# 2040 Vermont Long-Range Transportation Plan

ADDISON COUNTY RPC TRANSPORTATION ADVISORY COMMITTEE JUNE 20, 2018 DAVE PELLETIER, AOT PLANNING COORDINATOR



# Agenda

- 1. Background / Work Completed to Date
- 2. Goals, Objectives, & Strategies
- 3. Tools to Achieve the Vision
- 4. Next Steps



# LRTP Purpose & Context

- Sets broad priorities for transportation decision-making and investments over the next 20 years.
- 2. Addresses changes in federal policies (over 50% of transportation funding).
- Guides the development of strategic & modal plans.
- 4. Updated periodically to ensure we are pursuing the right path in terms of policies and investment priorities.



# LRTP progress to date



How important are the following services & issues to you?

- > 2000 & 2006 top 3:
- 1. Safety
- 2. Environment
- Preserve
   Landscapes and
   Village Character

## 2016 Statewide Transportation Public Opinion Survey

Winter snow and ice removal	85%		15% 19
Ensuring the safety of the traveling public	84%		15% 19
Roadway/pavement conditions	82%		17% 1 <mark>9</mark>
Protect the environment	73%	25	<mark>% 3</mark> %
A transportation system that can withstand extreme weather events	64%	33%	29
Support Vermont's downtowns and village centers	62%	34%	<mark>4</mark> %
Support job creation and retention	56%	40%	4%
Minimize cost to taxpayers	51%	46%	4%
Bicycle and pedestrian facilities	50%	40%	10%
Public transit services	50%	42%	9%
Reduce traffic congestion	47%	47%	7%
Passenger rail (Amtrak) services	34%	49%	16%

Very/extremely
Slightly/moderately
Not at all

### Summer 2017

Stakeholders Mtg #1 and visit RPC Transportation Advisory Committees to review Draft Existing Conditions & Future Trends Report

#### Winter 2018

Develop draft LRTP including goals, objectives, and strategies

### Summer 2018

Publish draft LRTP for comment and adopt upon completion

Stakeholders Mtg #2 to review regional TAC input and develop LRTP themes and focus areas Fall 2017 Stakeholders Mtg #3 and visit RPC Transportation Advisory Committees to review Draft LRTP including goals, objectives, and strategies

Spring 2018



## 2040 LRTP Vision Statement

"A safe, reliable, and accessible, multimodal transportation system that grows the economy, is affordable and protects the vulnerable."



# Challenges

Funding & Finance Asset Conditions Population & Demographics **Economic Changes** Land-Use & Transportation Cycle Water Quality Freight & Trade **Highway Safety** Security **Extreme Weather Events** Traffic Congestion & Reliability **Technological Change** 

# Opportunities

**Discretionary Funding** Asset Management Leverage Transportation Investments to Grow the Economy Public Transit **Corridor Planning** Electric Vehicle Infrastructure **Regional & International Relationships** Transportation Demand Management **Resiliency Planning & Design Coordinated Downtown Investments** Intelligent Transportation Systems Technological Advancement









## Goal 1: Improve SAFETY & SECURITY across all modes



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## VTrans Flood Resilience Map

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#### Select:









Deerfield River

River

Welcome to the VTrans Flood Resiliency App. Use this planning tool for:

- prediction of road, bridge, and culvert <u>vulnerability</u> due to flood inundation, erosion, and deposition hazards
- criticality assessment the importance of an asset to transportation network function and critical facility access
- risk rating the combination of vulnerability consequences and asset importance
- initial prioritization of <u>mitigation</u> strategies to reduce hazards

This tool is for planning purposes only and findings must be confirmed in the field prior to seeking funding and initiating design.

Download data (ZIP file)

Help



## Goal 1: Improve SAFETY & SECURITY across all modes



Goal 2: PRESERVE Vermont's multimodal transportation system, and OPTIMIZE its performance.

