Background

- Good planning and follow-through makes for an efficient freight system for Vermont
- FHWA requires a State Freight Plan every five years in order to obligate Freight Formula funds
- State Freight Plans must include:
  - Freight trends, needs, and issues
  - Freight policies, strategies and performance measures
  - How innovative technologies are being considered
  - Congestion, delay, mobility, and deterioration issues
  - Freight Investment Plan
  - Engaged stakeholders and Freight Plan Advisory Committee
Freight Plan Elements

- **State of the multi-modal Freight System**
- **Economic and commodity flows**

**Existing Conditions**
- Review vision and specific goals for the multi-modal freight system

- **Vision and Goals**
- Overall socio-economic conditions
- Commodity flows
- Technological and logistics trends

**Trends Analysis**
- Outstanding from 2017 Freight Plan
- New initiatives

**Initiative Ideas**
- Investment Plan: How will Vermont leverage state and federal funds?
- Implementation roles, timeframes, etc.

**Implementation**

**Tech Memo #1**
- State of the multi-modal Freight System
- Economic and commodity flows

**Tech Memo #2**

**Tech Memo #3**

**WE ARE HERE**
1. Improve the safety, security, and resilience of the freight system;

2. Modernize freight infrastructure and operations to grow the economy, increase competitiveness, and improve quality of life;

3. Prepare for the future by supporting the development of data, technologies, and workforce capabilities that improve freight system performance.

4. Ensure reliable truck travel times between Vermont and its major regional markets such Boston, New York City, Albany, and Montreal;

5. Keep highway, rail, aviation, and water transportation infrastructure in a state of good repair; and

6. Increase freight rail usage by expanding capacity, improving intermodal connectivity, and acting on opportunities for ancillary economic development.
Trends and Issues

- Post-COVID-19 Economic Recovery
- E-Commerce and Last-Mile Delivery
- Cross-Border Issues
- Technological Innovation
- Truck Size and Weight Permitting and Harmonization
- Freight Workforce
- Climate Change and Resiliency
- Freight as a "Good Neighbor"
- Asset Management
- Broadband Access
- Asset Management
# Needs Assessment

<table>
<thead>
<tr>
<th>Performance Measures</th>
<th>Issue</th>
<th>Need</th>
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<tbody>
<tr>
<td></td>
<td>System Performance</td>
<td>Help shippers find freight solutions</td>
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<td></td>
<td>Infrastructure Performance</td>
<td>Continue funding State of Good Repair projects</td>
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<td>Travel Time, Border Delays</td>
<td>Manage weather response; support US and Canadian efforts to improve border operations</td>
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<td>Safety (HAZMAT &amp; Truck-Involved Crashes)</td>
<td>Advance safety improvements, particularly on highways with truck-involved or HAZMAT crashes</td>
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<td>Technological Innovation</td>
<td>Anticipate deployment; partner with innovators</td>
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<td>Post-COVID-19 Economic Recovery</td>
<td>Monitor and model to anticipate potential effects on freight demand in Vermont</td>
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<td>E-Commerce and Last-Mile Delivery</td>
<td>Acquire data and estimate the potential effects of deliveries on highways, emissions, and the economy</td>
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<td>Cross-Border Issues</td>
<td>Continue coordinating among stakeholders and take useful actions</td>
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<td>Truck Permitting and Harmonization</td>
<td>Consider talks with New York to join NETC or otherwise streamline permitting for trips between VT and NY</td>
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<td>Freight Workforce</td>
<td>Support the development of workforce capabilities that improve freight system performance</td>
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<td>Climate Change and Resiliency</td>
<td>Support initiatives to reduce GHG emissions, and harden vulnerable freight infrastructure</td>
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<td>Freight as a “Good Neighbor”</td>
<td>Coordinate discussions around “good neighbor” strategies and practices</td>
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<td>Asset Management</td>
<td>Engage as VAMIS develops so it can be used for freight planning</td>
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<td>Broadband Access</td>
<td>Expand the reach of broadband internet access statewide</td>
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9/14/2021
Packages of Initiatives

- Freight Planning and Policy
- Climate Change and Resiliency
- Technological Innovation
- Trade Corridors and Economic Development
- Highway Operations
- Rail Development
- Air Freight
Initiatives Review

• Key discussion questions for each package:
  • Do the initiatives address Vermont’s freight needs?
  • Did we miss anything?
  • Which are highest priority?
Objectives:

- Integrate freight with other activities
- Gather information and monitor trends

Initiatives:

