

VERMONT AGENCY OF TRANSPORTATION  
**2019 FACT BOOK**  
and Annual Report



Published January 15, 2019



**RICHFORD.** Resurfacing of VT-105A along a 2-mile stretch from Richford to the Canadian Border.



**SOUTH HERO.** Governor Phil Scott joined AOT Secretary Joe Flynn and members of state and local government to celebrate the completion of repairs to the Island Line Rail Trail, also known as the Colchester Causeway, which had been severely damaged in early May. With support from VTrans, crews from local construction firm Engineers Construction, Inc. worked 12 hours a day, six days a week, wrapping up the project ahead of schedule and in time for the July 4th holiday week.

## **CONTENTS**

<b>AGENCY OF TRANSPORTATION</b>	<b>5</b>
<b>ACCOMPLISHMENTS</b>	<b>7</b>
<b>PROJECT PRIORITIZATION</b>	<b>16</b>
<b>DEPARTMENT OF MOTOR VEHICLES</b>	<b>19</b>
REVENUE AND TRANSACTIONS	20
<b>FINANCE AND ADMINISTRATION</b>	<b>21</b>
<b>HIGHWAY DIVISION</b>	<b>23</b>
SAFETY	24
WINTER MAINTENANCE	25
WINTER MAINTENANCE STATISTICS	26
WINTER MAINTENANCE PLOW ROUTES	27
STRUCTURE POPULATION AND CONDITION	28
PAVEMENT CONDITION	29
<b>POLICY, PLANNING, &amp; INTERMODAL DEVELOPMENT (PPAID)</b>	<b>31</b>
RAIL & AVIATION	32
POLICY, PLANNING, RESEARCH	33
PUBLIC TRANSIT	34
<b>BOARDS AND COUNCILS</b>	<b>36</b>
<b>PROJECTS COMPLETED IN 2018</b>	<b>37</b>



**MIDDLESEX.** Governor Phil Scott and members of the Agency clean up roadsides in District 5 for Green Up Day.



**ENOSBURGH.** Crews work on a complete resurfacing of VT-105 from Enosburgh Village to Richford.



VTrans co-sponsors the National Summer Transportation Institute, helping students gain hands-on experience, develop new skills, and explore career opportunities in the field of transportation.



**MONTPELIER.** The Agency Rail Bridge Inspection Team inspects a Vermont Rail bridge.



**CAVENDISH.** This rail construction project involved the replacement of existing railroad crossings with new track along VT 103 in Rutland County.



**RUTLAND.** Construction on the new Taxiway Alpha ("A") at Rutland Southern Vermont Regional Airport. The project will improve safety for aircraft and vehicles that operate at the airport and will make the airport more user-friendly for pilots.

# Agency of Transportation

With oversight from the Vermont Legislature, the Vermont Agency of Transportation (VTrans) is responsible for planning, development, implementation, and maintenance of transportation infrastructure including roads, bridges, state-owned railroads, airports, park and ride facilities, bicycle facilities, pedestrian paths, public transportation facilities and services, and Department of Motor Vehicles operations and motor carrier enforcement. VTrans serves the entire population of the State of Vermont.

## Secretary

Joe Flynn

## SFY 2019 Staff

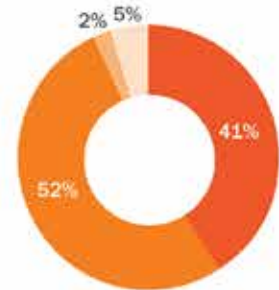
Total 1,273

- 228 Department of Motor Vehicles
- 849 Highway Division
- 122 Finance and Administration
- 72 Policy, Planning, and Intermodal Development

## SFY 2019 Funding

Total Appropriation: \$610.9 M

- \$251.1 M Transportation Fund
- \$318.9 M Federal Funds
- \$13.2 M TIB Funds
- \$27.7 M Other Sources
- \$3.6 M Local/Other
- \$1.1 M Interdept. Transfers
- \$2.4 M TIB/GO Bonds
- \$20.7 M Internal Service



## DEPARTMENTS AND DIVISIONS

### Dept. of Motor Vehicles

Oversees vehicle licensing, registration, tax, and titling; provides commercial licensing, permitting, and enforcement/inspection services; investigates fraud/violations; provides driver training programs; collects motor fuel revenue.

**\$330M**  
Revenue

**1.08M**  
Transactions

**735K**  
Registrations

**148K**  
Licenses

### Highway

Oversees the maintenance and operation of the interstate and state highway system; oversees construction/materials; supports municipal projects; inspects and maintains bridges, culverts, signs, and signals; provides road condition information.

**70**  
Highway  
Fatalities, 2017

**269**  
Major  
Crashes, 2017

**197**  
Miles Paved,  
2018

**61**  
Projects Under  
Construction, 2018

**2.3M**  
Lane Miles Plowed  
Winter 17-18

### Policy, Planning and Intermodal Development

Oversees state-owned rail lines and airports; supports public transit providers; provides statewide planning and policy support, including research, development review, and outreach.

**96.4K**  
Passenger Rail  
Ridership, Vermont-  
Stations, FFY18

**4.7M**  
Public Transit  
Ridership, FFY18

**\$1.3M**  
Aviation Grant  
Awards FFY17  
(Federal Share)

**234**  
Municipalities  
Engaged in Regional  
Transportation Planning

### Finance and Administration

Provides services in contract administration, accounting, budgeting, audit, performance monitoring, civil rights, labor compliance, training, workforce development, and recruitment.

