
**Access Gain**

- 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)*

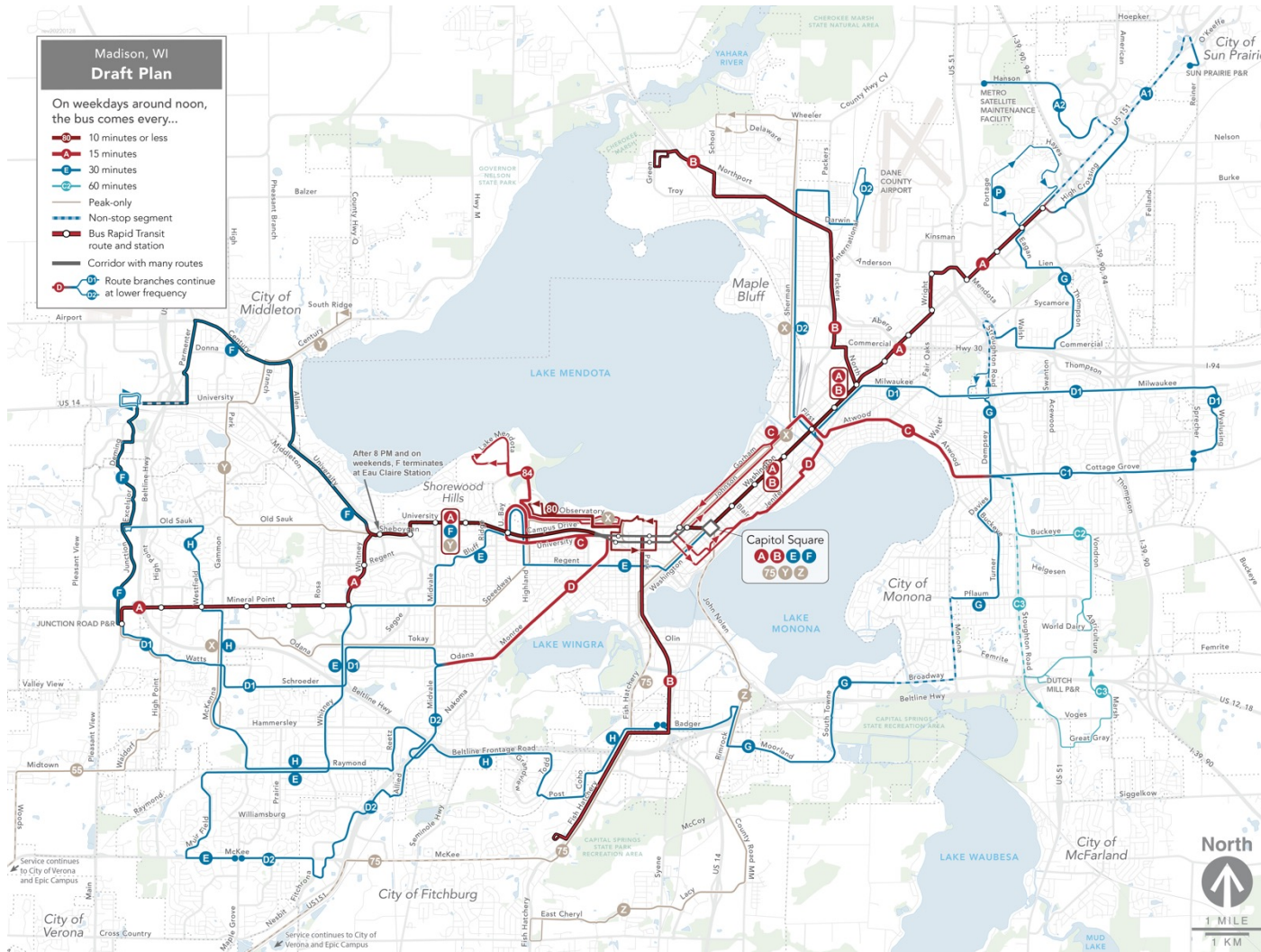
All Residents: **+80%** (+20,000)  
 People of Color: **+80%** (+19,500)  
 Low Income: **+20%** (+17,000)



