Future of Transportation in Florida

Florida Transportation Commission
“Meeting of the Modes”
February 12, 2007

Bob Romig, Director
Office of Policy Planning
Florida Department of Transportation
Key Trends Shaping Mobility

- Continued strong population and economic growth
- Shift toward regional economic centers
- Shift toward national and global markets
- Shift toward service and information industries
- Continued concerns about growth management and environmental stewardship
Population Growth

Florida Population, 1970-2030

Source: U.S. Census Bureau, Historical Census; University of Florida, Bureau of Economic and Research, Projections of Florida Population by 2002.
Visitors Are Increasing, Too

Source: Florida Department of Transportation using Visit Florida data.
Passenger Movements Will Continue to Outpace Population Growth

<table>
<thead>
<tr>
<th>Mode</th>
<th>Measure</th>
<th>2002 (Actual)</th>
<th>2025 (Forecast)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>Vehicle miles traveled (millions)</td>
<td>178,681</td>
<td>274,503</td>
<td>54%</td>
</tr>
<tr>
<td>Transit</td>
<td>Trips (millions)</td>
<td>208</td>
<td>325</td>
<td>56%</td>
</tr>
<tr>
<td>Air</td>
<td>Enplanements (millions)</td>
<td>57</td>
<td>97</td>
<td>72%</td>
</tr>
<tr>
<td>Water</td>
<td>Cruise passengers (millions)</td>
<td>13</td>
<td>28</td>
<td>115%</td>
</tr>
<tr>
<td>Rail</td>
<td>Interregional passengers (millions)</td>
<td>0.9</td>
<td>1.2</td>
<td>29%</td>
</tr>
<tr>
<td>Population (millions)</td>
<td>16.7</td>
<td>23.7</td>
<td>42%</td>
<td></td>
</tr>
</tbody>
</table>

Most Freight Flows are Within Florida

- Exports: 72M tons
- Imports: 200M tons
- Within Florida: 575M tons

Source: Federal Highway Administration, Freight Analysis Framework 2, 2002 data.
### Rising Demand for Freight Movement

#### Freight Volume in Millions of Tons

<table>
<thead>
<tr>
<th>Mode</th>
<th>1998 (Actual)</th>
<th>2001 (Estimate)</th>
<th>2025 (Forecast)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck</td>
<td>562</td>
<td>629</td>
<td>1,163</td>
<td>85%</td>
</tr>
<tr>
<td>Rail</td>
<td>143</td>
<td>156</td>
<td>256</td>
<td>65%</td>
</tr>
<tr>
<td>Air</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>171%</td>
</tr>
<tr>
<td>Water</td>
<td>73</td>
<td>78</td>
<td>115</td>
<td>48%</td>
</tr>
<tr>
<td>Employment (millions)</td>
<td>6.9</td>
<td>7.4</td>
<td>11.2</td>
<td>51%</td>
</tr>
</tbody>
</table>

*Source: Federal Highway Administration, Freight Analysis Framework, 2002; US Bureau of Economic Analysis; DRI-WEFA, State Long-Term Tables, Fall 2002 Forecast*
SIS Highways Not Meeting Level of Service Standards in 2005

State of Florida Department of Transportation

LEGEND

Highways Not Meeting Standards as of Year 2005*

NOTES

* SIS Highways not meeting standards are defined as those facilities operating below FDOT’s statewide minimum level of service standards as specified in “Rule Chapter No. 14-94”.

Other Facilities:

- SIS Highways not meeting standards are defined as those facilities operating below FDOT’s statewide minimum level of service standards as specified in “Rule Chapter No. 14-94”.

**Notes**

Concord Corridors, 2005

Orlando Area
Tampa Bay Area
Jacksonville Area
Southeast Area

Other Facilities:

- SIS Highways not meeting standards are defined as those facilities operating below FDOT’s statewide minimum level of service standards as specified in “Rule Chapter No. 14-94”.

**Notes**

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**Notes**
Congested Corridors, 2025

SIS Highways Not Meeting Level of Service Standards in 2025*

State of Florida
Department of Transportation

LEGEND

Highways Not Meeting Standards as of Year 2025**

Other Facilities:

Includes lanes added as a result of constructing the Ten-Year Plan through 2015 with Growth Management funds and the FHHS Cost Feasible Plan through 2025.

