Strategic Issues for Regional Transit System Plan Development:

Connecting Homes and Jobs with Transit

Rail~volution Conference
October 19, 2011
Regional Transportation Direction

- TPB’s Transportation Vision (1998)
  - Transportation focused goals to improve transport, increase efficiency, and connect areas of activity

- COG’s Region Forward (2010)
  - Regional sustainability, accessibility, and livability goals, targets, and indicators focused on transit and activity centers

- Achieving the region’s goals requires to transit to:
  - Increase transit mode share
  - Provide access to regional activity centers
Regional Development: Population and Employment Projections

- **2010 - 2040**
  - 29% population (1.5 million people)
  - 34% household (0.7 million households)
  - 39% employment (1.3 million jobs)
Population and Employment Projections

- Population growth throughout outer suburbs
- Employment concentrated in Ashburn, Manassas, I-95 N and S
Regional Development: 58 Activity Centers/28 Activity Clusters

- Focus for land-use and transport planning
- 90% of transit work trips in region to jobs in activity centers (2010)
- Capture 58% of new jobs between 2005-30
- Capture 25% of new households between 2005-30
Regional Development: Growth and Location Projections

- Significant population and employment growth in inner/outer suburbs
- Traditional travel to core growing modestly (12%)
- Suburb-to-suburb growing tremendously (45%)

### Commuting Market

<table>
<thead>
<tr>
<th>Commuting Market</th>
<th>2008-2040 Growth in Weekday Home-Based Work Trips</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Commute to Core</td>
<td>86,000</td>
<td>12%</td>
</tr>
<tr>
<td>Commute to Central Juris.</td>
<td>153,000</td>
<td>41%</td>
</tr>
<tr>
<td>Reverse Commute</td>
<td>62,000</td>
<td>35%</td>
</tr>
<tr>
<td>Central Circulation</td>
<td>76,000</td>
<td>39%</td>
</tr>
<tr>
<td>Suburb – Suburb</td>
<td>1,236,000</td>
<td>45%</td>
</tr>
</tbody>
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### Growth Projections

<table>
<thead>
<tr>
<th>Area</th>
<th>Population Growth (% of total)</th>
<th>Employment Growth (% of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core (DC/Arl CBD)</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Central Jurisdictions Outside Core</td>
<td>10%</td>
<td>14%</td>
</tr>
<tr>
<td>Inner Suburbs (Mont, Ffx, PG)</td>
<td>29%</td>
<td>38%</td>
</tr>
<tr>
<td>Outer Suburbs (Outside WMATA Compact Jurisdictions)</td>
<td>59%</td>
<td>43%</td>
</tr>
</tbody>
</table>
Regional Travel Projections (2011-40)

- 22% growth in VMT
- 4% reduction in VMT per capita
- 43% growth in transit used for work trips
- 27% growth in vehicle trips
- 38% growth in lane miles of congestion (AM peak)
Central Core Transit Market Share

- 18% of regional work trips by transit
- 42% of core work trips by transit (2009)
- 37% of core work trips by WMATA (2009)
- National benchmarks:
  - San Francisco: 32% (2009)
  - Boston: 35% (2009)
  - Chicago: 27% (2009)
Role of Metrorail

- Built to bring commuters to the core
- Changing uses between 2002-07
  - PM off-peak use grew 22%
  - Non-work trips grew 20%
  - Growth of walk (18%) and bike (60%) station access
  - 20% of 2007 riders do not own a car
Regional Development: What if There Were No Transit?

- 1 million+ more auto trips
- 1,000 lane miles of highway to accommodate transit trips → 1,450 acres or a second Beltway
- Some Potomac crossings require 2-3 additional lanes per direction
**Issue: Constrained Core Capacity**

- **Challenge**
  - Short-term: Funding for 8-car trains, power, car storage
  - Long-term: Core peak capacity constrained even with 8-car trains
  - Long-term: Station capacity constrained at major transfer stations

- **Opportunities**
  - Enhance bus priority corridors
  - Inter-lining
  - New rail lines through the core

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2040 Peak Hour Passenger Loads
100% 8-Car Trains
Issue: Last Mile(s) Station Access

• Issues
  – High cost of parking (40,000 spaces = $1B)
  – 45% of Park & Ride users live within 3 miles of station

• Opportunities
  – In-fill stations and pedestrian connections
  – Improve pedestrian/bike networks
  – Mixed use joint development
  – Off-site Park & Ride lots with shuttles to station
Issue: Inefficient Surface Transit

• Issues
  – Traffic congestion threatens bus network efficiency and reliability

• Opportunities
  – Running way improvements, high-frequency service, rapid bus, BRT
  – Value pricing/HOT lanes to support transit priority and funding
Issue: Future of the Region's Surface Transit System

- **Issues**
  - Local vs. regional surface transit provision
  - Streetcar/LRT projects led by jurisdictions

- **Opportunities**
  - Surface transit integration
  - Regional priority corridors
  - Fare integration and a regional fare system
Issue: Serving Activity Centers

• Issues
  – Fastest growing activity centers not served by Metrorail
  – Connections needed between suburban activity centers

• Opportunities
  – New surface transit connections
  – Reverse commute
  – Metrorail extensions to new markets
Issue: Rising Operating and Maintenance Costs

• Issues
  – Annually O&M costs projected to rise at a faster rate than ridership
  – Regional ability to afford current/future Metro service

• Opportunities
  – Transit-oriented development supporting new markets
  – Link transit funding to economic value created by transit service and access
  – Operational efficiencies achieved through surface transit priority
Issue: Unfunded Capital Needs

• Issues
  – Lack of dedicated funding stream
  – Unfunded capital needs, which caps system capacity

• Opportunities
  – Value pricing/HOT lanes to support transit priority and funding
  – Value capture of surrounding development