## Goal 3: Provide MOBILITY options and ACCESSIBILITY for all users of the system.









# Goal 4: Leverage transportation investments to increase Vermont's ECONOMIC VITALITY.

## Goal 5: Practice ENVIRONMENTAL STEWARDSHIP.





## Goal 6: Support LIVABLE, HEALTHY COMMUNITIES.

# Tools to Achieve the Vision



# Revised Project Selection & Prioritization System (VPSP2)





## Transportation Asset Management

# Right Investment, Right Asset, Right Time

AGENCY OF TRANSPORTATION

## Partners in Implementation

VT Agency of Natural Resources (ANR)	VT Agency of Human Services – Department of Health (AHS/VDH)	VT Agency of Commerce and Community Development (ACCD)	VT Department of Public Safety (DPS)	VT Public Service Department (PSD)	Premier Coach / Vermont Translines
Local Motion	VT League of Cities and Towns (VLCT)	VT Association of General Contractors (VT AGC)	VT Truck & Bus Association (VTBA)	VT Association of Planning & Development Agencies (VAPDA)	American Association of Retired Persons (AARP)
VT Association of the Blind and Visually Impaired (VABVI)	VT Center for Independent Living (VCIL)	VT Chamber of Commerce	Chittenden County Regional Planning Commission (CCRPC/MPO)	VT Public Transit Association (VPTA)	Green Mountain Transit (GMT)
		Federal Highway Administration (FHWA)	Federal Transit Administration (FTA)		

## Next Steps

External Stakeholder Meeting #3 (final)

Summer 2018 RPC Transportation Advisory Committee presentations

## Final edits to Draft Plan

Distribute for public comment

Adopt & publish

# Thank you

Draft 2040 Vermont Long-Range Transportation Plan posted at: <a href="https://www.weimont.gov/planning/long-range-plan">wtrans.vermont.gov/planning/long-range-plan</a>

Please forward comments and questions to Dave Pelletier at: <u>dave.pelletier@vermont.gov</u>



#### Goal 1: Improve SAFETY & SECURITY across all transportation modes.

Objectives	Strategies
1.1 Reduce the number of crashes on Vermont highways, with a focus on those resulting in a fatality or incapacitating injury.	<ul> <li>Design and construct infrastructure projects in accordance with the Vermont Strategic Highway Safety Plan; emphasize the use of Centerline Rumble Strips.</li> <li>Conduct outreach, education and public awareness programs on highway safety issues in partnership with the Vermont Highway Safety Alliance; emphasize increased seatbelt usage.</li> <li>Develop and maintain safety plans for all transportation modes.</li> <li>Conduct winter maintenance activities in accordance with Vermont's Safe Roads at Safe Speeds policy.</li> <li>Reduce speed limits in real time based on weather conditions and special events and develop and implement technology solutions to employ the strategy.</li> <li>Maximize the use of Intelligent Transportation Systems (ITS) strategies to address highway safety issues.</li> </ul>
1.2 Reduce incidents at work zone sites.	<ul> <li>Implement Vermont Strategic Highway Safety Plan measures addressing work zone safety; emphasize the use of radar speed-feedback signs.</li> </ul>
1.3 Reduce derailments and grade crossing incidents along Vermont's railroads.	Improve condition of railroad tracks, bridges, and grade crossings.
1.4 Enhance airport safety at all publicly- owned commercial and general aviation system airports.	<ul> <li>Improve runway, lighting, and associated aviation infrastructure and facilities in accordance with FAA design requirements and the adopted Airport Layout Plan (ALP) for each facility.</li> </ul>
1.5 Reduce the impacts of severe weather events on the transportation system.	<ul> <li>Design infrastructure to withstand severe weather events.</li> <li>Advance AOT's understanding of transportation system vulnerabilities to severe weather events through ongoing research and development of analytical tools.</li> <li>Incorporate resilience as a factor in project identification, prioritization, and planning &amp; design.</li> <li>Provide technical assistance and support to municipalities to deal with off-network severe weather events.</li> </ul>
1.6 Participate in the planning and delivery of coordinated disaster response services.	<ul> <li>Work with the Department of Public Safety, and other state and federal agencies, on disaster response planning and training.</li> <li>Develop and/or ensure security plans exist as required and/or needed for all transportation modes and facilities.</li> </ul>

