

JARRETT
WALKER
+ ASSOCIATES

Let's think about transit



Mobility Greensboro 2045 Long Range Public Transportation Plan

Kickoff Presentation to City Council

March 28, 2023

Agenda

- **What is Mobility Greensboro 2045?**
- **Project Timeline**
- **Q & A**



What is Mobility Greensboro 2045

Introduction to the Project

Initial Vision for the Plan

For Greensboro to become a car optional city by 2040, this plan will envision a new public transportation system for GTA by:

- **Reducing wait times and travel times across Greensboro with new and innovative public transportation services**
- **Improving supportive infrastructure, like bus stops, sidewalks and street design**
- **Connecting public transit to land-use and affordable housing policies and investments**
- **Improving the overall access to opportunity by transit throughout Greensboro**
- **Adjusting GTA services in the short-term to the new post-COVID travel patterns.**

What does it mean . . .

for Greensboro to become a car optional city by 2040?

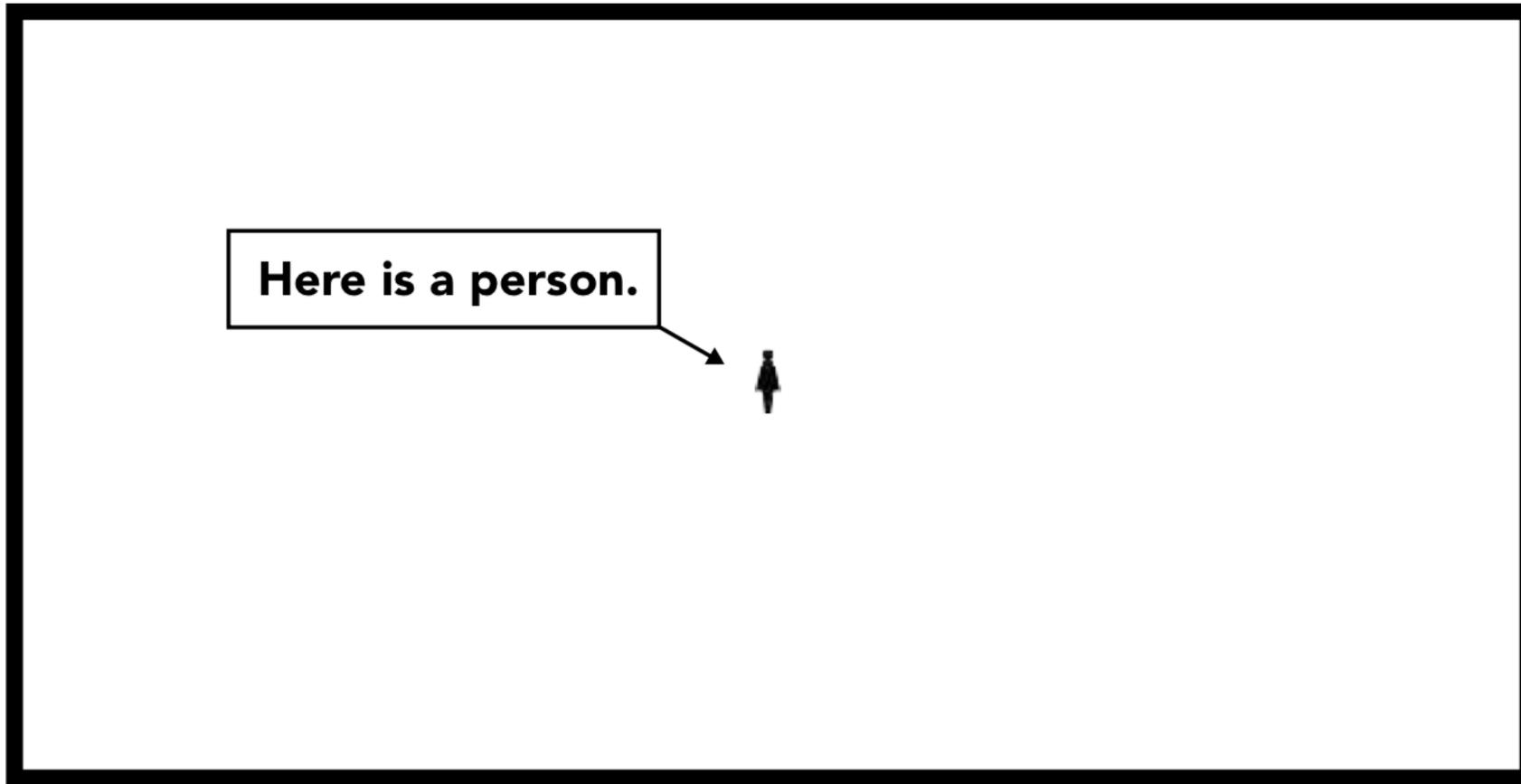
- Does it mean that everyone in Greensboro has an option to use transit?
- Does it mean that most people in Greensboro have a transit option that is very useful for reaching many places in a reasonable amount of time?

IF it means . . .

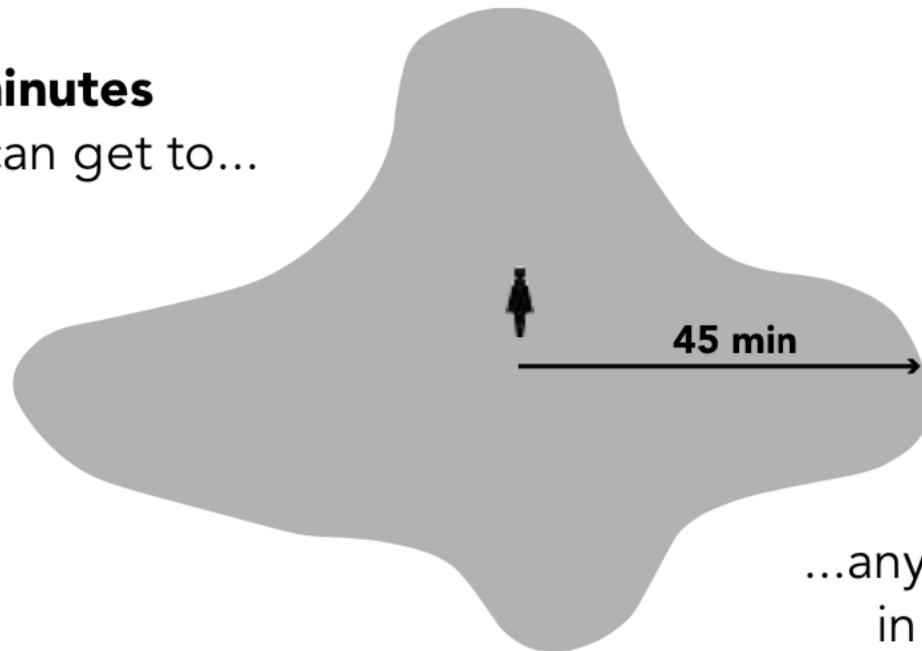
that most people in Greensboro have a transit option that is very useful for reaching many places in a reasonable amount of time?

