

Wake County Transit Alternatives

A Wake County Transit Investment Strategy Report

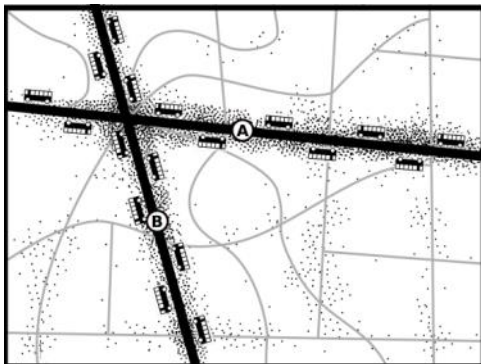


JARRETT WALKER + ASSOCIATES | Let's think about transit

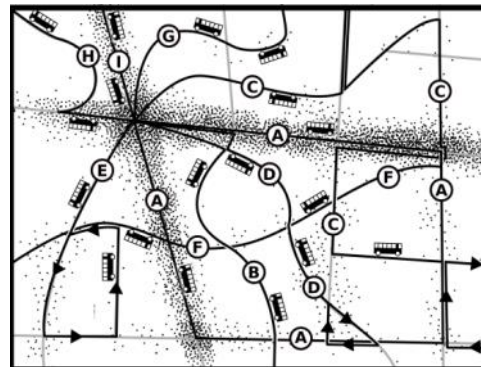
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Ridership / Coverage Spectrum

