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Drivers of Change Influencing Transport Needs

- Population
- Globalization
- Energy
- Federal Policy
- Environment
- Technological Innovation
- Economic Growth
Spatial Context in which Drivers of Change Operate

MEGAREGIONS
Why Megaregions Matter

<table>
<thead>
<tr>
<th></th>
<th>Megaregion</th>
<th>Non-Megaregion</th>
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<tbody>
<tr>
<td>Area</td>
<td>29.6%</td>
<td>70.4%</td>
</tr>
<tr>
<td>Population (2008)</td>
<td>76.54%</td>
<td>23.46%</td>
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<tr>
<td>Employment (2008)</td>
<td>76.98%</td>
<td>23.02%</td>
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<tr>
<td>GRP (2008)</td>
<td>81.47%</td>
<td>18.53%</td>
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<tr>
<td>Fortune 500</td>
<td>92.07%</td>
<td>7.93%</td>
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<tr>
<td>Patents (2008)</td>
<td>86.77%</td>
<td>13.23%</td>
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Megaregions-scale analysis captures relevant economic and demographic phenomena.

10 megaregions account for 30% of national territory and 75% of the nation’s population and employment.
Overview of Piedmont Atlantic Megaregion

- Megaregion stretching from Birmingham to Raleigh.
- Fast growing population, development, and business.
- Definition by Contant, Ross, et al. (2005) accounts for—
  - Population
  - Development patterns
  - Geographic characteristics
  - Passenger and freight movement
  - Infrastructure linkages
  - Ecologically sensitive areas
Leading Centers of the Piedmont Atlantic Megaregion
Implications of Megaregions on Transportation Needs

- How investment decisions are made?
  - New(Megaregion) vs. Old (City)
Competitiveness in a global economy? New (Multijurisdictional connective) vs. Old (Single geographies)

PAM exports goods to more than 80 countries

PAM exports (2004) : [13% of U.S. total exports ]
Implications of Megaregions on Transportation Needs

- Diversity of transportation modes?
  - New (Multi Modal/Pedestrian ways) vs. Old (Single mode)
Implications of Megaregions on Transportation Needs

- Sustainable development?
  - New (Economies of scale) vs. Old (Less efficient resource allocation)

- Leading industries:
  - Wholesale
  - Management
  - Administrative and waste services
  - Construction
  - Transportation and warehousing
Implications of Megaregions on Transportation Needs

- Sustainable development?
  - New (Economies of scale) vs. Old (Less efficient resource allocation)

  - Freight transportation is essential to megaregion economic strengths
Megaregions

• Cities are churning in response to the demands of the global economy.

• 21st-century infrastructure is called on to support individual, local, regional, and global mobility needs.