3. Ensure that freight impacts are considered in VTrans Project Selection and Prioritization Process (VPSP2).

4. Engage in equity and "good neighbor" elements of freight planning.

50. Identify up to two freight performance measures per mode to incorporate into VTrans dashboards.

11. Monitor the evolving freight rail corporate landscape and weigh in on industry activities.

51. Explore further strategies to reduce the effects of inclement weather and poor road conditions on freight movement.

52. Plan for traffic impacts of programmed construction projects on the movement of oversize shipments.

8. Improve data and analysis tools to quantify impacts of trends (COVID-19, e-commerce, etc.).
Objectives:

• Expanding alternative fuel infrastructure for freight
• Adapting to climate change impacts

Initiatives:

12. Pursue grant opportunities to fund low-and zero-carbon fuel and propulsion technologies for all modes.
13. Plan for freight sector alternative fueling capacity and access.
15. Educate consumers about e-commerce purchasing behaviors that improve efficiency and reduce greenhouse gas (GHG) emissions.

**Rail package includes investments to shift freight to rail when reasonable. Trains can move a ton of freight more than 470 miles per gallon.**
Objectives:

- Expanding information and Intelligent Transportation Systems (ITS) deployment
- Supporting innovation in Vermont

Initiatives:

16. Support technological innovation in freight transportation and supply chain logistics.
17. Implement virtual weigh stations (VWS) and weigh-in-motion (WIM) system.
53. Evaluate portable Dynamic Message Signs (DMS) locations statewide for potential permanent installations.
18. Develop more robust trucking information for New England 511.
19. Work regionally to harmonize regulations related to the deployment of new transportation technologies.
54. Develop and enhance the DMV online permit portal to support planning, enforcement, and safety.
Trade Corridors and Economic Development

Objectives:

• Streamlining cross-border and inter-state trade

Initiatives:

20. Provide full domestic double-stack railcar clearances on New England Central Railroad (NECR) and Western Corridor.
21. Continue planning for Quebec Autoroute 35 completion and associated impacts.
22. Improve regional coordination of Oversized/Overweight truck permitting.
24. Promote coordination between industry and education stakeholders to develop workforce.
Highway Operations

Objectives:

• Maintaining and improving highways (safety, resilience)
• Assessing and expand truck parking capacity

Initiatives:

25. Maintain a state of good repair (SOGR).
26. Maintain or improve travel time reliability.
27. Keep highways open and safe through prompt and effective snow removal and incident management.
28. Minimize delay associated with highway projects.
31. Promote the safe movement of commercial vehicles through enforcement and leveraging technology and communications.
30. Ensure sufficient, safe truck parking is available across the state.

**State of Good Repair and travel time reliability fundamental to goods movement**
Objectives:

• Maintaining and upgrading rail infrastructure
• Educating shippers and the public about freight rail

Initiatives:

32. Upgrade freight rail lines to be able to efficiently carry the standard railcar weight of 286,000 lbs. (286k).
33. Improve tracks so freight trains can travel at least 25 MPH (FRA Track Class 2 or better).
34. **Preserve and fully use industrial land parcels with access to rail sidings.**
38. Participate in multistate rail planning and programming to improve regional rail network.
41. Maintain and modernize freight rail yards.
Air Freight

**Priority Freight initiatives from the recently completed Vermont Airport System Plan**

Objectives:

- Maintaining infrastructure
- Monitoring ongoing studies and plans

Initiatives:

42. Maintain airport runway surfaces, approaches, and instrumentation in state of good repair.
43. Improve instrumentation when opportunities to expand air traffic and cargo arise.
44. Monitor runway safety issues and implement action plans as needed.
45. **Monitor obstructions to airport approaches and implement action plans as needed.**
46. Develop a weather observation station equipment improvement plan for State airports.
Next Steps

• Draft Plan – Oct 1
• FPAC Review – mid October
• Post Draft Plan for review – late October
• Submit Plan to FHWA – mid/late November
Information on Web Page

- Draft Initiative Packages
- Newsletters
- Data Trends Summaries
- Freight Tech Memo 3: Multimodal Freight Needs and Initiatives
- Meeting presentations
- Online map with freight system information and feedback tool

Freight Plan Web Page:
https://vtrans.vermont.gov/planning/freight
Thank You

For more information on the Vermont Freight Plan Update, visit [vtrans.vermont.gov/planning/freight](https://vtrans.vermont.gov/planning/freight) or contact Dave Pelletier at [Dave.Pelletier@vermont.gov](mailto:Dave.Pelletier@vermont.gov) or (802) 595-9675.

For more information on the Vermont Rail Plan Update, visit [vtrans.vermont.gov/rail/reports](https://vtrans.vermont.gov/rail/reports) or contact Zoe Neaderland at [Zoe.Neaderland@vermont.gov](mailto:Zoe.Neaderland@vermont.gov) or (802) 793-2778.