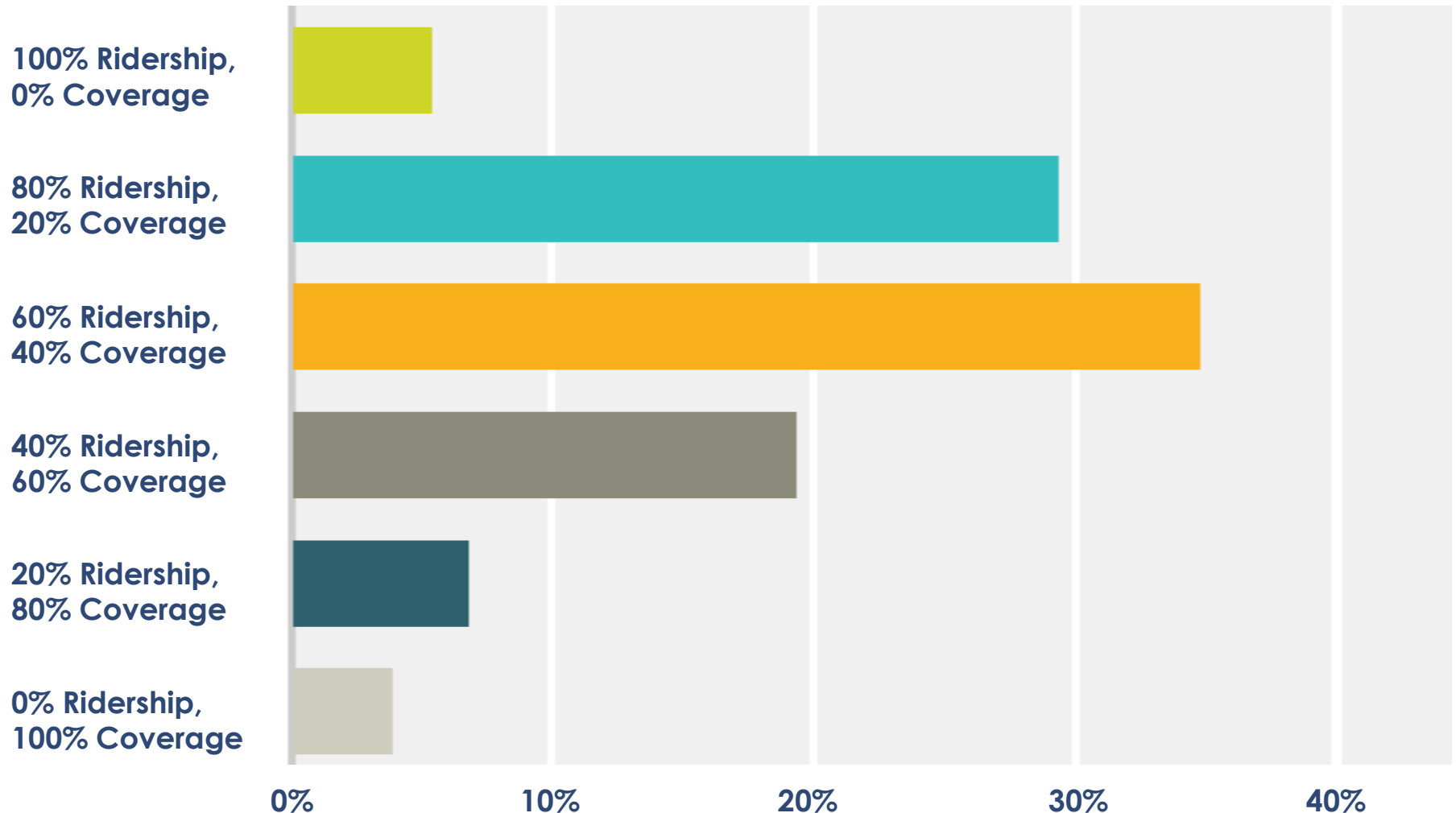


- Ridership Goal
 - “Think like a business”
 - Focus on highest ridership potential
 - Fewer but more frequent routes
 - Support dense and walkable development
 - Maximum VMT reduction



- Coverage Goal
 - “Access for all”
 - Services for hard-to-serve areas, despite low ridership
 - Support suburban low-density development
 - Lifeline access for everyone
 - Service to every member city

How would you split Wake County's transit budget between ridership and coverage?