That means we would use **ACCESS** as a primary measure of success.

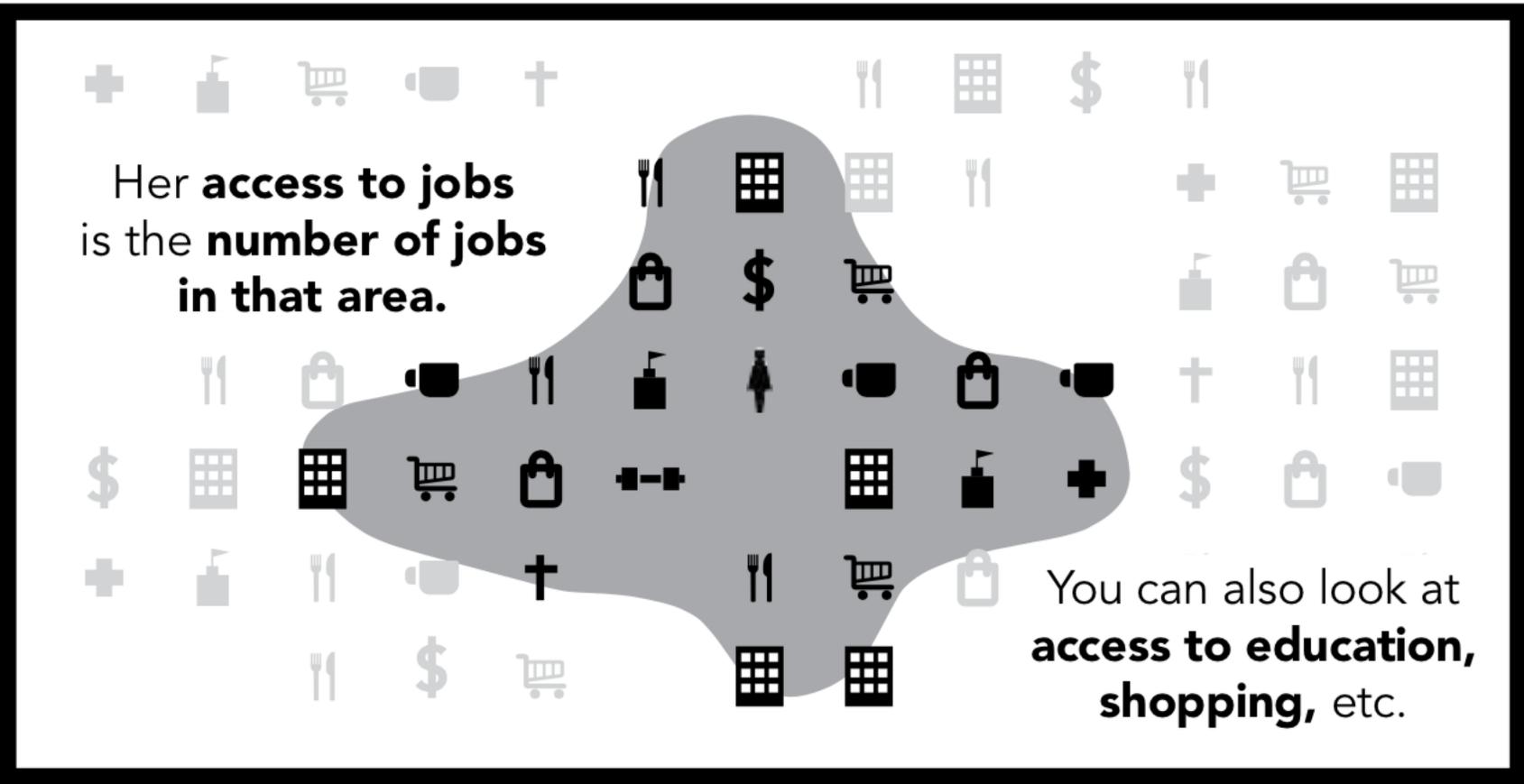
What is Access?



In **45 minutes**
she can get to...



