VCAT Discussion
Advanced Manufacturing

June 7, 2011
State of U.S. Manufacturing
Manufacturing employment has been on a long decline; 250,000 jobs gained since Dec ‘09

Source: BLS/Haver.
State of U.S. Manufacturing
Recent job gains concentrated in basic manufacturing industries

Net Job Growth 2009-Dec to 2011-Apr

<table>
<thead>
<tr>
<th>Industry</th>
<th>Net Job Growth</th>
<th>% Mfg GDP(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabricated Metals</td>
<td>89</td>
<td>8%</td>
</tr>
<tr>
<td>Machinery</td>
<td>61</td>
<td>7%</td>
</tr>
<tr>
<td>Transport Equipment</td>
<td>58</td>
<td>11%</td>
</tr>
<tr>
<td>Primary Metals</td>
<td>34</td>
<td>3%</td>
</tr>
<tr>
<td>All Other</td>
<td>8</td>
<td>72%</td>
</tr>
</tbody>
</table>

Source: BLS, BEA. 1. Industry % is based on 2009 Value-Added estimates. Numbers do not add to 100% due to rounding.
A Framework for Revitalizing American Manufacturing
An approach to addressing the core challenges facing manufacturers


1. Provide workers with the opportunity to obtain the skills necessary to be highly productive
2. Invest in the creation of new technologies and business practices
3. Develop stable and efficient capital markets for business investment
4. Help communities and workers transition to a better future
5. Invest in an advanced transportation infrastructure
6. Ensure market access and a level playing field
7. Improve the business climate, especially for manufacturing

Relevance for today’s discussion

- Macro policies are important, but not specific to the requirements for Advanced Manufacturing
  - Trade
  - Tax
  - Infrastructure
  - Energy
  - Education

- Our advanced manufacturing focus has been on:
  - Effectiveness of our R&D resources
  - Accelerating the commercialization of new technologies
  - Training the next generation workforce
Commercializing process technologies
  • Models for public-private collaboration on pre-competitive technologies
  • Priority technology areas for pilots

Developing shared “innovation infrastructure”
  • Core issues facing your supply chain
  • Opportunities for big company leadership