Infrastructure / Service Spectrum

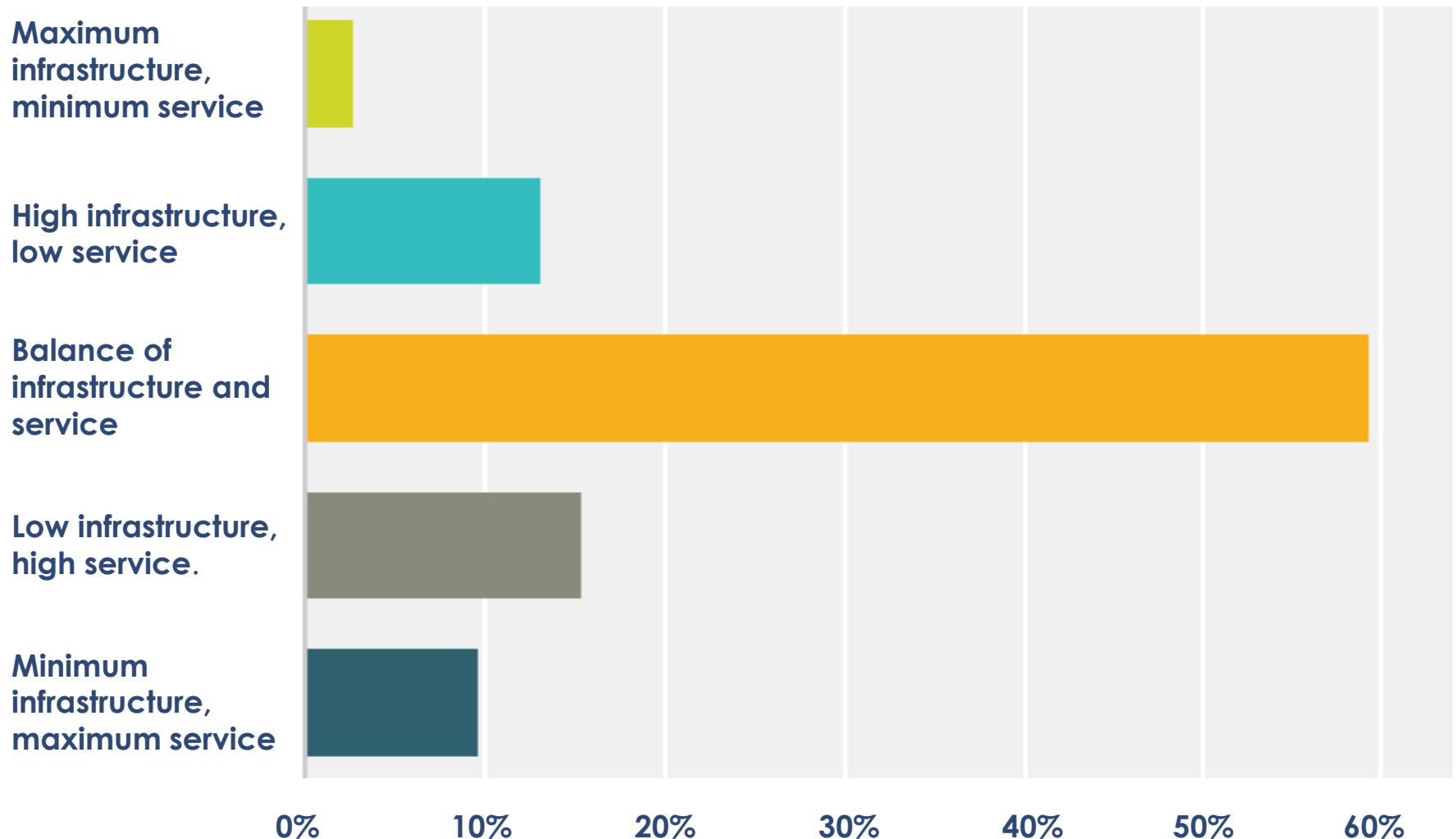


- Capital Goal
 - “Invest to make transit look, feel and operate differently”
 - Focused where congestion causes delays