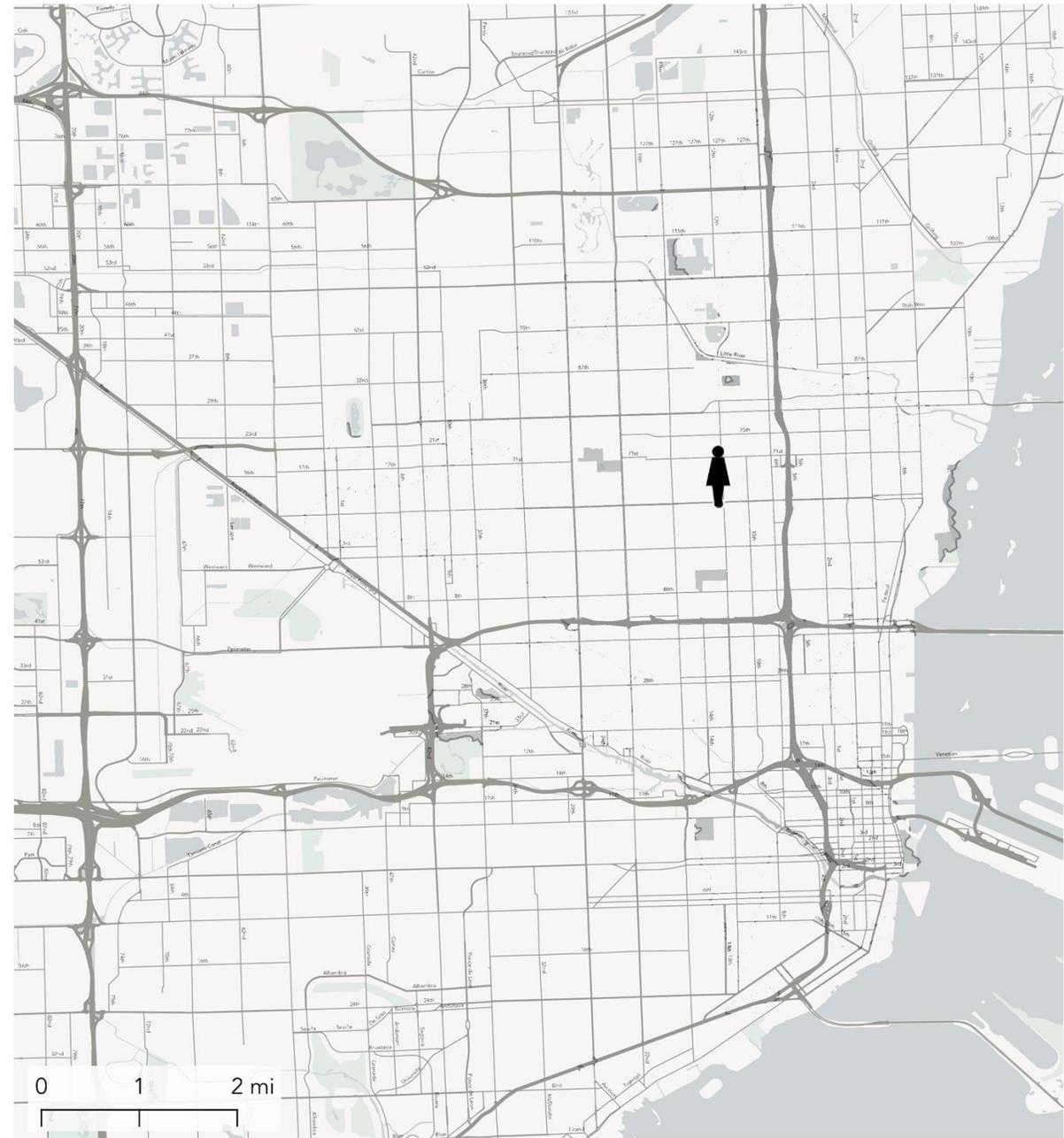
...anywhere
in a **certain area.**



Emphasize Access

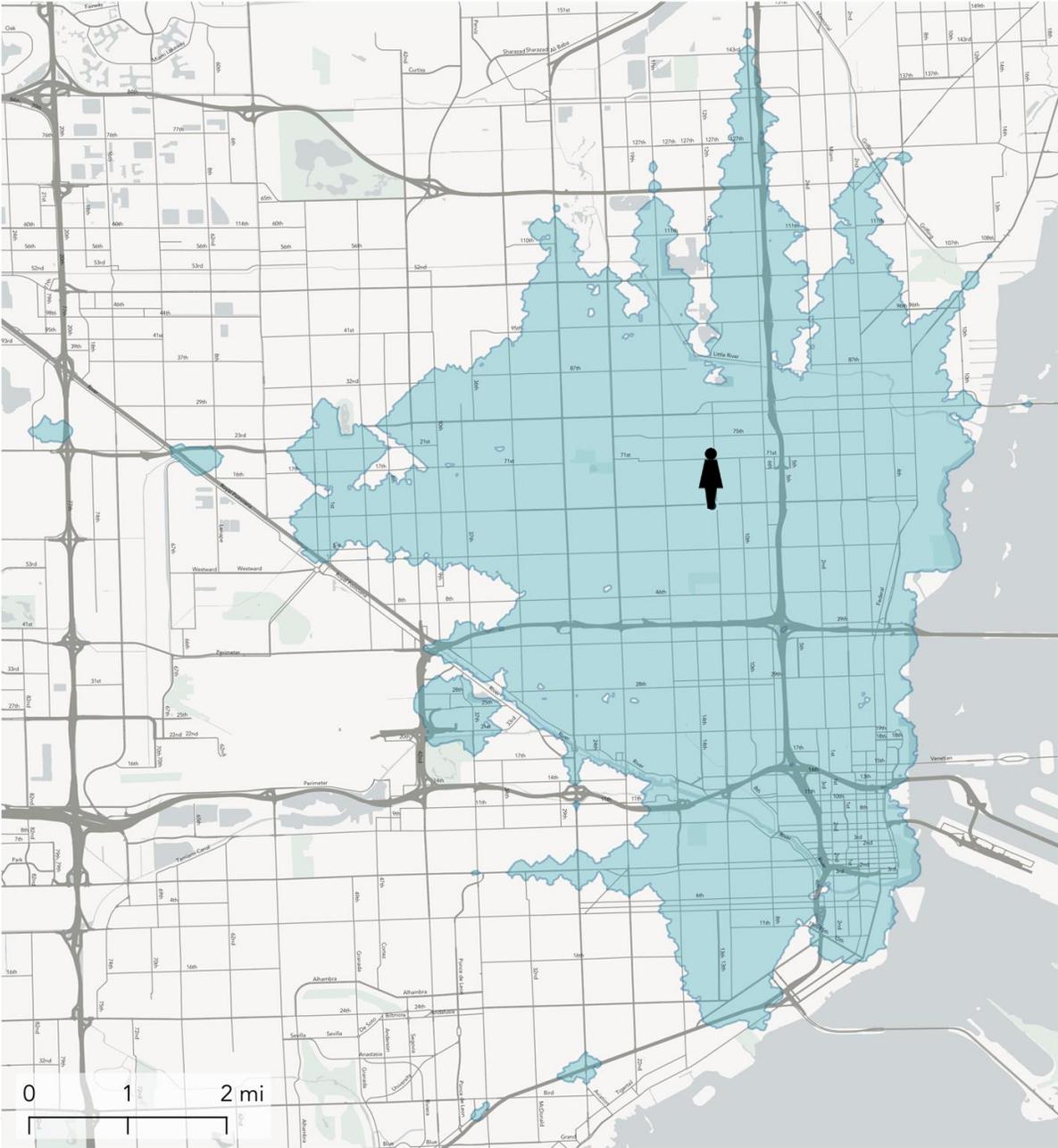


This is Jane.