#### Goal 2: PRESERVE Vermont's multimodal transportation system and OPTIMIZE its performance.

Objectives	Strategies
2.1 Make strategic investments to preserve and improve conditions of highways, railways, airports, and public transit facilities.	<ul> <li>Maintain adequate funding levels to ensure a state of good repair for all modes and levels.</li> <li>Apply for competitive discretionary federal funding to rehabilitate and upgrade transportation infrastructure.</li> <li>Continue to develop asset management processes and systems to inform transportation infrastructure investment priorities and to maximize value</li> <li>Develop long-range multimodal corridor management plans in coordination with local governments and regional planning agencies.</li> <li>Monitor research and track trends at the national and state levels on strategic disinvestment strategies.</li> </ul>
2.2 Provide a transportation system that adequately serves current and forecast demand.	<ul> <li>Implement needed capacity projects to maintain an acceptable level of service.</li> <li>Ensure broad public access to electric vehicle charging infrastructure.</li> <li>Support testing and deployment of automated vehicles</li> <li>Develop connectivity plans for connected and automated vehicles (CAVs) as part of the Vermont Intelligent Transportation Systems (ITS) Architecture.</li> <li>Periodically review and update the project prioritization process.</li> </ul>
2.3 Maximize operational efficiency of all existing transportation modes.	<ul> <li>Make data-driven decisions to relieve recurring traffic congestion through operational improvements.</li> <li>Strategically deploy ITS infrastructure to monitor and manage traffic conditions.</li> <li>Review and modify design standards and best practices where appropriate to facilitate cost-effective maintenance.</li> <li>Plan for and accommodate the ongoing integration of connected and autonomous vehicles into the transportation network, including considerations of Vehicle to Vehicle (V2V), and Vehicle to Infrastructure (V2I) technologies.</li> <li>Support Travel Demand Management (TDM) initiatives, including telework, alternative work schedules, transit pass programs, and other similar strategies to relieve congestion.</li> <li>Apply access management best management practices throughout the state highway network.</li> </ul>
2.4 Identify new funding sources to support the capital, maintenance and operational costs of strategic transportation improvement programs and investments.	<ul> <li>Explore federal loan programs such as the USDOT Transportation Infrastructure Finance &amp; Innovation Act (TIFIA) for project financing.</li> <li>Apply for competitive discretionary federal funding as opportunities arise.</li> <li>Explore leasing of highway right-of-way to telecommunications companies, or other industries, to generate revenues.</li> <li>Monitor research and track trends at the national and state levels on alternative financing mechanisms.</li> </ul>
2.5 Improve project development efficiency.	<ul> <li>Conduct early consultation with resource agencies and employ project delivery techniques such as design-build and design-build-maintain when appropriate.</li> <li>Periodically review grant and contract processes to identify potential gains in efficiency or time-saving modifications.</li> <li>Periodically review the project development process to identify any potential gains in efficiency or time-saving modifications.</li> <li>Apply "Continuous Improvement" techniques to the project development process to minimize/optimize the amount of time and resources spent on pre-construction activities and grant administration and management.</li> </ul>

Goal 3: Provide MOBILITY options and ACCESSIBILITY for all users of the system.

Objectives	Strategies
3.1 Improve connections between modes for passenger and freight transportation.	<ul> <li>Review the needs of all modes as part of the project development process.</li> <li>Use highway funding flexing authority to finance multimodal projects.</li> </ul>
3.2 Increase the connectivity and safety of non-motorized forms of transportation.	<ul> <li>Support funding programs such as the Bicycle and Pedestrian Grant Program.</li> <li>Develop projects and schedule maintenance in support of priority corridors identified in the Vermont On-Road Bicycle Plan.</li> <li>Lead and/or support public outreach and education on non-motorized transportation options.</li> </ul>

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	Review the needs of all modes as part of the project development process (employ Complete Streets philosophy).
3.3 Expand public transit, intercity bus, and passenger rail services.	<ul> <li>Encourage and support public transit provider route planning to identify priority routes:</li> <li>Implement priority routes identified in the Statewide Intercity Bus Study.</li> <li>Strengthen the coordinated provision of public transit services with Medicaid transportation services and other social service program transportation needs.</li> <li>Extend the Ethan Allen Express Amtrak service to Burlington and the Vermonter service to Montreal.</li> <li>Encourage coordination between public transit systems and school systems to meet transportation needs.</li> </ul>
3.4 Increase awareness of transportation options for residents and visitors.	• Lead and/or support public outreach and education on transportation options through programs such as Go VT, 511, and general social media.

