Gulf Coast Rail District
“Where 17 Railroads Meet the Sea”
(17) Railroads (Still) Meet the Sea
Rail Can Continue to Foster Houston’s Growth

- Roadway Congestion Relief
- Air Quality
- Energy Efficiency
Rail is A Win-Win

Public Benefits

• Consumer Products
• Roadway Mobility
• Roadway Safety
• Improve Community Livability
• Commute Alternatives
• Air Quality and Energy Efficiency
Freight Rail Improvements

- West Belt
- Belt Junction
- Bridge 16
West Belt

- Evaluated for feasibility
- Issues remain for final design

- 5 Closures
- 4 Underpasses
- 1 Grade Separation (Overpass or underpass feasible)
Operating Assumptions

- Average Operating Speed – 45mph
- Distance Based Fares - $6.00 max.
- Headways - 20 Min Peak
- Bi-Level Commuter Cars – 150 Passenger Capacity
- METRO Solutions Phase II Fully Implemented
- Park & Ride Service Discontinued outside Beltway 8
## Ridership Projections

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Total Daily Boardings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Up – No CBD</td>
<td>2,640</td>
</tr>
<tr>
<td>Build Out – No CBD</td>
<td>5,952</td>
</tr>
<tr>
<td>Build Out – CBD</td>
<td>18,816</td>
</tr>
<tr>
<td>Build Out (2035 RTP Update) – CBD</td>
<td>22,578</td>
</tr>
</tbody>
</table>
### Calculation of Daily Cost per User Benefitting

*Based on 2035 Capacity in 2010 Dollars*

<table>
<thead>
<tr>
<th>Project</th>
<th>Annualized Capital ($M)</th>
<th>Annual Operating ($M)</th>
<th>Total Annual Cost ($M)</th>
<th>Daily Users Benefitting</th>
<th>Annual Users (millions)¹</th>
<th>Cost per User Benefiting ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 290 Widening</td>
<td>$51.6</td>
<td>$8.1</td>
<td>$59.7</td>
<td>11,704</td>
<td>29.8</td>
<td>$2.00</td>
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<tr>
<td>Hempstead Toll Road</td>
<td>$79.1</td>
<td>$8.4²</td>
<td>$87.5</td>
<td>7,084</td>
<td>18.1</td>
<td>$4.84</td>
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<tr>
<td>Hempstead Corridor Commuter Rail³</td>
<td>$24.9</td>
<td>$13.9</td>
<td>$38.8</td>
<td>11,289</td>
<td>28.8</td>
<td>$1.35</td>
</tr>
</tbody>
</table>

¹ Based on 255 work days/year.

² Hempstead Toll Road annual operating cost based on 4-lane toll way for 23 miles at $90,914 per lane mile per year.

³ The above comparisons only include capital and operating costs. Right-of-way costs are not included since they are undefined at this time.
Austin-Houston Intercity Passenger Rail
DFW-Houston High Speed Rail
GULF COAST RAIL DISTRICT

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