**116**  
Public Records  
Requests

**\$297M**  
Value of Contracts and  
Amendments

**\$236M**  
Federal Funds  
Obligated

Note: All data is from State Fiscal Year 2018 (SFY18), unless otherwise noted.  
Definitions: FFY refers to Federal Fiscal Year  
SFY refers to State Fiscal Year

# Accomplishments

## MISSION

Through excellent customer service, provide for the safe and efficient movement of people and goods.

## VISION

A safe, reliable, and multimodal transportation system that grows the economy, is affordable to use and operate, and serves vulnerable populations.

## STRATEGIC GOALS

### GOAL ONE

Promote organizational excellence by attracting, developing, and retaining a talented, diverse, and engaged workforce.

### GOAL TWO

Grow Vermont's economy by providing a safe, reliable, and efficient transportation system in a state of good repair.

### GOAL THREE

Make Vermont more affordable and serve the vulnerable by providing accessible, convenient, and affordable travel choices.

### GOAL FOUR

Transition to an energy efficient, advanced technology transportation system.

### GOAL FIVE

Modernize and improve government efficiency through innovation, continuous improvement, and quality customer service.

## FIRE DISPLACES EMPLOYEES

On Saturday, June 2, 2018 the Agency sustained substantial damage to office headquarters at the National Life Building in Montpelier due to a fire. By Tuesday, June 5, 2018 all dislocated staff were back to work at temporary workstations or via telework. By early January 2019 many Agency staff were still in swing-space. Thanks to the Agency's dedicated employees, there were no delays to project delivery due to the fire.

## 2040 Long Range Transportation Plan Completed

Vermont's 2040 Long-Range Transportation Plan (LRTP) is the State's blueprint for guiding transportation decision-making and investments over the next 20 years. All Vermonters have a stake in the transportation system's continued development - which may look very different over the course of two decades. It establishes a vision for Vermont's transportation system and identifies goals and strategies that support Governor Scott's priorities to grow the economy, make Vermont affordable, and protect vulnerable Vermonters. The 2040 LRTP serves as a framework, guiding transportation decision-making and investments looking out over the horizon of the next 20 years. While transportation in its most fundamental form is simply the movement of people and goods, today's transportation system and that of 2040 must address many more considerations.

The growth of new technologies such as automated vehicles and 5G cellular networks, demographic changes in the form of an aging population, and evolving changes to the state's primarily services-based economy may require thinking differently about how we plan, build, and manage our transportation system and investments. While maintaining our highways and bridges, public transit, railways, and airports will continue to be major focus areas moving forward, we are likely to focus more on the operational part of our transportation system, such as information systems, signals, automated message boards, and other technology solutions.

Development of the plan included comprehensive outreach, including a statewide public opinion survey, two rounds of public meetings hosted by each of the eleven Regional Planning Commissions, and several meetings with transportation stakeholder groups.

View the plan at [vtrans.vermont.gov/planning/long-range-plan](https://vtrans.vermont.gov/planning/long-range-plan)



**TRANSPORTATION LEADERSHIP INSTITUTE.** The program provides opportunities for rising professionals from any part of VTrans, qualified in any field, to develop the skills and knowledge needed to become future leaders in the Agency.

## Vehicle Electrification in Vermont

In support of environmental work, VTrans has served on an interagency team to administer a \$2.4M grant program for electric vehicle charging stations using funding from the nationwide settlement stemming from Volkswagen's sale of diesel vehicles containing fraudulent emissions defeat devices. While the first round of the grant program was capped at \$400,000, applicants sought more than \$1.6M in funding. VTrans continued work with other agencies on using additional VW settlement funds to create electric public transit bus and electric school bus pilot programs in Vermont. VTrans used federal Lo-No funding to bring three full sized electric transit buses to Green Mountain Transit.

VTrans and other agencies added a section to last year's Transportation Bill requiring the Public Utility Commission (PUC) to conduct an investigation into how to restructure the regulatory environment around electric vehicles to promote vehicle electrification in Vermont. The PUC convened a broad array of experts on vehicle electrification and is expected to make legislative recommendations or to promulgate rules relating to means of assessing highway user fees against electric vehicles without discouraging electric vehicle adoption. Other focuses include appropriate jurisdiction over electric vehicle charging stations, and rate design to make electric vehicle charging as affordable as possible while still benefiting rate payers.

## Automated Vehicles

The Agency is testing legislation with multiple Vermont agencies and is working with the six New England States, the I95 Corridor Coalition, and others on regional CAV issues. A small New England Transportation Consortium (NETC) project has led to a report available at [www.newenglandtransportationconsortium.org](http://www.newenglandtransportationconsortium.org), and additional meetings with our New England peers on this topic.

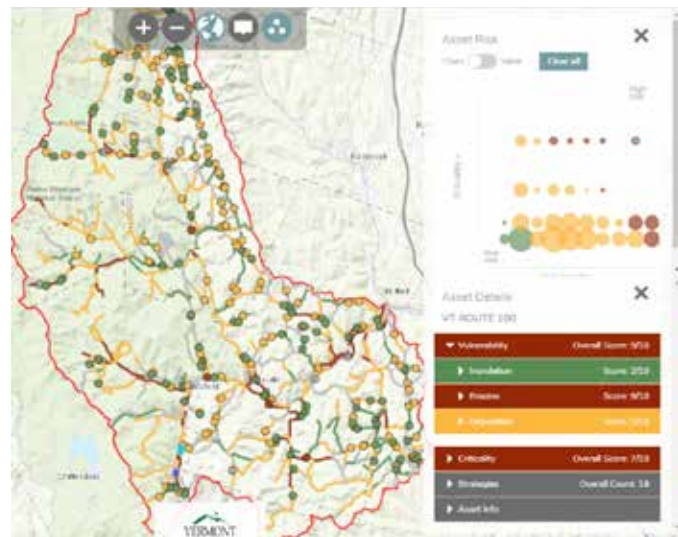


**INFRASTRUCTURE DESIGN TO PREVENT VEHICLE-WILDLIFE COLLISIONS.** VTrans allocated about \$45,000 in FFY 18 to continue research into making transportation systems more permeable to terrestrial wildlife. This research will help VTrans design its infrastructure to prevent vehicle-wildlife collisions and to enable wildlife to move more safely across transportation systems.