SIS Highways not meeting standards are defined as those facilities operating below FDOT's statewide minimum level of service standards as specified in "Rule Chapter No. 14-94".

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### Florida’s Seaports Face Challenges of Meeting Growth in Trade

- Improving capacity and productivity by investing in:
  - Waterside
  - Marine terminals
  - Highway and rail access
  - Linkages with inland facilities and markets
- Meeting environmental and security mandates
- Covering infrastructure and operating costs

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<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>563</td>
<td>2,669</td>
<td>7.7%</td>
</tr>
<tr>
<td>So. Carolina</td>
<td>320</td>
<td>1,864</td>
<td>8.8%</td>
</tr>
<tr>
<td>Virginia</td>
<td>223</td>
<td>1,852</td>
<td>10.6%</td>
</tr>
<tr>
<td>Georgia</td>
<td>216</td>
<td>1,662</td>
<td>10.2%</td>
</tr>
<tr>
<td>Texas</td>
<td>378</td>
<td>1,516</td>
<td>6.8%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>256</td>
<td>276</td>
<td>0.4%</td>
</tr>
<tr>
<td>Mississippi</td>
<td>0</td>
<td>213</td>
<td>---</td>
</tr>
<tr>
<td>No. Carolina</td>
<td>61</td>
<td>104</td>
<td>2.6%</td>
</tr>
<tr>
<td>Alabama</td>
<td>31</td>
<td>37</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

Source: American Association of Port Authorities
Airports Facing Capacity Constraints

Source: Florida Aviation System Plan
Rail is Critical to Effectively Moving Florida’s Freight

- Over 2 million carloads of freight annually in Florida
  - Same as 6 million truckloads
  - 4th nationally in terminations
  - 7th nationally in originations

- Rail is critical to key Florida industries
  - Phosphate
  - Coal
  - Retail distribution
  - Food/agriculture
  - Paper/fiber
  - Automobiles
  - Construction

- High cost of capital improvements creates capacity issues

Source: FDOT Rail System Plan
Will Total Logistics Costs Continue to Increase?

Percentage of U.S. Gross Domestic Product

2025 Florida Transportation Plan

- Safety and Security
- Quality of Life and Environmental Stewardship
- Maintenance and Preservation
- Mobility and Economic Competitiveness
- Sustainable Investments
Safety and Security
- Improve safety of all modes
- Improve ability to deter and respond to security incidents
- Ensure access to military facilities

Quality of Life and Environmental Stewardship
- Protect seaports, airports, and other hubs from encroachment by incompatible land uses
- Reduce impact of freight movement on communities

Maintenance and Preservation
- Protect existing infrastructure
- Expand use of alternative modes for overweight loads
2025 FTP: Key Objectives and Strategies
A Stronger Economy Through Enhanced Mobility

- Where?
  - Hubs (ports and terminals)
  - Corridors (highways, rail, water)
  - Connectors between the modes

- How?
  - Optimize existing facilities
  - Expand modal options
  - Develop new hubs and corridors

- Key initiatives
  - Strategic Intermodal System
  - Passenger Rail and Transit Initiatives
  - Future Corridors
Strategic Intermodal System

http://www.dot.state.fl.us/planning/sis
Example
Port of Tampa

- New and expanding freight and passenger facilities

- New and improved connectors
  - Highway (Crosstown Connector)
  - Rail
  - Waterway
Passenger Rail Initiatives

- Southeast Florida
  - Tri-Rail
  - FEC Passenger Rail

- Central Florida Commuter Rail

- Intercity Passenger Rail Vision Plan
Freight Rail Initiatives

- Major upgrades to CSX as part of Central Florida Commuter Rail Project
  - Shift freight from “A” Line through Orlando to “S” Line through Ocala
  - Statewide CSX Florida Improvement Plan
Freight Rail Initiatives