#### Goal 4: Leverage transportation investments to increase Vermont's ECONOMIC VITALITY.

Objectives	Strategies
4.1 Strategically invest in highways and bridges, railroads, airports, and public transit facilities to support economic access and growth.	<ul> <li>Align transportation planning and investments with economic development strategies and plans.</li> <li>Undertake needed highway and bridge rehabilitation along the National Highway System</li> <li>Implement highway capacity projects identified in state and regional plans.</li> <li>Rehabilitate and upgrade tracks, bridges, and grade crossings identified in the State Rail Plan.</li> <li>Upgrade aviation infrastructure consistent with the State Airport System and Policy Plan.</li> <li>Upgrade and expand public transit maintenance and operations facilities.</li> </ul>
4.2 Grow tourism-oriented transportation services.	<ul> <li>Promote public transit, rail, and aviation services as a tool to support tourism and economic development; coordinate and partner with the Department of Tourism &amp; Marketing.</li> <li>Implement priority routes identified in the Statewide Intercity Bus Study.</li> <li>Extend the Ethan Allen Express Amtrak service to Burlington and the Vermonter service to Montreal</li> <li>Develop projects and schedule maintenance in support of priority corridors identified in the Vermont On-Road Bicycle Plan.</li> <li>Lead and/or support public outreach and education on non-motorized transportation options.</li> <li>Review the needs of all modes as part of the project development process (employ Complete Streets philosophy).</li> </ul>
4.3 Support transportation initiatives which enhance recreation & tourism opportunities.	<ul> <li>Develop projects in support of priority corridors identified in the Vermont On-Road Bicycle Plan.</li> <li>Develop projects in support of state-cesignated Vermont Byways.</li> <li>Develop and implement a statewide strategy for maximizing the appeal and the economic benefit of Vermont's road network for bicycle tourism.</li> </ul>

#### Goal 5: Practice ENVIRONMENTAL STEWARDSHIP.

Objectives	Strategies	
5.1 Reduce negative water quality impacts associated with transportation facilities.	<ul> <li>Work with the Agency of Natural Resources (ANR) on the development of water quality best management practices and conservation design as common practice in Vermont.</li> <li>Implement highway stormwater management initiatives, including permitting processes, grant programs, and technical assistance, in partnership with ANR and Vermont's municipalities.</li> </ul>	
5.2 Reduce air pollution associated with fossil fuels used in transportation.	<ul> <li>Increase the use of, and support additional access to and development of, alternative fuels that could reduce Vermont's reliance on fossil fuels.</li> <li>Encourage the development and use of transportation construction and operations technologies that reduce emission of greenhouse gases.</li> <li>Participate in the build-out of Vermont's electric vehicle charging network.</li> </ul>	
5.3 Reduce the overall level of energy use by the transportation system.	<ul> <li>Implement the transportation recommendations included in the 2016 Comprehensive Energy Plan, including supporting efficient land-use, reduction in single occupancy vehicles, and electrification of the light duty vehicle fleet, as well as alternative fuels for the heavy / commercial fleet.</li> <li>Work in partnership with the Agency of Natural Resources and the Public Service Department to take an active role in rate cases at the Public Utilities Commission in order to advocate for competitive electric rates to support electrification of the transportation sector.</li> <li>Increase use of walking, biking, transit, rail, and Travel Demand Management (TDM) options.</li> </ul>	
5.4 Reduce wildlife and habitat impacts associated with the transportation system.	<ul> <li>Include wildlife habitat &amp; crossings in the context of the AOT Highway Corridor Planning Process.</li> <li>Coordinate with ANR Fish &amp; Wildlife d vision as appropriate to identify and address wildlife crossing issues when planning, designing, and constructing highway projects.</li> <li>Incorporate the Best Management Practices identified in the 2012 Vermont Transportation &amp; Habitat Connectivity Guidance Document.</li> </ul>	

#### Goal 6: Support LIVABLE, HEALTHY COMMUNITIES.

Objectives	Strategies
6.1 Maintain and strengthen village vitality and town centers.	<ul> <li>Update the Vermont State Standards to incorporate state of practice in highway design and to ensure that ensure that Vermont transportation facilities are designed to meet current state and community needs and accommodate a variety of users of the transportation network</li> <li>Support transportation improvements and services assessed as critical to enhancing, stimulating and connecting vital urban and village centers.</li> <li>Coordinate transportation investments in developed centers and villages with other public and private investments.</li> <li>Support investments in developed centers that accommodate and the viability and safety of active transportation, such as walking and bicycling.</li> <li>Emphasize public transit services in and around developed centers.</li> <li>Apply a health impact assessment for selected transportation projects and programs.</li> </ul>

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