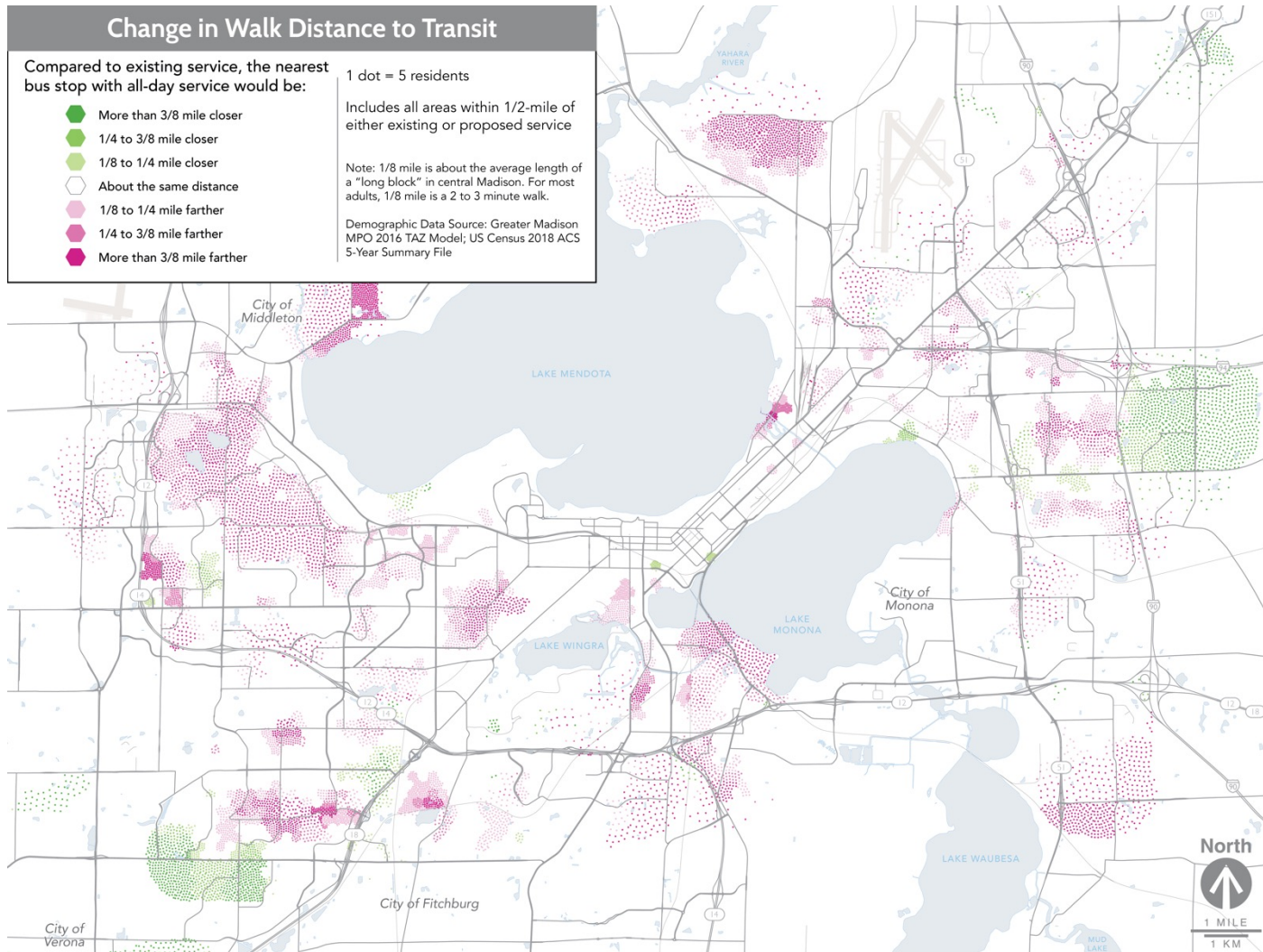
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# In Summary