## Vermont Airport System Plan (VASP)

The Agency is in the process of updating the Vermont Airport System Plan (VASP), which represents Vermont's long-range vision and goals that will guide the integrated planning, operations, and development of Vermont's public use airports. The Plan will be developed within the framework of the State's three priority goals: making Vermont more affordable, growing the economy, and protecting the vulnerable.

The VASP will include an evaluation of the adequacy and performance of Vermont's public airports, forecasts of future performance, the setting of goals, policies, and recommendations, and an economic impact assessment. Ultimately, the VASP will provide guidance into how Vermont's public use airports can remain safe, competitive, and responsive to its users, stakeholders, and the public's needs.



### TRANSPORTATION RESILIENCE PLANNING TOOL

The Agency completed development of the Transportation Flood Resilience Planning Tool (TRPT). The TRPT is a web-based application that:

- identifies bridges, culverts, and road embankments that are vulnerable to damage from floods;
- estimates risk based on the vulnerability and criticality of roadway segments;
- and identifies potential mitigation measures based on the factors driving the vulnerability.

The tool has been applied to three watersheds so far. The methodology combines river science, hydraulics, and transportation planning methods and is applied at a watershed scale. The tool is ready to be applied to inform project scoping, capital programming, and hazard mitigation planning at the state, regional, and local levels. The project also developed a flood vulnerability metric for all bridges, culverts, and road segments on the state highway system that will be incorporated into an updated project selection and prioritization process. The overall goal is to address high risk locations before flood damage occurs.

## Rail Upgrades

This past year on the VTR Northern Line, the Agency completed the final phases of our TIGER V grant which upgraded 12.74 miles to continuously welded rail. The Agency completed the rail replacement portion of the TIGER VII grant which upgraded the final 11.59 miles to continuously welded rail. The remaining TIGER VII projects will focus on public crossings, platforms, and bridges over the next several years to complete the western corridor plan of providing passenger rail service from Rutland to Burlington.

## Public Transportation

### Service Expansion

Expanded service including: development of a winter shuttle service on the Stowe Mountain Shuttle with increased frequency and mid-mountain loops to better serve the afternoon high demand; expansion of the Jay-Lyn Shuttle to accommodate staff relocated as a result of the Eastern Avenue unexpected closure; and the expansion of Capital Shuttle service to year-round and 5 days a week to accommodate reduced parking in Montpelier due to the start of construction at the new Montpelier Downtown Transit Center.

### Flexible Trip Planner

In March 2018 the Agency launched the first of its kind “Flexible Trip Planner”. By expanding on an established open-source data set, the Agency is now able to better broadcast rural transit options as well as other modes that are currently unable to be revealed through traditional trip planners like Google Maps.

### Grant Awards

The Agency received several grant awards: two awards for No or Low Emission electric buses; a \$2 million competitive grant for a bus garage in Bradford; and two awards totalling \$2.6 million to purchase about 35 new buses and allow 25 aging buses to be retired across the state, increasing the number of buses able to serve the Stowe, VT area to relieve seasonal congestion.

### Automated Vehicle Location Service

The Agency is developing a statewide Automated Vehicle Location (AVL) service which will allow any bus rider to see where their bus is on the route and the estimated time it is arriving to their stop. This service assuages a primary concern of bus riders (“where’s my bus?”) and will improve the overall ridership experience.

### Intercity Bus Service

VTrans continues its partnerships with commercial bus services to bring more connectivity and travel options to the state. In SFY2018, in partnership with Premier Coach (VT Translines), VTrans launched the VT Shires Connector that links southwestern Vermont to rail service in New York’s Capital Region. With bus stops in Manchester and Bennington, the bus brings riders to the Amtrak station in Rensselaer, N.Y., the Greyhound terminal in Albany, and Albany International Airport. The service is a great addition to the ongoing Vermont Translines services that provide transportation between Burlington and Albany, NY and between Rutland and White River Junction. Vermont also has additional intercity services options provided by Greyhound, Megabus, and Yankee Trails. All intercity routes connect to national bus networks. Service and routes can be found at [connectingcommuters.org](http://connectingcommuters.org) or by calling 1-800-685-RIDE.



**MONTPELIER.** VTrans was proud to present the 2nd Annual Research and Innovation Symposium at the Vermont State House. The event brought together thought leaders from across the transportation community and highlighted more than two dozen projects from researchers around the state, covering subjects ranging from Pavement Life to Unmanned Aircraft Systems. View featured projects and project fact sheets, posters, and video clips from the researchers at <https://vtrans.vermont.gov/planning/research/2018symposium>.



### National Bridge Inspection Standards Compliance Achieved

FHWA recently concluded their annual review to assess key areas of the State bridge inspection program for compliance with the National Bridge Inspection Standards (NBIS). For the first time since 2011 the VTrans Bridge Inspection Program is found to be in full compliance (Green) with the NBIS.