A Real-World Example

Proposed Network

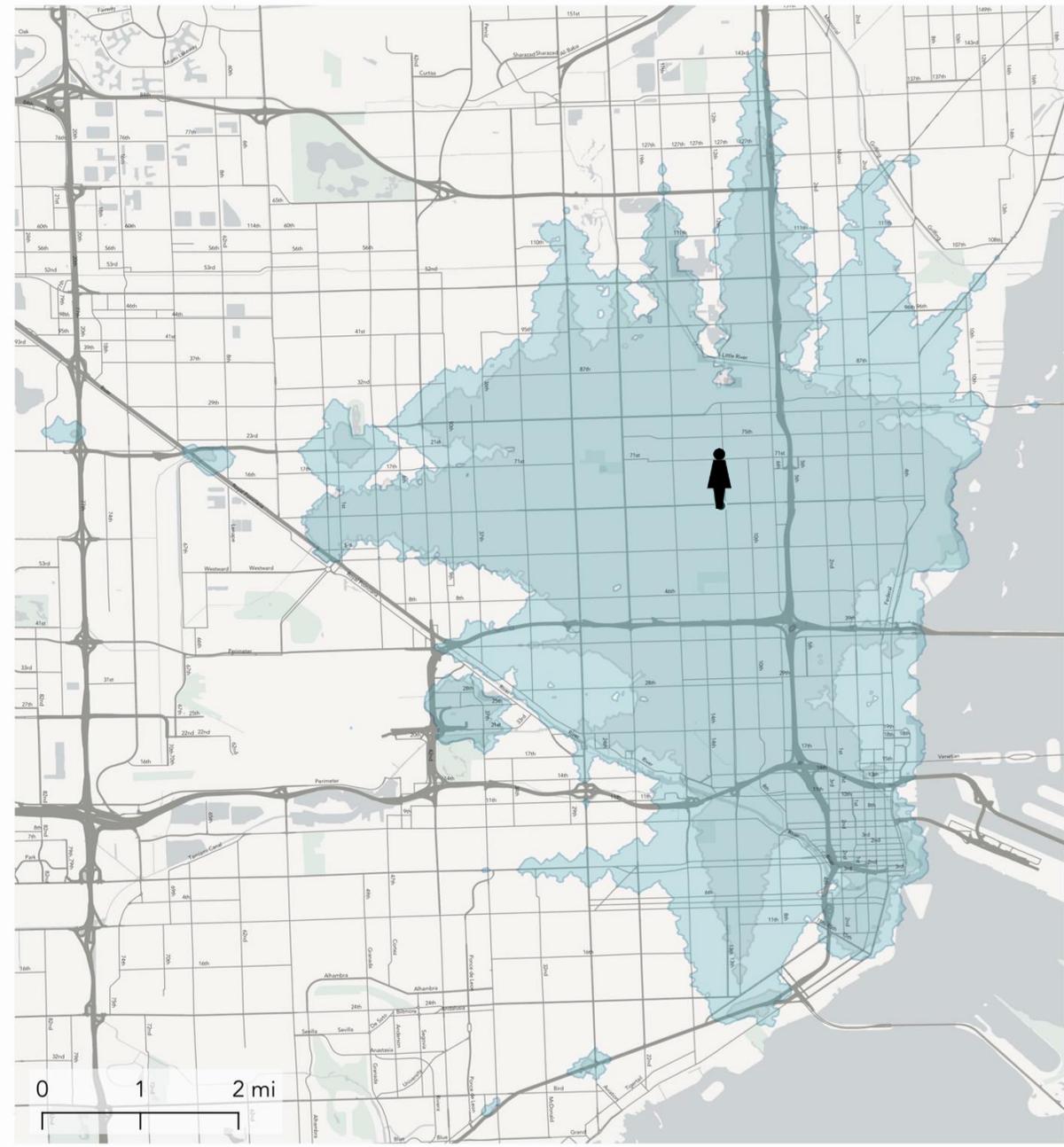


A Real-World Example

 **Jane can get to 96,000 more jobs (+60%).**

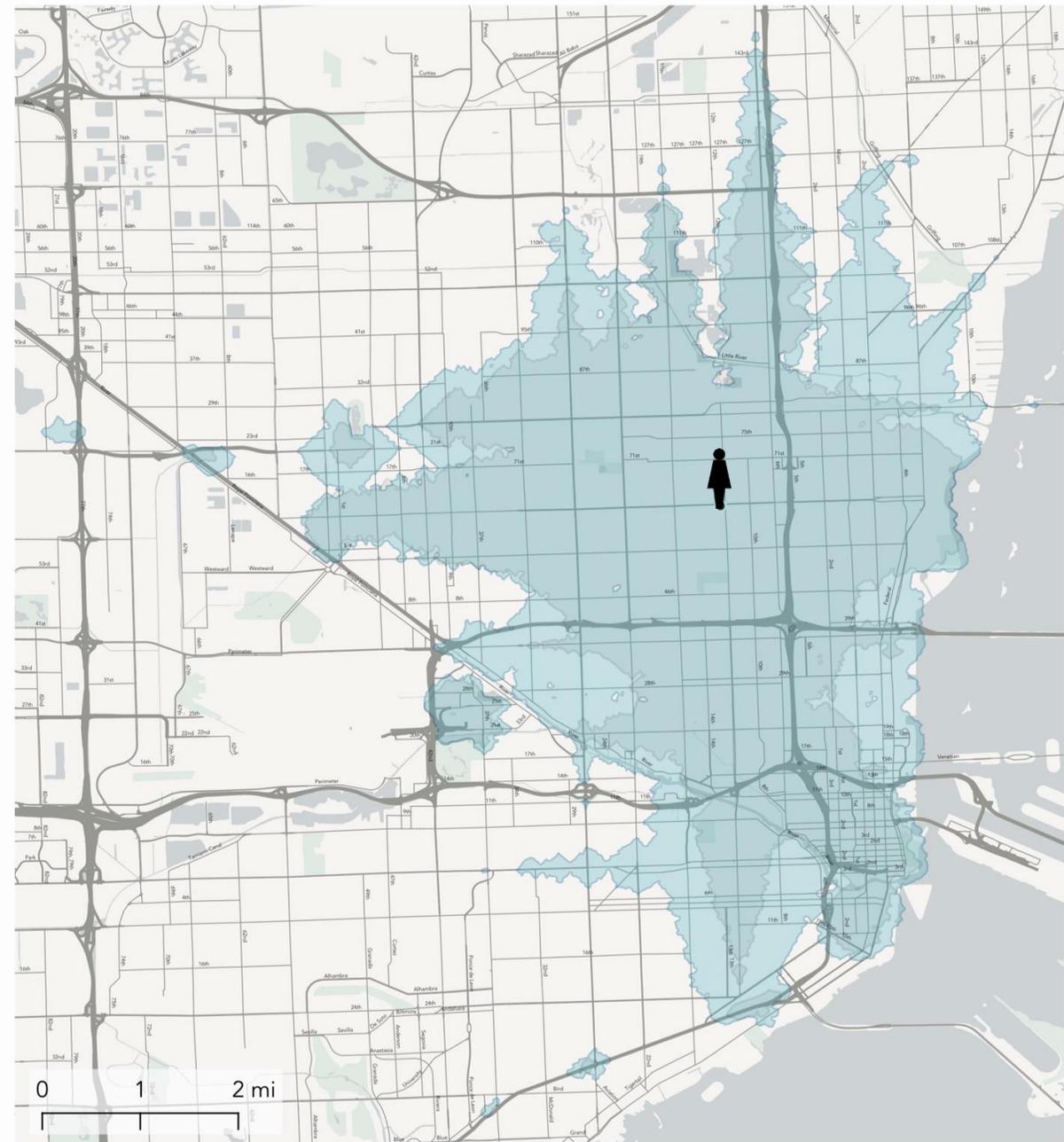
It's not just jobs. We can count access to anything, if the data exists.