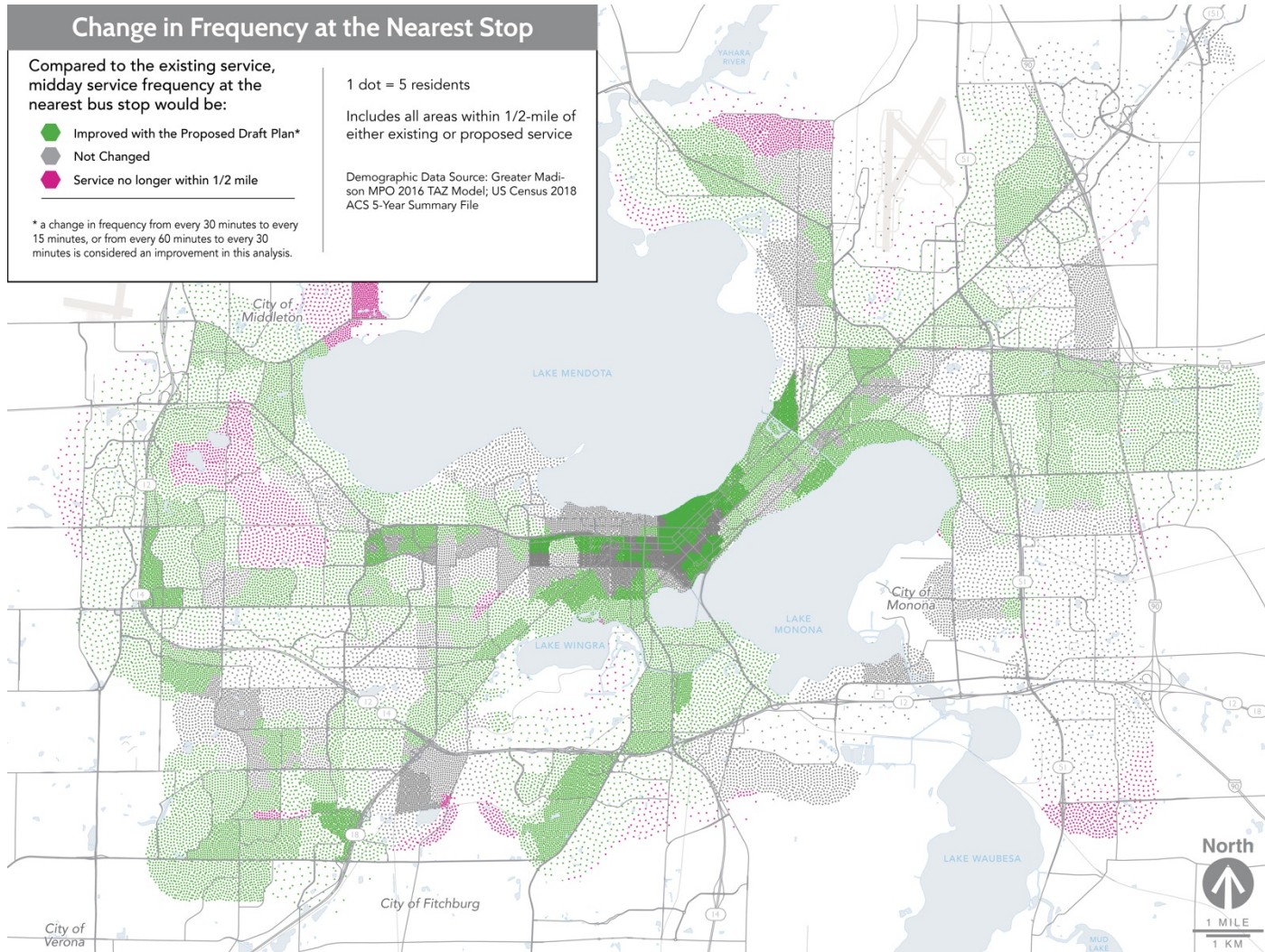
# The Draft Network Plan would make transit more frequent and direct.