**TRANSPORTATION ASSET MANAGEMENT PLAN.** The Agency submitted the first transportation asset management plan (TAMP) to the Federal Highway Administration, and expects the plan will be in full compliance by June 2019.



#### HYDRAULICS INSPECTION VEHICLE EXPLORER (HIVE).

A new tool is helping the Agency manage the network of over 48,000 small culverts. The Hydraulics Inspection Vehicle Explorer (HIVE) provides a cost effective alternative for gaining enhanced culvert barrel condition data by allowing an inspector to drive the pipe. Having the ability to verify pipe condition will ensure that the limited funds available for culvert rehabilitation and replacement are targeted to the right pipes. The Maintenance Districts are preparing to each build and deploy a HIVE.



**ROAD SURFACE PROFILING:** Over 950 miles were profiled with the Dynatest 5051 Mark Road Surface Profiler. This work supports the Agency's pavement analysis, design, and research. It is required per VTrans Standard Specification for Construction, as well as the Code of Federal Regulations (CFR).



141 interstate culverts determined to be high risk based on various condition, geometric, and site factors were inspected this past year.



**HARTFORD.** After a weather event, a backed-up culvert caused significant damage to the subsurface roadway along US-5. Crews worked diligently through cold weather to replace the major culvert and restore the roadway.

### Structures and Hydraulics

In the Structures Unit, 28 projects were advertised in 2018 representing an 86% success rate of advertising on-time. Of the 28 projects advertised in 2018, 61% (17 projects) are state highway projects, 32% (9 projects) are town highway projects, and 7% (2 projects) are interstate projects. Two projects in the Town Highway Bridge Program were delayed with both advertised by the end of 2018. Two projects in the State Highway Bridge Program were delayed due to funding. Nine projects were transferred from scoping into design.

The Hydraulic Unit sized approximately 100 culverts for towns and 26 culverts on state routes, in addition to working on 12 programmed projects from the Project Delivery Bureau.

### e-Construction

The Agency vision is to initiate paperless plans within 5 years. This is expected to increase the quality, efficiency, and collaboration with the construction industry, while increasing transparency for all stakeholders.

### Construction Management System (CMS)

In July of 2018 the Agency signed a contract with ExeVision Inc. to replace its aging enterprise-wide Construction Management System (CMS). Estimation and e-Contracting modules have been designed and will deploy in the spring 2019. Full deployment of the new CMS is expected by 2021.



18 bridge replacement, rehabilitation, and preventative maintenance projects were under construction during 2018, totaling \$165.6 million dollars. Half of the projects utilized Accelerated Bridge Construction (ABC).



**EAST MONTPELIER.** Spanning the Winooski River, the original two-span steel VT 14 Bridge along US-2 was replaced with a new 3-lane bridge. Replacing the bridge was a complex project due to the high traffic volumes and the potential impacts on local residents and businesses. A temporary bridge was installed to manage traffic flows while the new bridge was constructed. Through advanced construction methods, the contractor was able to finish ahead of schedule and the new VT 14 Bridge was opened to the public in mid-November.



**ROCKINGHAM.** Replacement of Bridges #24 N&S on I-91 over the Williams River. The multi-year project will create wider bridges and employ precast concrete girders in lieu of the previous steel deck trusses, resulting in longer bridge life.



Large Bridge Projects Update



**MIDDLEBURY TUNNEL.** Replacement of the bridges on VT30 and Merchants Row. \$12 million in early work for constructing a complex drainage system was completed in 2018. \$45 million is slated for the main project, which is in the final stages of design and will be starting this spring. An expected 10 week rail shutdown is scheduled for summer 2020.



**NORTH HERO.** The North Hero – Grand Isle Bridge on US RT 2 is a \$70 million drawbridge replacement project scheduled for completion in the fall of 2021.

## Before and After



**JOHNSON.** The replacement of Bridges 1 & 2 along VT-100C was one of nine different projects to use Accelerated Bridge Construction (ABC) technology. ABC allowed for quicker construction time and shorter road closures to lessen impacts on travel and ensure a stronger, more durable structure.



**WOODSTOCK.** Every construction project is carefully planned to measure the impact it may have on the traveling public. This bridge replacement (also utilizing ABC technology) was completed in the spring of 2018, in time to avoid potential conflicts with the summer tourism season.

## Transportation Operations

The number of Traffic Signals with remote communication capabilities increased from 18 to 50 (30% of system).

The Agency piloted BlueToad travel time monitoring technology using State-owned devices, integrated into the Advanced Transportation Management System (ATMS), for work zone monitoring on the Waterbury-Stowe VT-100 reclaim project and Montpelier-Waterbury I-89 paving project. The system measures project delays on this high-profile corridor.

## Emergency Management

The Agency's efforts in emergency management include: implementation of the VT-ALERT Mass Notification System, coordination with the nascent Agency drone team, and changes to the Transportation Management Center to be a more robust 24/7 entity including emergency management mission support.