Education,
Retail,
Medical,
Etc.



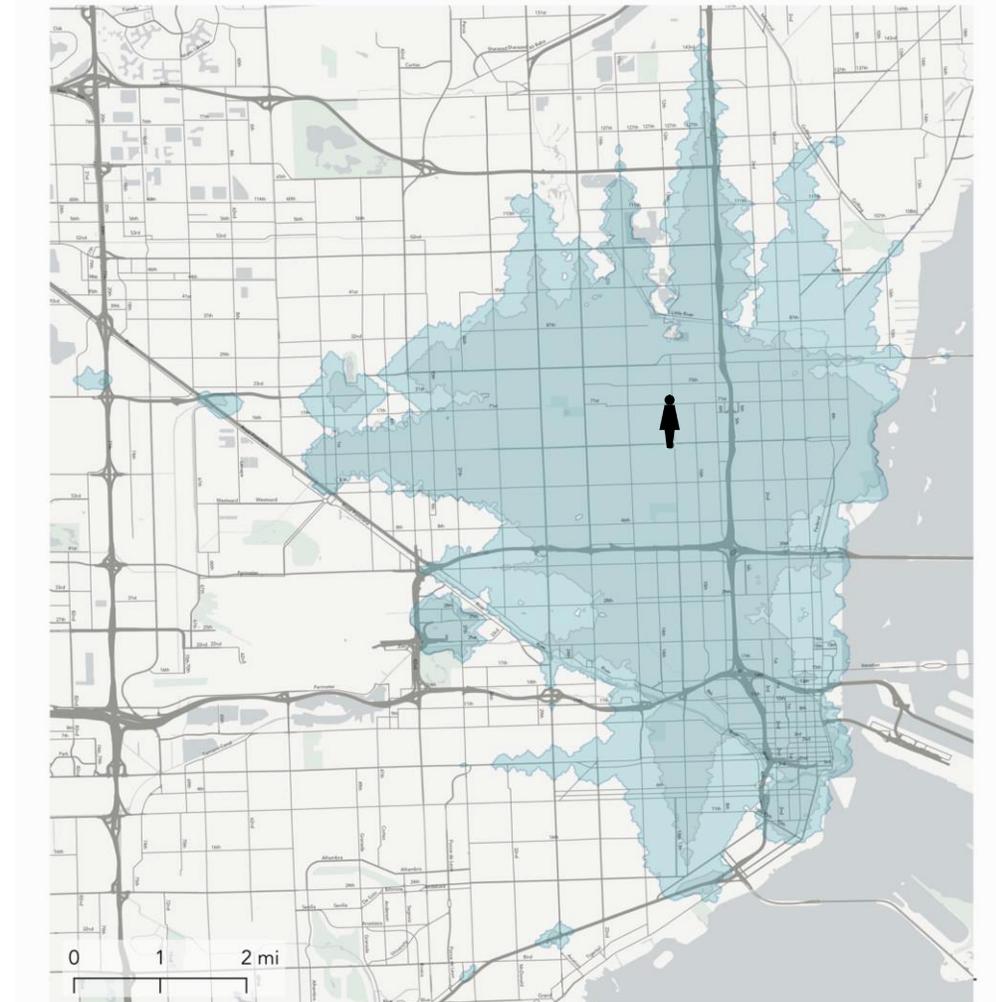
“The average Miami-Dade resident can reach 26% more jobs in 30 minutes.”

“65% of Miami-Dade residents would experience a significant increase in job access.”



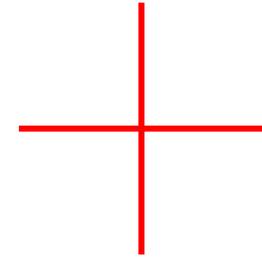
How does transit maximize freedom?

- High Frequency Lines
- Forming a Connected Network
- Reasonably fast and reliable
- Focused on Transit Friendly Places
 - Dense
 - Walkable
 - Linear
 - Proximate



Frequency comes first

- **High frequency means public transport is coming soon. This has three independent benefits:**
 - **Reduced Waiting**
 - **Easier Connections**
 - **Reduced Impact of Disruptions**
- **Lines with higher frequency tend to have not just higher ridership, but higher ridership per unit of service.**





What areas does high access (and high ridership) transit serve?

Put liberating service where it will liberate the most people.

Density

How many people are near transit?

The more people are going to and from the area around each stop, the more people will ride transit.