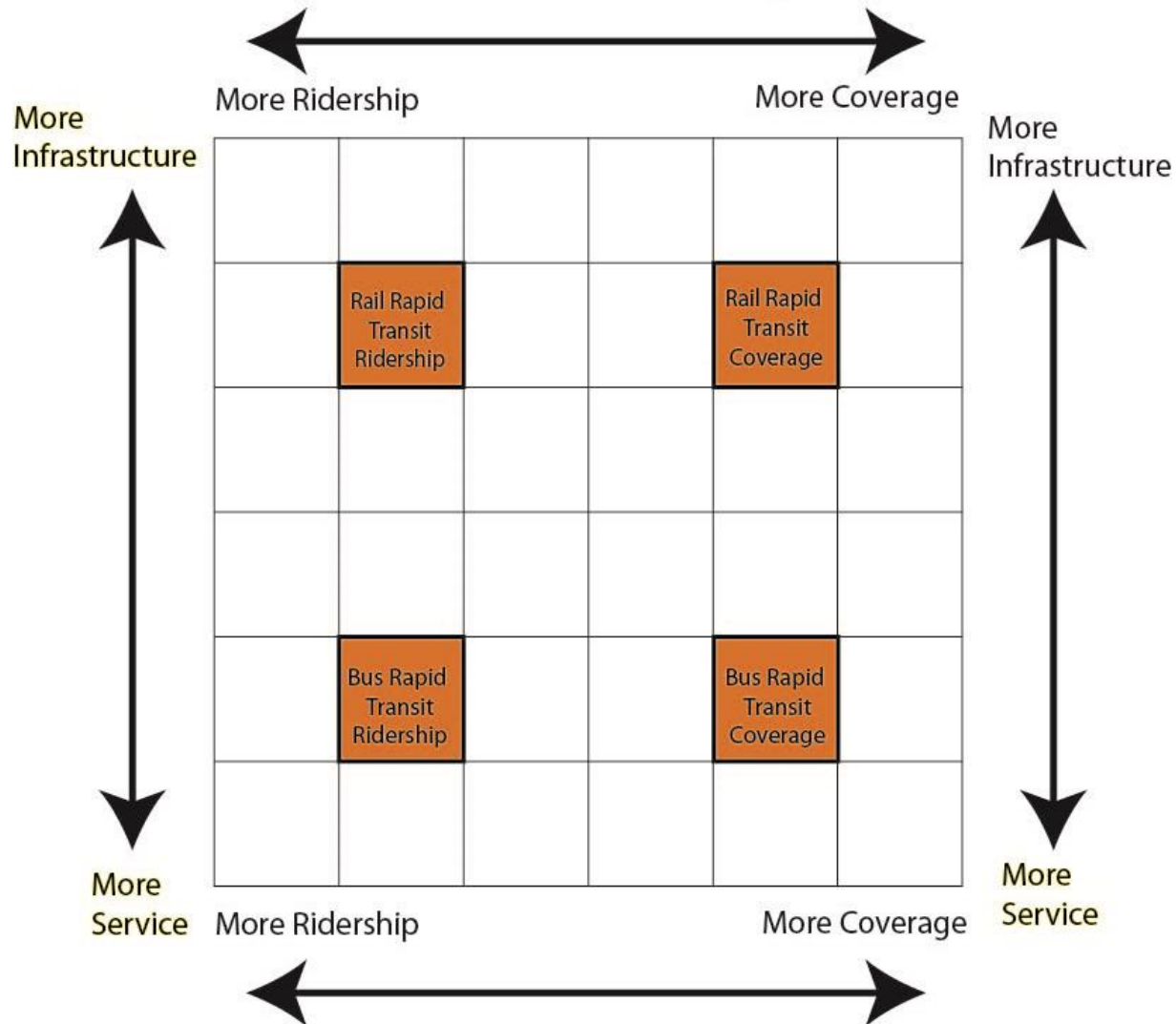


- Operating Goal
 - “Deliver Better Service ASAP ”
 - Focused on potentially connecting more areas
 - Service delays are limited by frequency

How would you split Wake County's transit budget between infrastructure and service?



Four Alternatives



Key Notes on the Alternatives

- All Alternatives increase Span and Frequency

Existing Span

- WD: 12-20 hrs all routes
- SAT: 12-19 hrs most routes
- SUN: 11-12 hrs some routes

Existing Frequency

- Peak-based on weekdays
- Limited off-peak and weekend service

Proposed Span

- 17-20 hrs all routes every day

Proposed Frequency

- All day, every day

Bus Rapid Transit

- Dedicated guideway or mixed traffic as needed
- ½ to 1 mile station spacing
- Scalable infrastructure



Rail Rapid Transit

- FRA compliant to operate in freight rail corridor
- Hybrid of light rail and commuter rail
 - 2 mile station spacing
- Faster overall than BRT



Bus Rapid Transit - Ridership

BRT Ridership

 BRT Infrastructure

Network Frequency

-  Every 15 minutes or less
"Transit is always there when I need it."
-  Every 30 minutes
-  Every 60 minutes
"I have to plan my life around the transit schedule."
-  Peak-only (frequency as above)
"Only for commuting at rush hour."
-  Peak-only Express Routes
"Only for commuting at rush hour."
-  County Boundaries
-  Downtown; exact routings not specified

What could change?

Funding, regulatory and operational constraints are some of the issues that may impact future decisions regarding the specific corridors (BRT/rail). Physical constraints such as buildings and roads may limit where we can build new lanes, tracks or other improvements. Existing roadway, rail, and utility corridors are used for multiple purposes which need to be considered in planning future transit services.

What happens in Durham County?

I-40 Express service continues to Durham, with connections at RTP to Chapel Hill. Other Durham County services meet Wake County services at RTP.

Is this all the transit we'd get?

No! These maps show a level of transit that could be funded in the first decade of new revenue after a successful vote. Service and infrastructure could continue to expand in future years.

I-40 Express Service: Every 30 minutes all day via RDU, with peak hour service every 10 minutes bypassing airport.

NC State Wolfline: Existing NC State Wolfline services not shown, but are presumed to continue to operate as they do today.