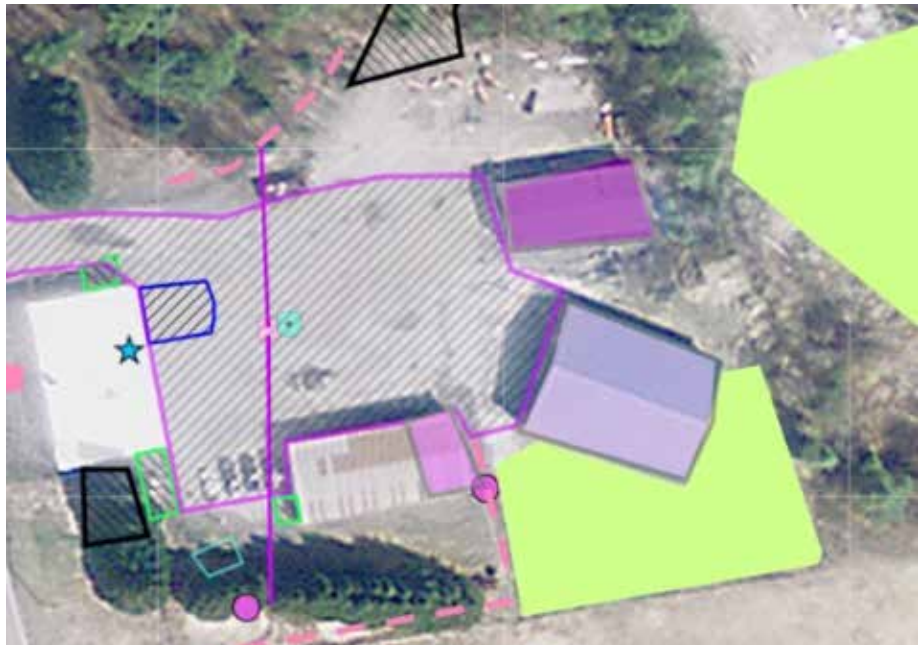
Additional emergency management process improvements include ongoing Incident Command Structure (ICS) planning and implementation, revitalizing the Agency's Continuity of Operations Plan, planning for a Catastrophic Exercise training operation, and improving efficiencies in post-disaster damage collection processes.

## Indefinite Delivery/Indefinite Quantity (IDIQ) Contracts for Maintenance and Repair

The Agency created efficiencies by reducing contracting needs for the same services from approximately 120 contracts to 59 contracts allowing for Federal funding of maintenance activities, and increasing value through improved competitive processes.



**MORRISTOWN.** The new VT 15A Bridge over the Lamoille River replaced a decade-old temporary bridge. The new 230-foot bridge features wider lanes and added two 3-foot shoulders for pedestrian crossing.



**TRANSPORTATION MAINTENANCE FACILITY INFORMATION TOOL (FIT).** The Agency's Water Quality Unit developed FIT using GIS to assess water quality improvements at maintenance garages. In coordination with HazMat and the Districts the team completed mapping and creation of Stormwater Pollution Prevention Plans for 8 facilities which will help the Agency meet its water quality goals. The remaining 56 facilities will be phased in with eight completed annually. Improvements include, implementation of good housekeeping via Best Management Practice, re-vegetation, host Sites for stormwater retrofits, erosion stabilization.



All 1,315 Agency staff participated in the mandated Sexual Harassment Training, Workplace Civility, Unconscious Bias, and Ouch Training was delivered to 771 participants in 2018.



**NORTON.** Often, VTrans Maintenance Crews work closely with contractors on specific projects. Multiple garage crews assisted in the installation of a 31-foot pipe along VT-114 in Warren's Gore.



**MIDDLESEX.** 2018 saw the completion of the US-2 Bridge Replacement project over I-89. Started in 2016, the multi-year project involved the construction of a completely new bridge structure and the demolition of the existing bridge.

### Department of Motor Vehicles

#### Training Modernization

DMV worked with the Agency's Training Center to modernize the delivery methods of training materials and ensuring that information taught to staff is consistent and delivered in methods that best work for the student.

#### Safety Enforcement Recognition

Vermont was recognized by the Federal Motor Carrier Safety Administration for excellence in safety enforcement by adopting best practices through the Commercial Driver's License Information System. The Vermont DMV was one of only six states in the country to receive this recognition.

#### Drivers with Diminished Skills

Staff from the Driver Improvement Unit worked with Rehabilitation Therapy at Central Vermont Medical Center to educate medical professionals on their role in maintaining highway safety. DMV staff taught medical professionals how they may report drivers with diminished skills and explained the reexamination process that such drivers would go through in order to maintain their Operator's License.



**SPRINGFIELD.** A view after takeoff from Hartness State Airport.



**FAIR HAVEN SCALE REPLACEMENT.** The existing failed platform scale at the Fair Haven Scale House was replaced by a brand new, state of the art enforcement platform scale. The new scale enhances Vermont's Size & Weight Enforcement Plan with the Federal Highway Administration and allows DMV Enforcement Officers to more easily ensure vehicles are in compliance with weight limits.



## VERMONT PROJECT SELECTION AND PRIORITIZATION PROCESS.

The Agency is in the midst of revamping its project prioritization system so that there is a clear understanding of how a project becomes a project and how projects are prioritized based on the “value” they provide to taxpayers. Transportation value is determined by evaluating each project against eight criteria: safety, asset condition, health access, environment, community, economic access, resiliency, and mobility and connectivity.

Performance measures for the Highways mode have been developed. The remaining criteria for Walkways, Paths & Trails, Aviation, Rail and Transit are still under development, in collaboration with the Regional Planning Commissions (RPCs).

This new system is expected to be in operation for the Fiscal Year 2022 capital program. In the interim, the existing prioritization process remains in effect.

## Structures Criteria

Structures Criteria	Maximum Points
Bridge Condition	30
Load Capacity and Use	15
Regional Input and Priority	15
Remaining Life	10
Waterway Adequacy and Scour Susceptibility	10
Asset-Benefit Cost Factor	10
Functionality	5
Project Development and Momentum	5

*Note: These criteria were developed in 2007, in compliance with 19 V.S.A. paragraph 10b(c).*

Points are summarized for each program, with the highest score receiving the top ranking. Rankings will change from year to year as projects are completed, as assets change in condition, or as regional planning commissions’ priorities change. These rankings are used in developing the capital program, help in deciding which bridges to advance next, and have enabled us to clear a backlog of projects in a defined, documented, and efficient manner.