High Ridership
and Access



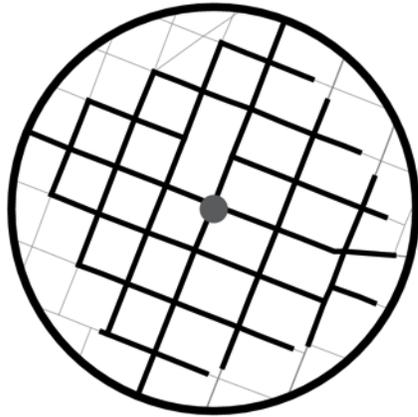
Lower Ridership and
Access



Walkability

Can the people around the stop walk to the stop?

High Ridership and Access



Lower Ridership and Access



Linearity

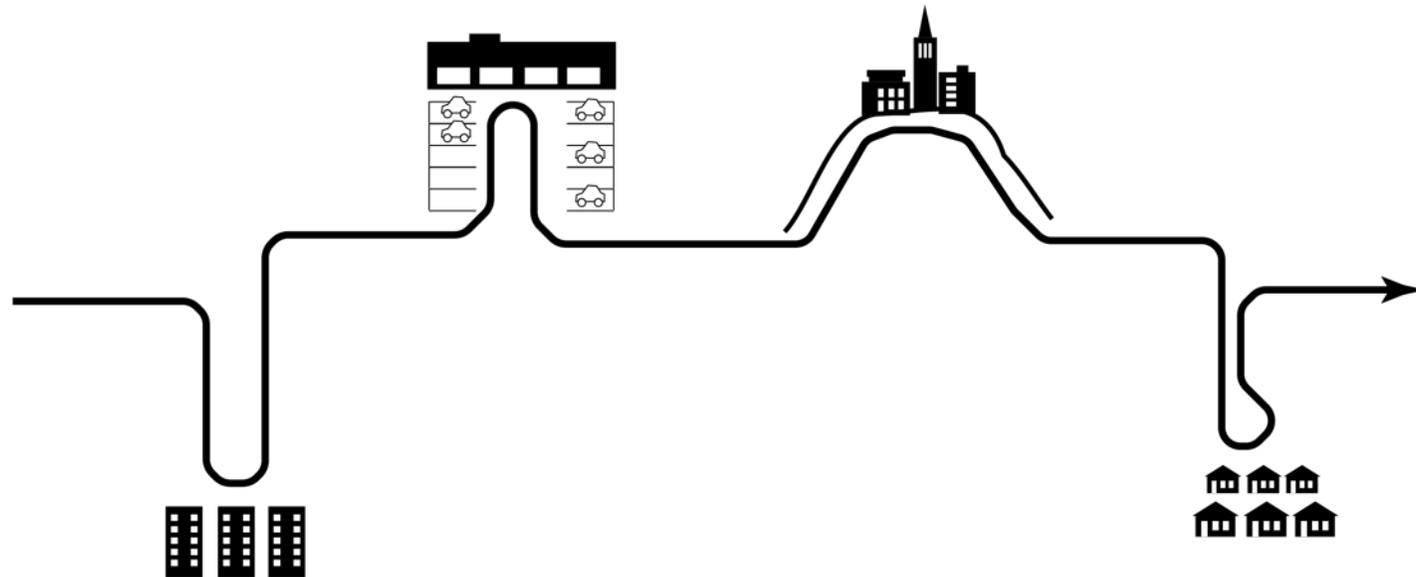
Can transit run in straight lines that are useful to through-riders?

The straighter the line, the shorter the journey, and the more people can find it useful.

High Ridership and Access



Lower Ridership and Access



Proximity

Does transit have to cross long low-ridership gaps?

