NJTPA Region

Bergen
Essex
Hudson
Hunterdon
Jersey City
Middlesex
Monmouth
Morris
Newark
Ocean
Passaic
Somerset
Sussex
Union
Warren
North Jersey Transportation Planning Authority
The Metropolitan Planning Organization for Northern New Jersey

STANDING COMMITTEES
Planning & Economic Development Committee
Project Prioritization Committee
Freight Initiatives Committee
Regional Transportation Advisory Committee
Population Distribution

- 79%: 6.7M
- 14%: 1.2M
- 7%: 0.6M
# Regional Transportation Network

<table>
<thead>
<tr>
<th>Road Network</th>
<th>Commuter Rail</th>
<th>Freight Rail</th>
</tr>
</thead>
<tbody>
<tr>
<td>19,000 miles</td>
<td>10 Lines</td>
<td>Port Express Rail</td>
</tr>
<tr>
<td>177 miles of toll roads</td>
<td>150 Stations</td>
<td>Intermodal facilities</td>
</tr>
<tr>
<td>250 bus routes</td>
<td>390 Miles</td>
<td>Waterborne Traffic</td>
</tr>
<tr>
<td>Local</td>
<td>PATH</td>
<td>Port of NY/NJ</td>
</tr>
<tr>
<td>Express</td>
<td>Light Rail</td>
<td>Cross Harbor Freight Connection</td>
</tr>
<tr>
<td>Intercity</td>
<td>EWR Monorail</td>
<td>3 Passenger Ferry Operators</td>
</tr>
<tr>
<td>Park-And-Rides</td>
<td></td>
<td>Bicycle and Pedestrian</td>
</tr>
<tr>
<td>Paratransit</td>
<td></td>
<td>Sidewalks</td>
</tr>
<tr>
<td>Truck Freight</td>
<td></td>
<td>Bike Paths</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transit Station Bike Lockers</td>
</tr>
</tbody>
</table>
Smart Growth Opportunities and Constraints

Legend

- NJTPA_Transit_Villages
- Interstates/Toll Roads
- US/State Highways
- Preserved Land
- Highlands/Pinelands
- Coastal CAFRA Centers
- Potential Growth Focus Areas
- Planning Areas 1&2
- County Boundary
Congestion
Delay Ratio on Regional Roadways

Delay is the added travel time that results from traveling in congested conditions. The delay ratio is the amount of delay that vehicles experience while traveling on a road, as percentage of their total travel time on that road. This map shows the delay ratio for travel in the peak period.

Delay Ratio

- > 75%
- 50% to 75%
- 25% to 50%
- < 25%
Looking Ahead to 2035

Population  16% growth
Jobs  17% growth
Vehicle-Miles Traveled  14 - 16% increase
Transit Trips  45 - 60% increase
Freight Traffic  100% increase
Traffic Congestion  44% to 52% increase
Median Travel Time  11 - 13% increase
Accidents/Crashes  Decline on a per-capita basis
High Cost Bridges

**Route 1&9 Pulaski Skyway:**
Reconstruction cost estimated at $1.2 billion. Interim repairs will cost at least $100 million/year (over 7-8 years).

**Route 7 bridge over the Hackensack River (Wittpenn Bridge):**
Construction cost estimated at $452 million.
## Bridge Conditions

<table>
<thead>
<tr>
<th>Owner</th>
<th>Total Deck Area (Sq Ft)</th>
<th>Not Deficient</th>
<th>Structurally Deficient</th>
<th>Functionally Obsolete</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJDOT</td>
<td>25,197,314</td>
<td>57%</td>
<td>17%</td>
<td>26%</td>
</tr>
<tr>
<td>Counties</td>
<td>5,675,794</td>
<td>66%</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>Cities and Towns</td>
<td>267,858</td>
<td>50%</td>
<td>26%</td>
<td>24%</td>
</tr>
<tr>
<td>NJ TRANSIT</td>
<td>554,652</td>
<td>30%</td>
<td>17%</td>
<td>53%</td>
</tr>
<tr>
<td>Turnpike</td>
<td>19,467,655</td>
<td>58%</td>
<td>1%</td>
<td>41%</td>
</tr>
<tr>
<td>All Other (incl. Unknown)</td>
<td>743,960</td>
<td>52%</td>
<td>13%</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51,907,233</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Pavement Conditions

