Central New Jersey Route 1

Bus Rapid Transit BRT

Alternatives Analysis Study

Central Jersey Transportation Forum

July 20, 2006
Primary Study Area and Service Market Area
US Route 1 Bus Rapid Transit Alternatives Analysis

Legend
- Primary study area
- Service market area
- Activity center
- Commuter rail station
- Commuter rail line
- 500-level county road
- Interstate/US/State highway
- Municipal boundary
- County boundary
- NJTPA/DVRPC boundary

Source: ESRI, Inc., NJTPA and DVRPC.
BRT Core Service Concept
BRT System Infrastructure Elements

- **Rt. 1 Corridor BRT Guideway**
  - *Most of guideway parallels Route 1*
    - 34.0 miles at grade
    - 1.2 miles of elevated structure
    - 0.5 miles of new bridges/flyovers
  - 22 BRT Stations

- **Park-and-Ride Locations**
  - New Jersey (5)
  - Pennsylvania (2)
### Highlights and Results

<table>
<thead>
<tr>
<th>Year</th>
<th>Description of Service</th>
<th>Regional BRT Routes Ridership</th>
<th>Core Rt. 1 BRT Ridership</th>
<th>Average Weekday Regional Bus Ridership</th>
<th>Reduction in person trips by auto</th>
<th>Reduction in vehicle miles of travel by auto</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Existing Service</td>
<td>NA</td>
<td>NA</td>
<td>14,000</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2025</td>
<td><strong>No Build Alternative</strong> Added frequency to existing routes to accommodate growth in ridership</td>
<td>NA</td>
<td>NA</td>
<td>26,600</td>
<td>No reduction as traffic is projected to grow by 55%*</td>
<td>No reduction as VMT is projected to grow by 118%*</td>
</tr>
<tr>
<td>2025</td>
<td><strong>BRT Alternative 4c</strong> Dinky retained</td>
<td>30,100</td>
<td>14,760</td>
<td>43,500</td>
<td>11,100</td>
<td>368,000</td>
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</tbody>
</table>

*Estimate is for 2020*
BRT ALTERNATIVE 4C: DAILY 2025 CORE AREA BUS TRIPS

Total Bus Trips into Core Area- 9,820
Total Bus Trips Within Core Area- 4,940
TOTAL CORE AREA BUS TRIPS- 14,760
Highlights and Results

- BRT system cost in $600 to 700 million range to implement all at one time
  - System can be implemented in segments by being integrated into area projects
- DVRPC and NJTPA have included BRT project in long-range plans
  - Facilitates advancement and implementation of system
Next Steps

- **NJDOT Route 1 Regional Growth Strategy Study**
  - *Discussions with Rt. 1 area municipalities should utilize the BRT system as a key part of the mobility improvement plan that supports growth in the region.*
  - *NJDOT Strategy Study can provide a venue for working closely with each municipality to devise a growth and transportation strategy that recognizes and incorporates the BRT system.*

- **Assist municipalities with preservation of right-of-way for future implementation**

- **Continue coordination with the NJDOT on the Penn’s Neck Area Improvements to facilitate future BRT**
  - *Millstone River Bridge Replacement Project*
  - *Vaughn Drive Connector at Princeton Junction*
Next Steps

- Continue coordination with DRJTBC on the Scudder Falls Bridge Replacement Project to establish BRT treatments
- Coordinate with private redevelopment to establish BRT stations and guideway
  - Quaker Bridge Mall
  - General Growth (former Wyeth site)
  - Sarnoff
  - Forrestal Center
  - Princeton University
- Coordinate with the University Medical Center and the Capital Health System relocation proposals
Next Steps

➡ Identify infrastructure and BRT services that can be launched incrementally
  ➡ Establish a pre-BRT service to supplement the Dinky (“Dinky Bus”)

➡ Establish park & ride facilities in coordination with existing services and future BRT services
  ➡ Along I-95 with service between Bucks County and Route 1 corridor
  ➡ In East Windsor area with service to Princeton along County Route 571. Include bus treatments in planned construction for Route 571.
  ➡ In South Brunswick area with service along Route 1 corridor
Next Steps

- Pursue appropriate environmental analysis and engineering as BRT segments are adopted

- Develop a marketing and outreach plan to establish a “brand” for the BRT system that can be applied as services and facilities are developed
Thank You