Lower cost

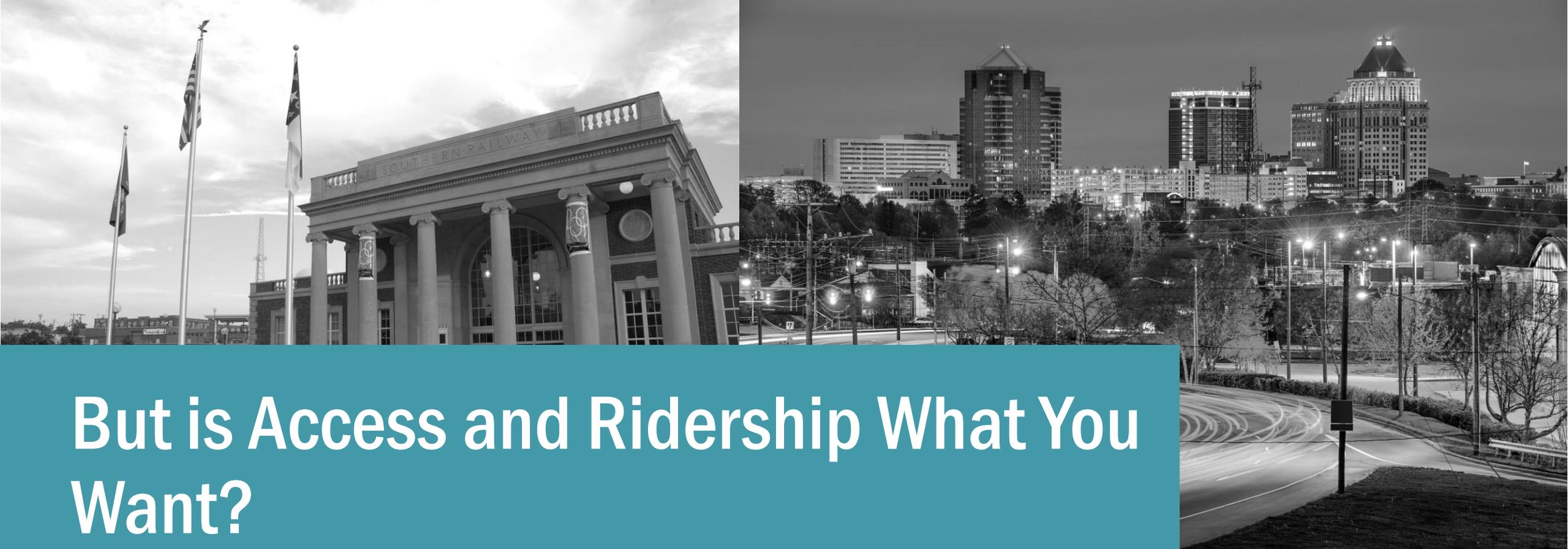
More access per \$



Higher cost

Less access per \$



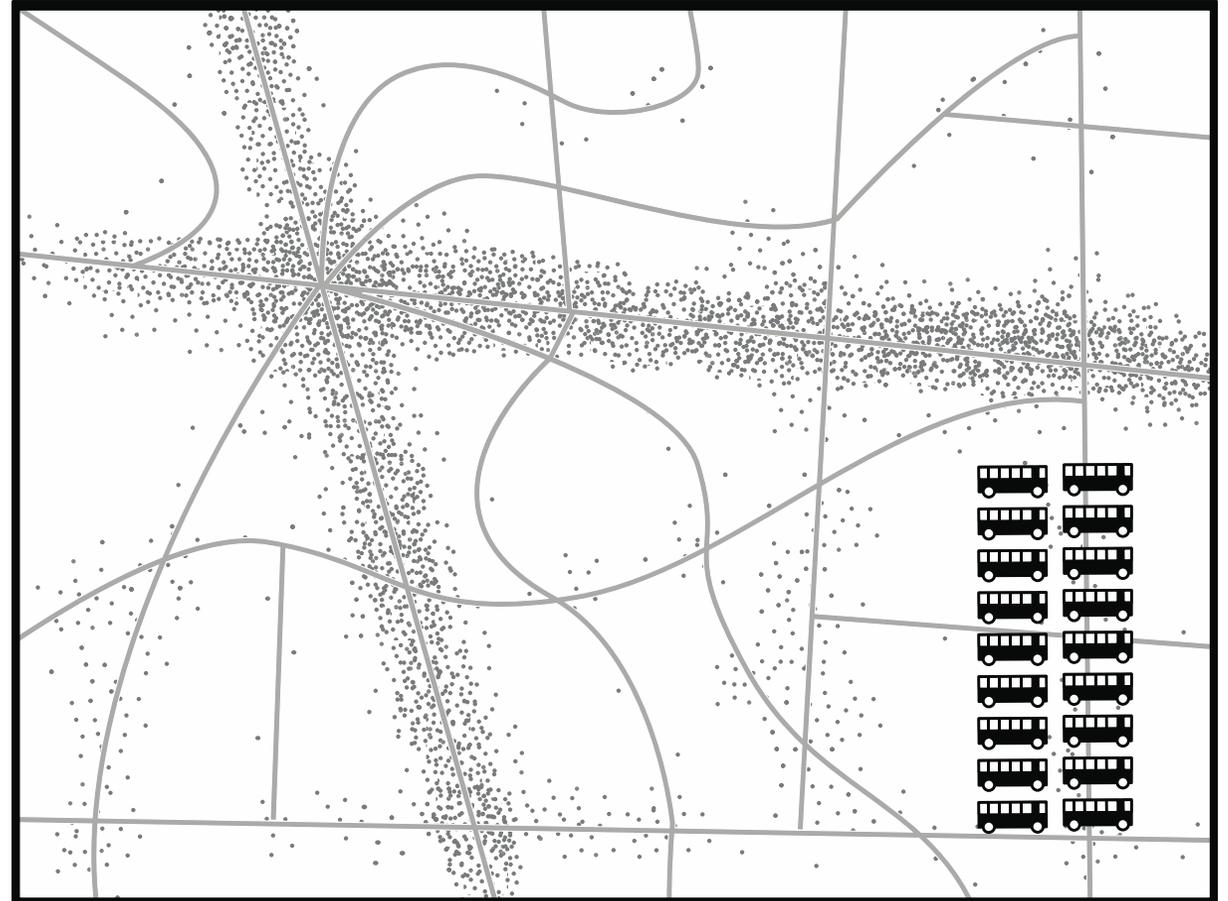


But is Access and Ridership What You Want?

The Ridership-Coverage Tradeoff

How should a transit agency allocate its resources?

- **Fictional Urban Area**
- **Dots = residents and jobs**
- **You have 18 buses**



Maximum Access or Ridership Goal

The straight lines offer density, walkability, and an efficient transit path, so you focus service there.

Because all 18 buses are focused on few lines, they are frequent.

With frequent service to many, but not all people, most people can reach many places quickly.

Performance Measure: Access

Jobs reachable in 30 or 45 minutes
for average or median person



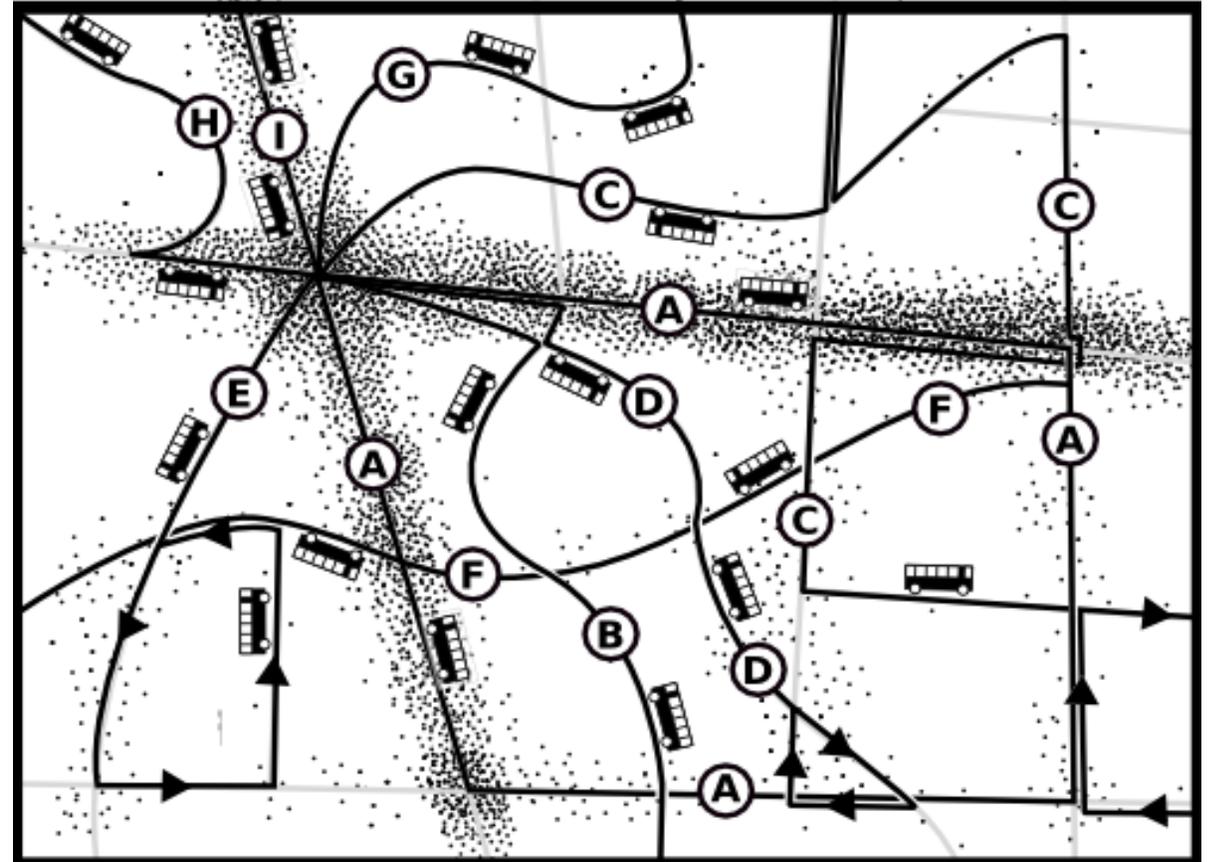
Coverage Goal “Some service for everyone”

