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?
Thinking Through Transportation: Back to Basics

• 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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<tr>
<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

Village

Mega City

Staley, Wake County Transit Panel

12 November 2013
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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