<table>
<thead>
<tr>
<th>Rating</th>
<th>Miles</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>366</td>
<td>11.0%</td>
</tr>
<tr>
<td>Fair or Mediocre</td>
<td>1,409</td>
<td>42.4%</td>
</tr>
<tr>
<td>Deficient - Roughness</td>
<td>434</td>
<td>13.1%</td>
</tr>
<tr>
<td>Deficient - Distress</td>
<td>700</td>
<td>21.1%</td>
</tr>
<tr>
<td>Deficient - Both</td>
<td>414</td>
<td>12.4%</td>
</tr>
<tr>
<td>Total</td>
<td>3,323</td>
<td></td>
</tr>
<tr>
<td>Rating Not Available</td>
<td>230</td>
<td></td>
</tr>
</tbody>
</table>
Regional Transportation Planning Goals

Protect and Improve the Quality of Natural Ecosystems and the Human Environment

Provide Affordable, Accessible and Dynamic Transportation Systems Responsive to Current and Future Customers

Select Transportation Investments that Support the Coordination of Land Use with Transportation Systems

Retain and Increase Economic Activity and Competitiveness

Enhance System Coordination, Efficiency, and Intermodal Connectivity

Maintain a Safe and Reliable Transportation System in a State of Good Repair
Access and Mobility 2030/Plan 2035
Capital Investment Strategy
Investment Principles

Help Northern New Jersey Grow Wisely

Focus on Climate Change

Make Travel Safer
Fix it First

Expand Public Transit

Improve Roads but Add Few

Move Freight More Efficiently

Manage Incidents and Apply Technology

Support Walking and Bicycling

Emphasis on Livable Communities
Plan 2035’s Development Process

Created a *Plan 2035* website and 1-800 line

Held Symposium to explore emerging issues

Discussed critical issues with Board of Trustees and broad Technical Advisory Committee

Created an interactive visioning tool and used it at regional workshops

Used the results, feedback & comments to develop a vision for the future of the region

Performed Technical Analysis and Scenario Planning
Three Different Stories and Their Likely Impacts:

**Story A**
This story of the future is based on the assumption that current trends will continue into the future and the region will grow in terms of jobs and population in line with the adopted forecasts.

**Story B**
This story of the future is one of robust economic growth and technological advancement. The region will grow in terms of jobs and population well above the adopted forecasts.

**Story C**
This story of the future is one of slow economic growth with conspicuous effects of global warming evident in the region. The region will grow in terms of jobs and population well below adopted forecasts.
% of VMT that are in congestion

To see the impacts of another story, click here.
**Transit-Oriented Development or Transit Villages**

Transit-oriented development (TOD) refers to residential and commercial development with a design that maximizes access to public transit. The typical design is a mixed-use, walkable village-type development. TOD tends to decrease automobile use and increase use of transit, walking, and bicycling.

Please select your preference for the future extent of Transit-Oriented Development in the region.

- **LOW**
  - Continue with current market-oriented approach, driven largely by developer interest, with some public support, e.g., Transit Village program.

- **MEDIUM**
  - Actively promote TOD at stations with a focus along existing and proposed commuter rail and light rail lines.

- **HIGH**
  - Adopt an aggressive program to plan for TOD at all stations along existing and proposed commuter rail, light rail, BRT, and major bus lines.
Summary of Story, Land Use and Transportation Impacts:

Hover over indicator names to receive a brief description.

To see the impacts of another story, click here.
Transportation Strategies:

Please indicate the level of investment you would make in:

Transit Enhancements

**LOW**
- Low investments in transit enhancements focusing largely on improvements to local and commuter bus services (route extensions and new bus routes). Additional transit operating subsidy will be needed to cover the new services.