Franklin

Bunn

Rolesville

Zebulon

Wendell

Archer Lodge

Johnston

Wilson's Mills

Clayton

Garner

Wake

Fuquay-Varina





Holly Springs

Morrisville

Cary

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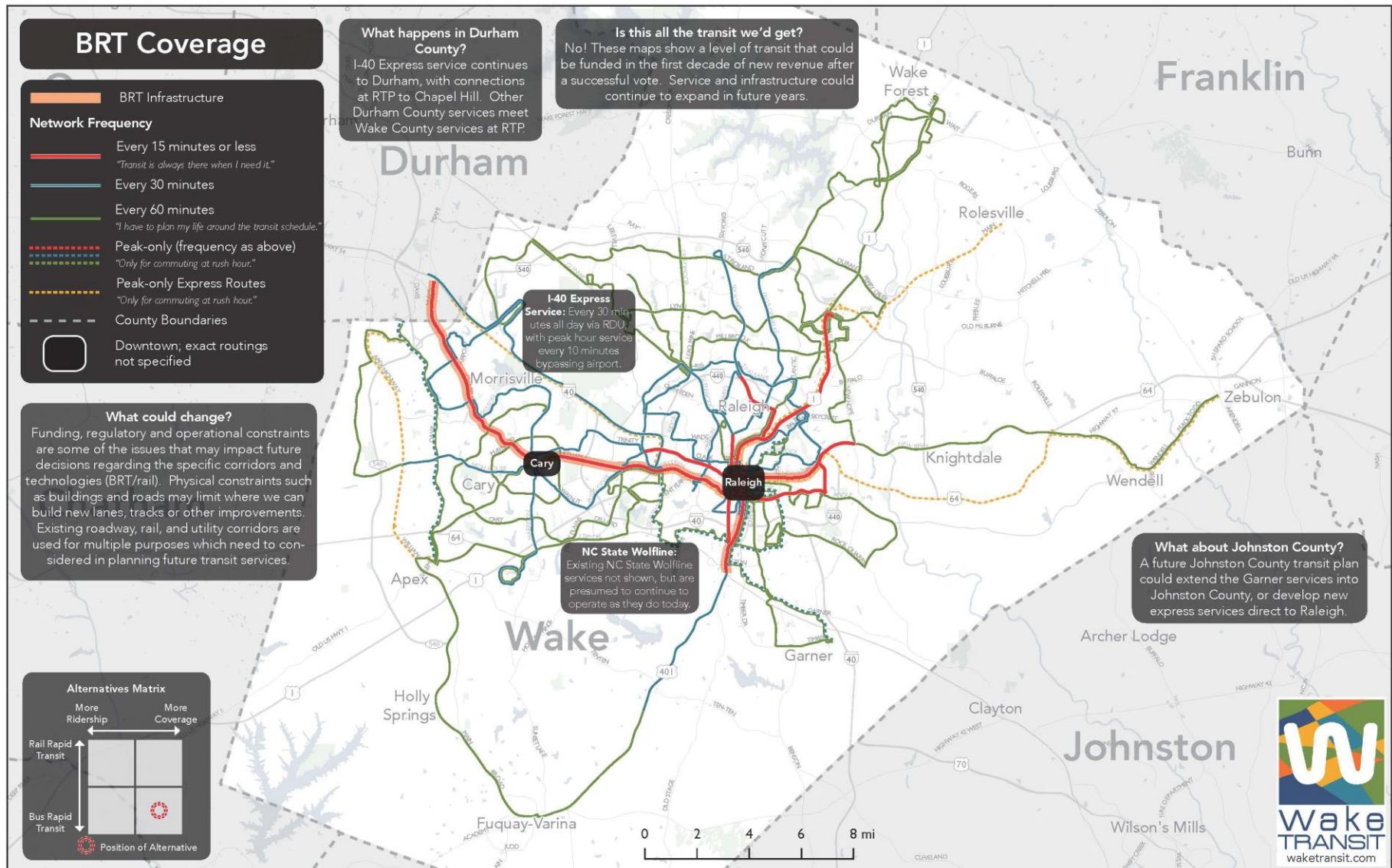
Alternatives Matrix