Selection for proposed rehabilitation and reconstruction projects will continue to utilize the priority system. To become a project and have design initiated, the bridge will need to be among the highest ranked.

The bridge priority system, which is used to rank major bridge replacement and rehabilitation projects, will continue to be used for project selection and determining funding needs. However, this system is not comprehensive as it does not rank short structures or maintenance needs, both preventive and routine.

Bridge replacement and rehabilitation projects progress through the VTrans Project Development Process. With its current reorganization, the Structures Section is aggressively looking for opportunities to streamline project delivery while reducing project scope, impacts, and costs.

Scope reduction can be achieved by various methods: reducing approach work, minimizing or eliminating enhancements, phased construction, or road closures. Although inconvenient for a community, the elimination of a temporary bridge reduces timelines, cost, need for significant right-of-way acquisition, and resource impacts. Swift construction and improved safety conditions are additional benefits of road closures.

Where appropriate, accelerated bridge construction (ABC) and materials are utilized. The technique minimizes traffic disruptions and congestions, improves work-zone safety, and lessens environmental impacts. Additionally, prefabrication can improve constructability, increase quality, and lower life-cycle costs.

The establishment of the bridge maintenance program gave us a start, enabling us to perform much-needed preventive maintenance on a limited number of bridges, but it was just the beginning. Preventive maintenance is not a high-profile activity; if done on a routine schedule, however, its benefits will be obvious as it will extend service life and delay the rate at which our bridges become structurally deficient. The agency has substantially grown the program from its origins and has now integrated it into the regular program.

Focusing efforts toward preventive maintenance activities will slow, but not reduce, the number of bridges becoming structurally deficient. Preventive maintenance does not correct existing structural deficiencies, but instead retards deterioration so that a bridge’s lifespan can be extended, thus preventing the structure from becoming structurally deficient. To this end, preventive maintenance is essential to slowing the rate at which structural deficiencies evolve over time.

The value of preventive maintenance will be appropriately demonstrated in the future through new performance measures that evaluate a bridge’s overall core unit condition or network health.



## Roadway Criteria

Roadway Criteria	Maximum Points	Criteria Description
Highway System	40	This factor looks at the Highway Sufficiency Rating and the network designation. Interstates are held to the highest standard, followed by non-Interstate primary and then off-primary roads. The Highway Sufficiency Rating considers traffic, safety, width, subsurface road structure, and more.
Cost per Vehicle Mile	20	This is the project cost divided by the estimated number of miles vehicles will travel on the project. This is a relatively easy method to get a benefit/cost ratio for comparing similar projects.
Regional Priority	20	The top RPC Roadway project is assigned 20 points. The score is reduced for lower RPC priorities. Projects listed as priority #10 and lower get two points
Project Momentum	20	This factor considers where the project is in the development process and anticipated problems such as right of way or environmental permitting. Some projects are so far along that they must be completed or the Agency would have to pay back federal funds.
Designated Downtown Project	10	Per 19 V.S.A. § 10g(l)(3), VTrans awards ten bonus points to the base score for projects within a designated downtown development district established pursuant to 24 V.S.A. § 2793.

## Traffic Design Criteria

Traffic Design Criteria	Maximum Points	Criteria Description
Intersection Capacity	40	This factor is based on Level of Service (LOS) for the intersection and the number of intersections that are in the coordinated system. Projects with a lower LOS and that are part of a larger coordinated system receive higher scores for this category.
Accident Rate	20	This factor is based on the critical-accident ratio for the intersection. Projects with higher critical-accident ratios receive higher scores for this category.
Cost per Intersection Volume	20	This factor uses the estimated construction cost and average-annual-daily traffic through the intersection. VTrans calculates the construction cost of the project for each anticipated user through the intersection. Projects with lower costs per intersection volume receive higher scores for this category.
Regional Input and Priority	20	This factor is based on the ranking of projects from the RPCs/MPO. The RPCs/MPO rank the projects based on criteria they develop. Projects with higher regional rankings receive higher scores for this factor.
Project Momentum	10	This factor considers where the project is in the development process, anticipated problems such as right of way or environmental permitting; and funding.

## Pavement Criteria

### Asset Condition (PCI)

#### Pavement Condition Index

- Combination of; Ride, Rut, Cracking
- Scoring structured to recognize need to address roads in very poor condition regardless of traffic

### Project Economics (Benefit Cost)

#### Benefit Cost Ratio

- Benefit compares condition difference between the selected treatment and doing nothing on the project section over the lifespan of the treatment
- Benefits are weighted by traffic volume
- Cost is present value financial cost to the state
- Measures the “bang for the buck” amongst candidate projects

### Regional Planning Commission (RPC) Rank

#### Regional Importance

- Allows RPCs to address socio-economic, cultural/local importance and impact on local economy of candidate projects
- Scoring structure helps create a geographically distributed program



**EAST MONTPELIER.** Before being replaced, the 80-year-old VT 14 Bridge over the Winooski River was in visibly deteriorating condition and did not meet current design standards. See page 11 to see how the new bridge looks now.



**RUTLAND.** Commissioner Wanda Minoli (far right) and DMV representatives at the Driver and Traffic Safety Annual Conference.



