Passenger and Transit Rail Vehicles: The U.S. Supply Chain

Marcy Lowe
Senior Research Analyst
Duke University
Center on Globalization, Governance & Competitiveness

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What is a value chain?
Pent-up demand

- Over $248 billion in new fixed guideway projects

Based on data from Reconnecting America
...after decades of little or no investment

• Amtrak needs $11 b. in new rolling stock 2010-2033

Based on data from Amtrak
Who has the largest rail equipment market?

- **Total market:** $159 billion
- **“Accessible”**: $111 billion
- **Rolling stock:** $48 billion
- **Rolling stock for passenger & urban rail:** $19 billion (estimate)

Based on data from Roland Berger/UNIFE
Our focus: 6 rail types

<table>
<thead>
<tr>
<th>Passenger rail:</th>
<th>Regional</th>
<th>Intercity</th>
<th>High-Speed Rail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro light rail</td>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
<td><img src="image3" alt="Image" /></td>
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<tr>
<td>Light rail</td>
<td><img src="image4" alt="Image" /></td>
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<tr>
<td>Streetcar</td>
<td></td>
<td><img src="image5" alt="Image" /></td>
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</tr>
</tbody>
</table>

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## Who are the U.S. players?

<table>
<thead>
<tr>
<th>Railcar firms</th>
<th>Locomotive firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alstom</td>
<td>Alstom</td>
</tr>
<tr>
<td>AnsaldoBreda</td>
<td>Bombardier</td>
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<tr>
<td>Bombardier</td>
<td>Electro-Motive Diesel (EMD)</td>
</tr>
<tr>
<td>Brookville</td>
<td>General Electric (GE)</td>
</tr>
<tr>
<td>CAF</td>
<td>National Railway Equipment</td>
</tr>
<tr>
<td>Gomaco</td>
<td>Motive Power (Wabtec)</td>
</tr>
<tr>
<td>Hyundai Rotem</td>
<td></td>
</tr>
</tbody>
</table>

Railcar firms: Locomotive firms:
Who else is in the supply chain?

Passenger & transit rail:
• 13 railcar firms
• 6 locomotive firms

Including freight:
• 150 – 200 firms

Including tier 3:
• > 300 firms
30 firms that pledged to expand U.S. manufacturing if they received HSR grants
More to come, in early June 2010
Thank you for your attention!

Marcy Lowe
Senior Research Analyst

Center on Globalization, Governance & Competitiveness

Duke University
marcy.lowe@duke.edu