- Other freight rail improvements as part of Strategic Intermodal System and Growth Management Investments
  - 23 projects @ $100M between FY05/06 and FY10/11
    - Projects to upgrade shortline railroads to handle industry standard railcars
    - Projects to provide passing opportunities
    - Bridge rehabilitation projects
    - Projects to improve rail operations

- Florida’s investments in Freight Rail are consistent with AASHTO Rail Bottom Line recommendations targeted at helping the rail industry maintain mode share.
“New Starts” Transit Initiatives
Projects with Local Funding Commitment

- Miami-Dade Transit
  - MIC/Earlington Heights
  - North Corridor
  - East-West Corridor

- Jacksonville BRT

- Central Florida Commuter Rail

- City of Miami Streetcar

- Ft. Lauderdale Downtown Light Rail
Florida’s Future Corridors Program will develop and maintain a statewide, integrated network of multimodal, multiuse corridors that:

- Address current and future statewide mobility and connectivity needs
- Are connected to regional facilities that also serve local trips
- Are developed in a manner that balances economic competitiveness and mobility needs with community livability and environmental stewardship
- Are developed by a partnership of state agencies, statewide commissions and other statewide, regional, and local partners
- Are financed through user fees to the maximum extent possible
**Potential Corridor Transformation (Re-Use) Study Areas**

**Important Note:** These specific study areas, boundaries, and facilities may change or be deleted, and others may be added, based on additional information.
Potential New Corridor Study Areas

Important Note: These specific study areas and boundaries may change or be deleted, and others may be added, based on additional information.
Recommended Prototype Studies

- Transformation/re-use of existing corridor
  - Multimodal corridor – I-95 Miami-Dade County to Georgia State line

- New corridors
  - Interstate corridor – Bay County-Alabama
  - Interregional corridor – Hillsborough County-Duval County
  - Economically distressed/developing area – Collier County-Polk County

- Selection based on:
  - Urgency of mobility or connectivity need
  - Status of visioning activities
  - Partner readiness to move forward
  - Geographic distribution
## Investing in Florida’s Future
### Economic Impacts of FDOT Work Program

<table>
<thead>
<tr>
<th>Benefits (2006 dollars)</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Income</td>
<td>$3,254</td>
<td>$5,255</td>
<td>$6,749</td>
</tr>
<tr>
<td>Gross State Product</td>
<td>$3,361</td>
<td>$6,136</td>
<td>$7,554</td>
</tr>
<tr>
<td>Output</td>
<td>$5,534</td>
<td>$9,677</td>
<td>$11,781</td>
</tr>
<tr>
<td>Employment</td>
<td>43,165</td>
<td>64,114</td>
<td>67,930</td>
</tr>
</tbody>
</table>

*Source: FDOT Macroeconomic Analysis Model*
Sustainable Investments for Florida’s Future

- Reduce backlog and meet future needs

- Set investment priorities; recognize strategic and essential role of SIS

- Seek alternative revenues sources
  - User fees
  - Public/private partnerships
What’s Next

- SIS designation update
  - Annual data review to be completed spring 2007
  - Next comprehensive update beginning in 2008

- Future Corridor implementation
  - 4 prototypes to begin in 2007

- ‘Future hubs’
  - Major expansions to existing hubs
  - Some relocations (new Panama City/Bay County Airport)
  - New types of hubs (inland ports, commercial spaceports)
# Summary: How Does Florida Compete?

<table>
<thead>
<tr>
<th>From…</th>
<th>To…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving vehicles</td>
<td>Moving people and freight (and sharing information)</td>
</tr>
<tr>
<td>Individual modes and facilities</td>
<td>Complete end-to-end trip</td>
</tr>
<tr>
<td>Individual jurisdictions</td>
<td>Economic regions and trade corridors</td>
</tr>
<tr>
<td>Physical capacity</td>
<td>Operational performance, flexibility, and reliability</td>
</tr>
<tr>
<td>Travel time and vehicle operating costs</td>
<td>Business logistics and economic competitiveness</td>
</tr>
<tr>
<td>Reacting to economic growth and community and environmental impacts</td>
<td>Proactive planning for economic, community and environmental goals</td>
</tr>
</tbody>
</table>
www.dot.state.fl.us/planning