**MONTPELIER.** Customers check-in at the welcome desk at DMV headquarters in the capital.



**SOUTH BURLINGTON.** DMV staff are experts in guiding customers through different processes.



**RUTLAND.** A DMV Exam Specialist fills out forms following a road test.

# Department of Motor Vehicles

The Department of Motor Vehicles oversees vehicle licensing, registration, tax, and titling; provides commercial licensing, permitting, and enforcement/inspection services; investigates fraud/violations; provides driver training programs; and collects motor fuel revenue.

## Commissioner

Wanda Minoli

## SFY 2019 Staff

Total: 228

## SFY 2019 Funding

Total Appropriation: \$31.4 M












## Locations

- Montpelier
- Bennington
- Dummerston
- Middlebury
- Newport
- Rutland
- Saint Albans
- Saint Johnsbury
- South Burlington
- Springfield
- White River Junction



**MONTPELIER.** DMV Headquarters in the Capitol.

## PERFORMANCE & ASSETS

Enforcement & Safety				
	26.4K Permits Issued	6745 Commercial Safety Stops	586 Dealers Licensed, 2018	1172 Inspection Stations, 2018
Operations				
	148K Credentials Issued (Licenses & ID Cards)	735K Vehicle Registrations	254K Online Transactions	\$36.4M Revenue for Other Programs (i.e. Education, Wildlife)
Finance & Logistics				
	\$330M Total Revenue	134K Plates Distributed	275K Pieces of Mail Received	

Note: All data is from State Fiscal Year 2018 (SFY18), unless otherwise noted.

**Revenues FY2018, in millions**

(including all Education Fund allocations and other out-transfers)

Motor Vehicle Fees (Licenses & Registrations)	\$86.0
Gasoline	\$78.2
Purchase & Use	\$109.4
Diesel	\$18.9
Other Revenue (Includes Title Certificates, Oversize Permits, State Civil Traffic Fines, Inspection Sticker Fees, and other sources)	\$23.0
<b>Total</b>	<b>\$315.4</b>

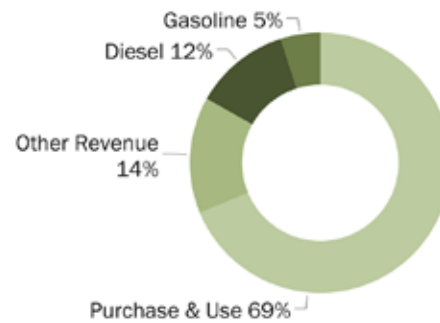
**Other Revenues FY2018, in millions**

Transportation Infrastructure Bond Gasoline	\$12.9
Transportation Infrastructure Bond Diesel and Other	\$2.0
<b>Total</b>	<b>\$14.9</b>

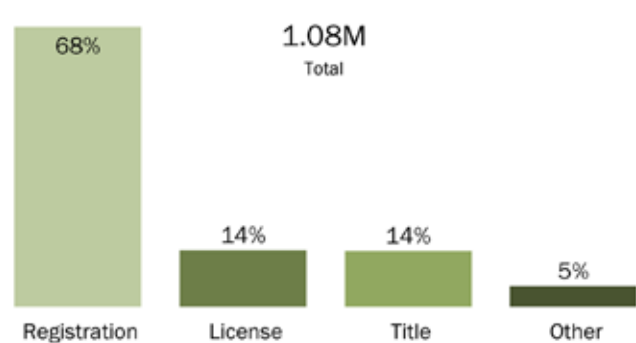
**DMV Rates**

Gas Tax, Assessments, and Clean Up Fee	\$0.121, plus MFTIA, plus MFTA, plus \$0.01 Clean Up Fee
Motor Fuel Transportation Infrastructure Assessment (MFTIA)	\$0.0396 per gallon or 2% of the adjusted retail price upon each gallon of motor fuel sold by the distributor, whichever is greater
Motor Fuel Tax Assessment (MFTA)	\$0.134 per gallon or 4% of the tax-adjusted retail price upon each gallon of motor fuel sold by the distributor not to exceed \$0.18, whichever is greater
Diesel Tax, Clean Up Fee, and Infrastructure Fee	\$0.28 and \$0.01 and \$0.03
Sales Tax, Purchase and Use Tax, Motor Homes, Trucks up to 10,099 lbs.	6%
Driver Training	\$50 - \$150
Clean Air Fund	\$2/year
Conservation Plates	\$26/pair, in addition to registration fee
Title Fees (Vehicle)	\$35
Title Fees (ATV, Boats, Snowmobiles)	\$22
Oversize Permits	\$1 - \$500
Survey Fee	\$300 - \$10,000

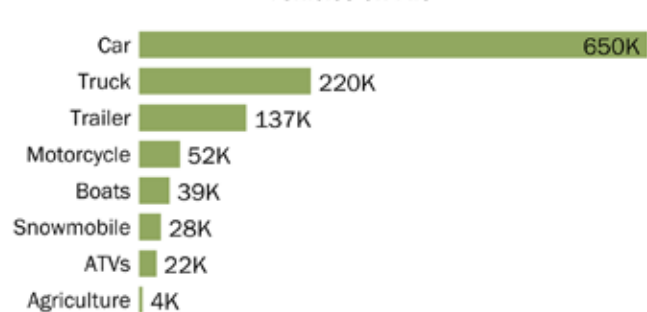
Revenue Sources



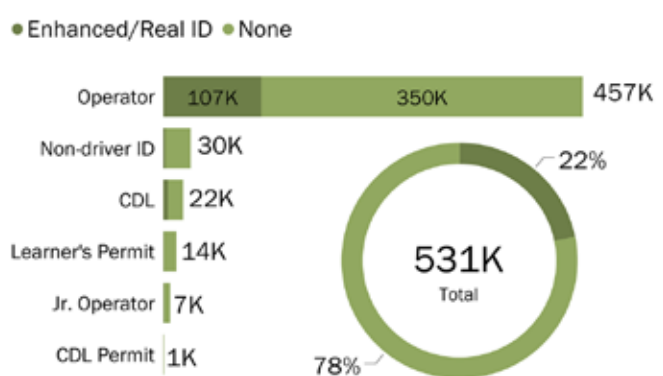
Transactions Processed



Vehicles on File



Credentials on File



# Finance and Administration

The Division of Finance and Administration provides services in contract administration, accounting, budgeting, audit, records management, performance monitoring, civil rights, labor compliance, training, workforce development, and recruitment.