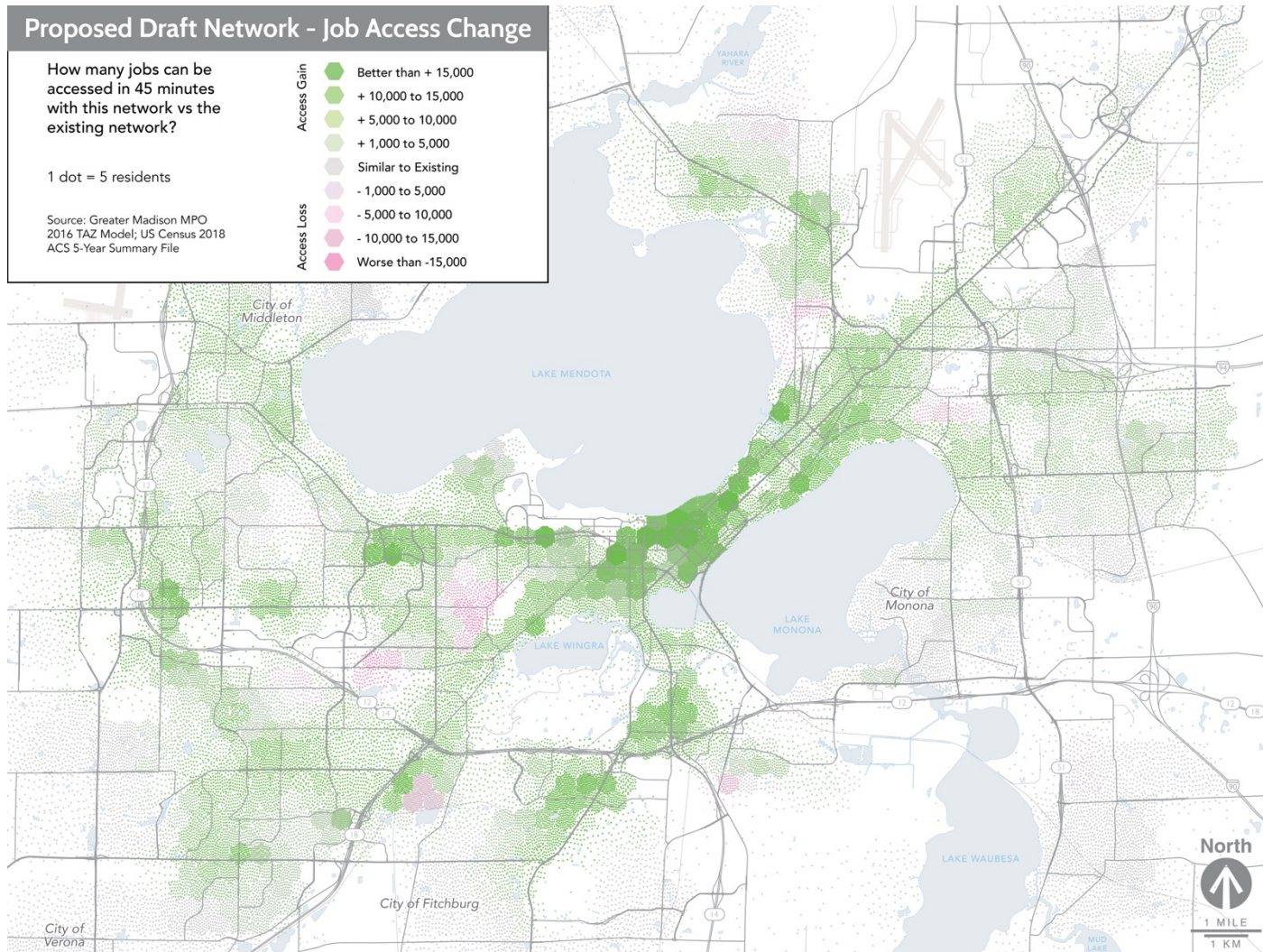
# Some people would have to walk farther to get to a bus stop.



# Often, they would be near more frequent service



# So most people could get to many more places in a reasonable amount of time.



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# Next Steps

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# Public Outreach

If TPPB approves moving forward, we will begin another round of public outreach.

Key Questions will include:

- Overall, would this Draft Plan make bus service better:
  - For you and your family?
  - For your neighborhood and community?
  - For Madison as a whole?
- What's wrong or missing from this plan? What should be corrected in the Final Plan?

# 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?

Apr-May 2022  
Recommended Plan

Late Spring 2022  
Final Plan Report



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We appreciate your time and participation  
today and going forward.

**Thank you!**