Perspectives on Wake County’s Transportation Plan

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Three problems

1. **Public Debate.** What are the most efficient and effective strategies for meeting the region’s transportation needs?

2. **Policy Question.** What is the goal of transportation policy?

3. **Nested Issue.** Why is transportation important?
Transportation networks are not intrinsically valuable

The public & private sector provide services that consumers use

- Mobility
- Access

Many benefits & costs can be measured

- Some can be monetized (e.g. fares, tolls, property values)
What is the value of transportation investments?

• The right transportation investments add economic value and the community grows
  ▪ Improve mobility
  ▪ Increase access
  ▪ Enhance equity

• Poorly targeted investments slow economic growth
  ▪ Reduce mobility
  ▪ Reduce access
  ▪ Increase inequality
Cities depend on layered transportation networks and systems

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Mode</th>
<th>Transportation efficiency characteristics</th>
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<tbody>
<tr>
<td></td>
<td>Walking</td>
<td>Travel distances &lt; than one mile; appropriate in all land uses except very low densities</td>
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<tr>
<td></td>
<td>Bicycles</td>
<td>Travel distances 2-3 miles</td>
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<td></td>
<td>Automobile</td>
<td>All travel distances in low to moderate densities</td>
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<td></td>
<td>Light Rail/Trolley</td>
<td>Corridors with medium densities and mixed uses at origins and destinations</td>
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<tr>
<td></td>
<td>Bus</td>
<td>Travel distances &gt; 2 miles in urban areas with heavily traveled corridors</td>
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<td></td>
<td>Heavy Rail/Metro</td>
<td>Very high density urban areas</td>
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Need to layer in transportation alternatives at the right time
What we know about Raleigh-Durham

• Tremendous population growth since 1960; Wake County now has 1 million people.
• But, the region is still a medium-sized metro area;
• And, ranks among the lowest density metro areas in its size category.
Effects of state planning on housing prices

- Population is continuing to decentralize
  - Population density is shifting to the Southwest
  - Commuting is becoming more dynamic
- But, congestion ranks among the nation’s lowest for similar size cities
  - 23 hours of delay each year (vs. 37 avg.)
  - 1.14 travel time index (vs. 1.20 avg.)
  - $502 cost per commuter (vs. $780 avg.)
Effects of state planning on housing prices

- Transit ridership has increased as Wake County’s population has grown
- But, transit’s overall impact on travel behavior in the network is small
  - transit makes up less than 1 percent of regional trips
  - Load factors for buses are very low
  - Fare recovery ratios are low (although they have stabilized)
Is this the “right” plan?
Building sustainable transit in Wake County

• Most, if not all, effective transit systems in the US have a working bus system as its backbone

• Rail adds of an entirely new layer of operational complexity onto the current transit system; it’s not merely an extension of existing service

• Adding rail risks diversions onto more expensive modes
Realistic assumptions about travel behavior are crucial

• Trends are toward increased single occupancy vehicle use
  ▪ Car sharing is declining

• Telecommuting is the fastest growing commuting “mode”

• Densities will likely increase, but migration will likely continue to be spread out
Can bus compete with rail?

• Bus transit is not one size fits all
  ▪ Local bus
  ▪ Express bus
  ▪ Bus Rapid Transit (BRT)

• Bus service has rivaled rail in providing mobility when implemented well
  ▪ Chicago

• Bus service can be cheap (local) or expensive (BRT)
Concluding Thoughts

- Raleigh-Durham’s growth justifies continued re-assessments of the region’s transportation needs.
- The underutilization of the current bus system implies a focused approach on bolstering core transit services.
- Demand for additional transit service is likely insufficient to justify an investment in rail at this time.
Thank You!

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