Applying the Interim Guidance and Instructions for Small Starts to Pace’s Rapid Transit Program

Tünde Bálványos, PhD
Bus Rapid Transit Coordinator
Pace Suburban Bus

November 2006
Pace Suburban Bus

– Service area:
  • Suburban
  • 3500 square mile
  • 35% recovery ratio
  • No HOV, nor shoulder-riding in region
  • Parking requirement for new development in suburbs

– New travel markets, new transit goals:
  • Provide regional connectivity
  • Solution is needed now
# Pace’s Arterial Rapid Transit

- Integrated system of functional elements

## Table:

<table>
<thead>
<tr>
<th></th>
<th>BRT</th>
<th>Pace’s Arterial Rapid Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td>$5 million /mile +</td>
<td>$1-5 million /mile</td>
</tr>
<tr>
<td><strong>Ridership</strong></td>
<td>12,000 pass/day +</td>
<td>Below 12,000 pass/day</td>
</tr>
<tr>
<td><strong>ROW</strong></td>
<td>Dedicated facility</td>
<td>Mixed traffic</td>
</tr>
<tr>
<td></td>
<td>Exclusive ROW</td>
<td>Queue jump + TSP</td>
</tr>
<tr>
<td><strong>Station spacing</strong></td>
<td>1 mile +</td>
<td>.5-1 mile + extension</td>
</tr>
<tr>
<td><strong>Vehicle fleet</strong></td>
<td>Special BRT vehicle</td>
<td>Dedicated fleet, low floor</td>
</tr>
<tr>
<td><strong>Fare collection</strong></td>
<td>Off-board</td>
<td>On board possible</td>
</tr>
<tr>
<td><strong>ITS</strong></td>
<td>Real-time information</td>
<td>Real-time information</td>
</tr>
<tr>
<td></td>
<td>TSP</td>
<td>TSP</td>
</tr>
<tr>
<td></td>
<td>Central Dispatch</td>
<td>Central Dispatch possible</td>
</tr>
<tr>
<td><strong>Operation</strong></td>
<td>Frequency below 8 minutes</td>
<td>Below 15 minutes</td>
</tr>
<tr>
<td></td>
<td>All day</td>
<td>All day</td>
</tr>
</tbody>
</table>
Pace’s Arterial Rapid Transit Network for the Region Program PARTNER
FTA’s Purpose

• Bus corridor projects are now eligible
• Smaller agencies, smaller scale projects could compete – Pace is not small, but very lean
• Wide range of modal alternatives – modal blind
• Address significant transportation problem – region is the 3rd most congested
• Provide significant mobility benefit – regional connectivity, shoulder riding
• Economic development – Niles example
• Cost–effectiveness ART is less than $3 mill/mile
Eligibility

- Bus projects are eligible without specified fixed guideway – great!
- Small Starts: description of ART
- Very Small Starts:
  - Existing riders 3000/day:
    - FTA’s goal is to limit projects,
    - Pace – some corridors are eligible
    - Pace wants to provide regional connectivity in non-traditional travel markets. However, new routes for regional connectivity are not eligible.
    - smaller transit agencies?
  - $3million/mile:
    - Pace’s ART is less then $3million/mile
    - all BRT are a Small Starts – ROW
Subdividing Projects

Definition of operable segment needs some clarification, in term of:

• Regional plan vs. individual corridors:
  – PARTNER Program is 1 or 20 projects?
  – Niles area small ART network would be 1 or 3 projects?

• Corridor segments:
  – ART Core – to provide frequent, high quality service
  – ART Connector – to provide regional connectivity

• Phasing in time:
  – as demand increases infrastructure elements can be added
Submission Requirements to Prove Eligibility

• Local match
  – regardless of guideline this continue to be a difficulty for Pace – Pace serves 274 communities.
  – Pace is not allowed to issue bonds
• Need to supply the raw data on vehicle boarding, therefore cannot run ART where there was no service before
• Performance measures are given as reduced travel time, added frequency, improved amenities – Pace’s increased mobility, access, regional connectivity
Planning Requirements

• Alternative Analysis:
  – Small Starts: fewer alternatives, simplified AA – will need consultation with FTA to work out what simplified AA means
  – Very Small Starts: project definition-based AA – time will tell
  – RTA will establish additional evaluation criteria that is relevant to the region

• Baseline Alternative:
  – Very Small Starts that include a fixed guideway must use Small Starts criteria – queue jump lane does not count as fixed guideway
Evaluation Criteria and Measures: Project Justification

- Land use and economic development
  - These are long term measures while Small Starts and Very Small Starts focus on the short term (including the ridership forecast for opening year)
  - Quantifying these requires lot of data, while the goal is to simplify
  - The smaller the project, the smaller its impact

- Land use and economic development could be given progressively lower weight in comparison to cost-effectiveness from New Starts, through Small Starts, to Very Small Starts
Entry into Project Development

• Small Starts and Very Small Starts
  – using opening year forecast
  – For small projects, such as ART, cost-effectiveness (and short deployment time) is the major advantage not land use impact.
FTA’s Funding Decisions

- Geographic equity – 10 million people in Chicago region, 3rd most congested region
- On going projects:
  - New Start: Star Line, commuter rail,
  - Pace SAFETEA-LU: Golf and Cermak road
  - still many transportation problems remain
- Regional equity – funding focused on the city but now employment and demographic growth is in the suburbs, resulting in different travel market
- RTA is working on the 30 year capital fund needs to prioritize the region’s projects
Summary

• FTA thinks of BRT/ART as an overlay system in urban setting
• Pace service area is different:
  – Suburban
  – Goal is to provide regional connectivity
  – Where currently no service
• Experience of Small agencies
Contact

If you have any question about Pace’s concept of Arterial Rapid Transit or the PARTNER Program, please contact

Tünde Bálványos
Bus Rapid Transit Coordinator
847-228-2389

tunde.balvanyos@pacebus.com