Think like a government service. Try to serve everyone, even those in expensive-to-serve places.

The result is more routes covering everyone, but less frequency, more complexity, and lower average access.

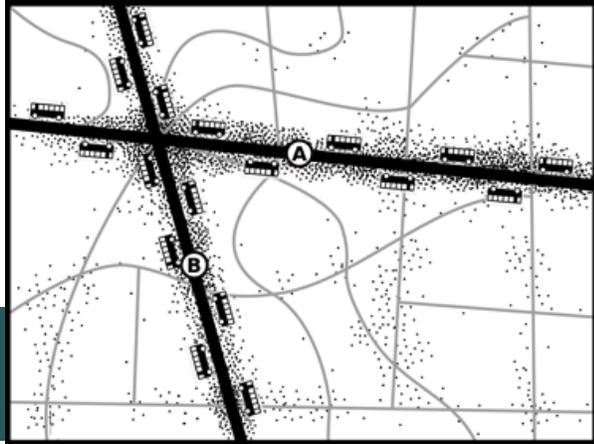
Performance Measure: Coverage

% of population and jobs near some service



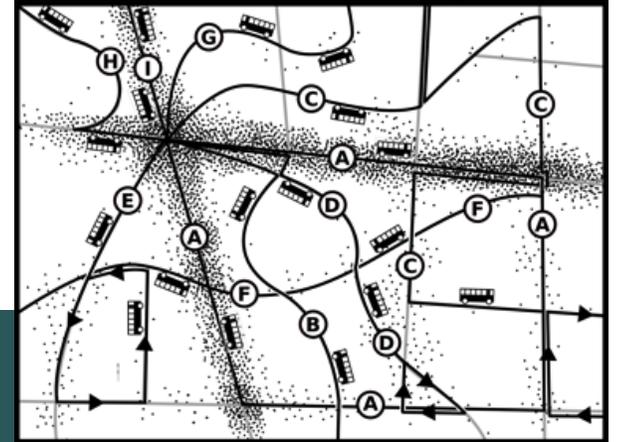
Both goals are important, ... but they lead opposite directions!

Access Goal



- Maximize job access
- Maximize ridership
- Support dense and walkable development.
- Max. competition with cars
- Maximum VMT reduction

Coverage Goal



- “Think like a public service.”
- “Access for all”
- Support low-density development.
- Lifeline access for everyone.
- Service to every member city or electoral district.

What does it mean . . .

for Greensboro to become a car optional city by 2040?

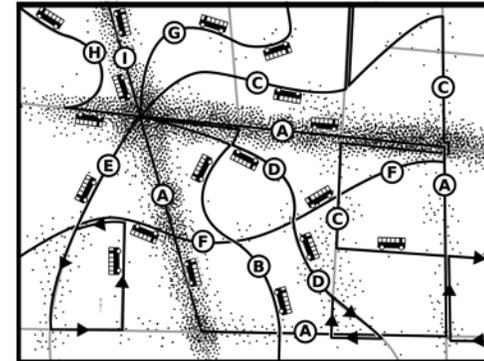
- Does it mean that everyone in Greensboro has an option to use transit?
 - This would lean toward a more “coverage-oriented” set of recommendations
- Does it mean that most people in Greensboro has a transit option that is very useful for reaching many places in a reasonable amount of time?
 - This would lean toward a more “access-oriented” set of recommendations

So it helps to choose a point on the spectrum ...

Ridership Goal



Coverage Goal



Where are you now?

Where do you want to be in the future?

You do not have much transit ...

- **Ultimately reflecting local investment decisions.**
- **You can afford a network of mostly 30-60 min routes.**
- **You would need more resources to either:**
 - **Grow frequency without cutting coverage, OR**
 - **Grow coverage without cutting frequency.**

How else can we increase access?

Increase density in places that are

- Served by useful transit
- Walkable
- Linear
- Proximate





Next Steps and Project Timeline

Where are we headed?

Timeline Phase 1

Phase 1: Kickoff & Existing Conditions

- Review Existing System, Issues, and Needs
- Assess System Costs and Revenue Options
- March to June

Round 1 Engagement

- Engage Stakeholders through Interviews and Workshops
- Engage Public Through Listening Sessions & Surveys
- July to August

Engaging Key Stakeholders



Timeline Phases 2 to 3

Phase 2: Conceptual Design

- Develop Concepts for 2025, 2035, 2045
- Identify Associated Improvements like Active Transportation and TOD
- September to December 2023

Round 2 Engagement

- Engage Stakeholders through Interviews and Workshops
- Engage Public Through Listening Sessions & Surveys
- January to March 2024

Phase 3: Final Plan and Implementation

- Revise and Update Recommended Networks
- Refine Associated Improvements to Active Transportation and TOD
- Finalize Funding Plan and Implementation Schedule
- Report Back to Public and Stakeholders
- April to August 2024



Questions

Thank you for the opportunity to present today.

Questions and Thoughts

As we start this process:

- **What do you hope to get out of this long-range plan?**
- **What do you think is more important:**
 - **maximizing access or maximizing coverage?**
- **What related issues do we need to keep in mind?**



Back Up Slides

More ideas to discuss!