	More Ridership	More Coverage
Rail Rapid Transit		
Bus Rapid Transit		

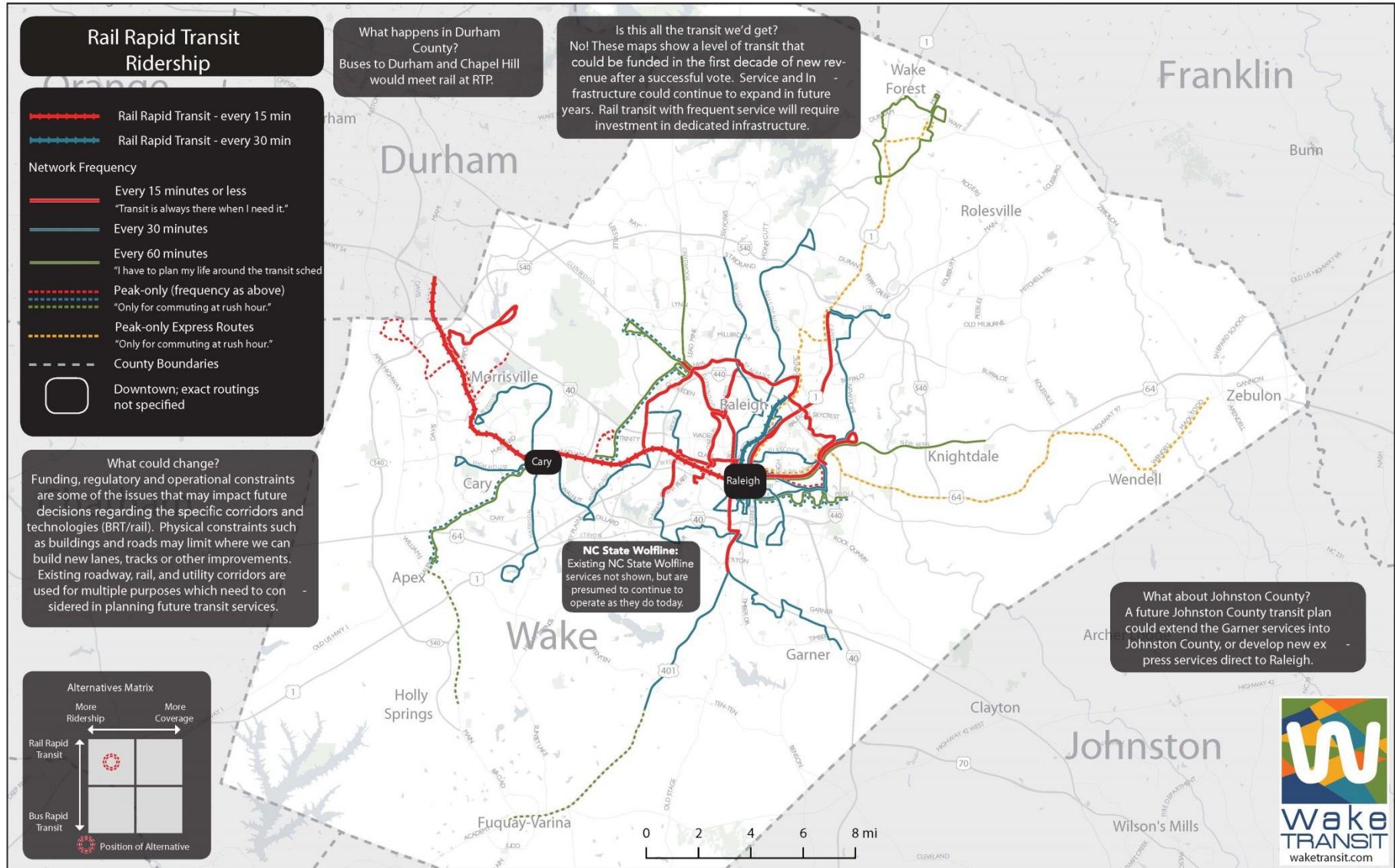
Position of Alternative



Bus Rapid Transit - Coverage





Rail Rapid Transit - Ridership



Rail Rapid Transit - Coverage

Rail Rapid Transit Coverage

-  Rail Rapid Transit - every 15 min
-  Rail Rapid Transit - every 30 min

Network Frequency

-  Every 15 minutes or less
"Transit is always there when I need it."
-  Every 30 minutes
"I have to plan my life around the transit shed"
-  Every 60 minutes
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Funding, regulatory and operational constraints are some of the issues that may impact future decisions regarding the specific corridors and technologies (BRT/rail). Physical constraints such as buildings and roads may limit where we can build new lanes, tracks or other improvements. Existing roadway, rail, and utility corridors are used for multiple purposes which need to be considered in planning future transit services.

What happens in Durham County?

The Durham County Transit Plan calls for commuter rail connecting to Raleigh at RTP. In the near term, buses to Durham and Chapel Hill would meet rail at RTP.