**MEDIUM**
- Medium investments in transit enhancements to include the above but also improvements to streets and highways to give preferential treatment for buses to allow them to travel at the posted speed limit all the time rather than being caught in congestion (shoulder lanes for buses, queue by-pass lanes with signal priority). Additional transit operating subsidy will be needed to cover the new services.

**HIGH**
- Large investments in transit enhancements to include the above but also investments in Bus Rapid Transit (premium buses on exclusive lanes with rail-like stations) and additional investments in light rail and commuter rail. Additional transit operating subsidy will be needed to cover the new services.

Current Funding | Additional Funding
--- | ---
$ | $$ | $$
Transportation Strategies:

Please indicate the level of investment you would make in:

Roadway Improvements

LOW

Low investments in roadway improvements focusing predominantly on operational improvements at existing intersections and ramps (turn lanes, signal timing, acceleration and deceleration lanes) and access management improvements.

MEDIUM

Medium investments in roadway improvements to include the above but also interchange improvements (improvements at existing interchange ramps, construction of new interchanges, and grade-separation of existing intersections) and investments in Intelligent Transportation Systems.

HIGH

Large investments in roadway improvements to include all of the above but also new lanes on existing highways and the construction of new highways and connector roadways.

Current Funding  Additional Funding

$  $$$  $$$$

PAGE 16 NEXT>
Summary of Story, Land Use and Transportation Impacts:

Hover over indicator names to receive a brief description.

To see the impacts of another story, click here.
<table>
<thead>
<tr>
<th>Transportation Strategy</th>
<th>Your Choice</th>
<th>Above the Current Funding Level?</th>
<th>Annual Estimated Gap for Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway Improvements</td>
<td>Medium</td>
<td>Yes</td>
<td>+ $300 Million</td>
</tr>
<tr>
<td>Transit and Ridesharing Support</td>
<td>Medium</td>
<td>Yes</td>
<td>+ $10 Million</td>
</tr>
<tr>
<td>Freight Improvements</td>
<td>Medium</td>
<td>Yes</td>
<td>+ $50 Million</td>
</tr>
<tr>
<td>Public Transit Enhancements</td>
<td>Medium</td>
<td>Yes</td>
<td>+ $300 Million</td>
</tr>
<tr>
<td>Infrastructure Maintenance and</td>
<td>Medium</td>
<td>Yes</td>
<td>+ $300 Million</td>
</tr>
<tr>
<td>Preservation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Add’l Funding Needed = $960 Million
Funding for transportation capital and operating costs comes from seven major funding sources. Each year, the region sees approximately $2.5 billion in transportation investment.
<table>
<thead>
<tr>
<th>Option</th>
<th>Current Status</th>
<th>Action Needed to Raise Given Amount of NJTPA Region Funding Per Year (2009 Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas/Carbon</td>
<td>14.5¢ state gas tax generates approximately $50 million per penny statewide</td>
<td>$400 Million: Increase by 10¢ per gallon</td>
</tr>
<tr>
<td>Tax Increase</td>
<td></td>
<td>$800 Million: Increase by 20¢ per gallon</td>
</tr>
<tr>
<td>Baseline Toll</td>
<td>$750 million in GSP and NJ Turnpike toll revenue in 2008 (statewide)</td>
<td>$400 Million: Increase tolls by ~80%</td>
</tr>
<tr>
<td>Increase</td>
<td></td>
<td>$800 Million: Increase tolls by ~160%</td>
</tr>
<tr>
<td>Transit Fare</td>
<td>$700 million in transit fare revenue last year (statewide)</td>
<td>$400 Million: Raise fares by 2.4x</td>
</tr>
<tr>
<td>Increase</td>
<td></td>
<td>$800 Million: n/a</td>
</tr>
<tr>
<td>VMT Tax</td>
<td>146 million daily VMT in NJTPA region, growing to 182 million in 2035</td>
<td>$400 Million: Institute roughly 1¢ per mile tax</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$800 Million: Institute roughly 2¢ per mile tax</td>
</tr>
<tr>
<td>Sales Tax</td>
<td>7% total sales tax generates revenues of $8.5 billion statewide in FY08</td>
<td>$400 Million: Slightly less than 0.5% (half penny)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$800 Million: Slightly less than 1% (one penny)</td>
</tr>
</tbody>
</table>
Recurring Themes: What We’ve Heard

Develop Smarter: Focus development and redevelopment around transit and in livable mixed-use communities.