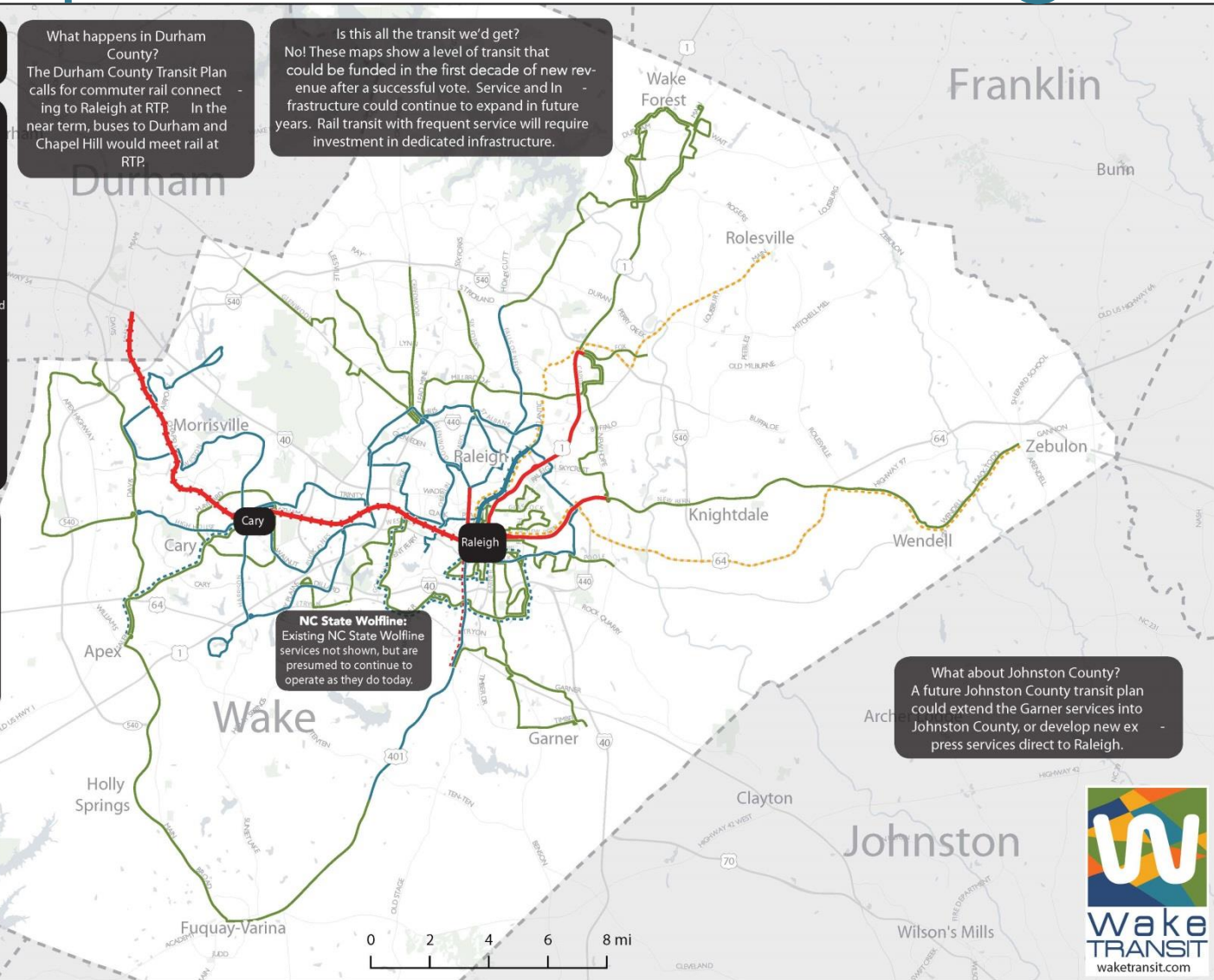
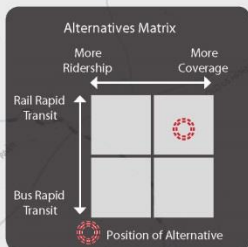
Is this all the transit we'd get?

No! These maps show a level of transit that could be funded in the first decade of new revenue after a successful vote. Service and infrastructure could continue to expand in future years. Rail transit with frequent service will require investment in dedicated infrastructure.

NC State Wolfline:
Existing NC State Wolfline services not shown, but are presumed to continue to operate as they do today.

What about Johnston County?

A future Johnston County transit plan could extend the Garner services into Johnston County, or develop new express services direct to Raleigh.



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