Prioritize maintenance and preservation of the existing transportation system, a.k.a. Fix It First.

Need to spend more, but little agreement about where new funding should come from.

Focus investments:
- New transit services and in transit system capacity
- More frequent transit services
- Transit services that focus on the “last mile”
- Making bus service more competitive to the auto (preferential treatments and BRT)
What is Scenario Planning?

Three Scenarios Explored:

– **Baseline**: Flat Funding; Existing Growth Patterns Continue
– **Plan 2035**: Additional Funding; New Growth in Centers
– **Aspirational**: More Additional Funding; Most New Growth in Centers
Plan 2035 Scenario

The cornerstone scenario of Plan 2035. Assumes that some additional new funding is available to the region:

– To maintain its existing infrastructure
– To add a few critical new links to improve capacity and system performance

Assumes improved land use policies: more regional growth in development and redevelopment around transit stations/stops and in mixed-use centers.
## Plan 2035 Modeling Results

<table>
<thead>
<tr>
<th>Indicators (per weekday)</th>
<th>2009</th>
<th>Plan 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions)</td>
<td>6.7</td>
<td>7.8</td>
</tr>
<tr>
<td>Employment (millions)</td>
<td>3.2</td>
<td>3.7</td>
</tr>
<tr>
<td>Auto Trips (millions)</td>
<td>17.2</td>
<td>19.8</td>
</tr>
<tr>
<td>Transit Trips (millions)</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Non-motorized trips (millions)</td>
<td>1.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Average Delay (minutess)</td>
<td>5.1</td>
<td>7.5</td>
</tr>
<tr>
<td>Vehicle Miles Traveled (millions)</td>
<td>144.0</td>
<td>167.0</td>
</tr>
<tr>
<td>VMT Per Capita</td>
<td>21.5</td>
<td>21.4</td>
</tr>
<tr>
<td>VMT @ LOS F (millions)</td>
<td>25.0</td>
<td>37.0</td>
</tr>
<tr>
<td>Vehicle Hours Traveled (millions)</td>
<td>4.9</td>
<td>6.3</td>
</tr>
</tbody>
</table>

All indicators are per weekday
### Summary of Plan 2035

**Capital Funding Assumptions**

*(in 2009 Billions of Dollars)*

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Plan 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Funding Available (2010-2035)</strong></td>
<td>$62.6</td>
<td>$91.4</td>
</tr>
<tr>
<td><strong>State Funding Average Annual Growth</strong></td>
<td>-0.2%</td>
<td>1.2%</td>
</tr>
<tr>
<td><strong>Federal Program Funding Annual Growth</strong></td>
<td>-1.9%</td>
<td>2%</td>
</tr>
</tbody>
</table>

1- Average growth rates are over plan period from 2010 to 2035.
2- Federal program growth shown is average annual rate, though funding increases occur every six years.
What The Region Must Do

Bring infrastructure to a state of good repair and keep it there.

Make major investments in public transit.

Insist on smart development and redevelopment.

Make targeted corridor improvements:

- Apply ITS
- Address bottlenecks and problematic intersections
- Improve safety
- Accommodate bicyclists and pedestrians
- Advance freight-specific improvements
Multiregional Projects and Issues

• Access to the Region’s Core / MTT
• Bayonne Bridge Clearance
• Cross Harbor Freight Initiative
• NJTPA / NYMTC / CTDT Truck Parking Study
• Tappan Zee Bridge / I-287
Implementing the Plan
Actions, Coordination and Consultation

NJTPA Board/Committee Oversight
NJTPA Central Staff
Operating Agencies
  NJDOT
  NJ Transit
  PANYNJ
Other MPOs
NJTPA RTAC
Stakeholder Groups
Local, Public Input
Federal Partners
Thank You!

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