## Director

Wayne Gammell

## SFY 2019 Staff

Total: 122
















## SFY 2019 Funding

Total Appropriation: \$14.7 M



**BERLIN.** The VTrans Training Center provides a wide variety of trainings for AOT employees including safety, tech, and professional development.

## PERFORMANCE & ASSETS

Financial Management, Business Support	 <b>\$236M</b> Federal Funds Obligated	 <b>\$316M</b> Billing Revenue	 <b>102.4K</b> Number of Payments Made	 <b>\$498M</b> Value of Payments Made
Contract Administration	 <b>429</b> Number of Contracts and Amendments	 <b>\$297M</b> Value of Contracts and Amendments	 <b>780</b> Number of Grants and Amendments	 <b>\$126M</b> Value of Grants and Amendments
Performance, Audit, Records Management, and Hearings	 <b>116</b> Public Records Requests	 <b>167</b> Firms Reviewed for Financial Qualification	 <b>24</b> Active Lean Engagements	
Training, Safety, and Civil Rights	 <b>161</b> Technical and Development Trainings	 <b>116</b> Safety Trainings	 <b>76</b> Vermont Local Roads Trainings	 <b>87</b> Civil Rights Outreach Events

Note: All data is from State Fiscal Year 2018 (SFY18), unless otherwise noted.



**GRAND ISLE.** VTrans staff inspect a bridge in the Champlain Islands



**BARTON.** Maintenance crews work on a guardrail repair along I-91 South.



**RICHFORD.** A multi-year rehabilitation of the Richford-Sutton Bridge along VT-105A over the Missisquoi River.



**JAY.** A VTrans plow battles an early winter storm along Route 242.

The Highway Division oversees the maintenance and operation of the interstate and state highway system; oversees construction/materials; supports municipal projects; inspects and maintains bridges, culverts, signs, and signals; provides road condition information.

## Director

Wayne Symonds

## SFY 2019 Staff

Total: 849

## SFY 2019 Funding

Total Appropriation: \$492.4 M



**MIDDLESEX.** VTrans divides the State into eight separate maintenance districts and operates out of more than 60 garages.

## PERFORMANCE & ASSETS

Highway Safety				
	70 Fatalities, 2017	269 Major Crashes, 2017	52% of Fatalities Unbelted, 2017	
Winter Maintenance				
	\$40.1M Cost of Winter Maintenance*	177K Salt Used (Tons)*	8.5K Sand Used (Cubic Yards)*	2.3M Lane Miles Plowed*
Operations				
	320 Tons of Trash Collected	19.1K Acres Mowed	\$5.0M Investment in Water Quality	80% Fleet Vehicles Less Than 8 Years Old
Asset Management, Project Delivery, Construction				
	791 Overweight Vehicle Permit Reviews	61 Projects Under Construction, 2018	4004 Total Structures Maintained	197 Miles Paved, 2018
				6193 Total Lane Miles Maintained

Note: All data is from State Fiscal Year 2018 (SFY18), unless otherwise noted.  
\* Data from 2017-2018 Winter Season

### 2017-2021 Strategic Highway Safety Plan Critical Emphasis Areas

**1. IMPROVE INFRASTRUCTURE**

- a. Minimize Lane Departure
- b. Improve Design and Operation of Highway Intersection

**2. REDUCE SPEEDING AND AGGRESSIVE DRIVING**

**3. INCREASE USE OF OCCUPANT PROTECTION**

**4. VULNERABLE USERS & MOTORCYCLISTS SAFETY**

- a. Increase Pedestrian Safety
- b. Increase Bicyclist Safety
- c. Increase Motorcyclist Safety

**5. AGE APPROPRIATE SOLUTIONS**

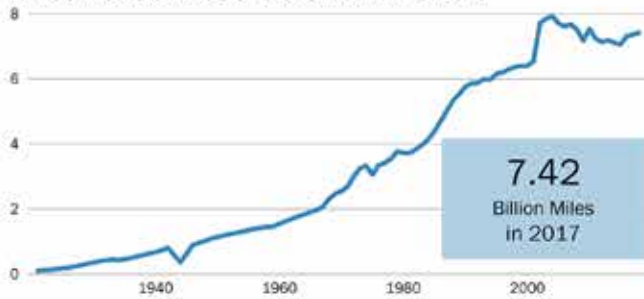
- a. Improve Younger Driver Safety (Under 25)
- b. Improve Older Driver Safety (65 and Over)

**6. REDUCE IMPAIRED DRIVING**

**7. CURB DISTRACTED AND INATTENTIVE DRIVING**

Additional crash information is available at [app.vtrans.vermont.gov/CrashPublicQueryTool](http://app.vtrans.vermont.gov/CrashPublicQueryTool)

Annual Vehicle Miles of Travel (AVMT), Billions

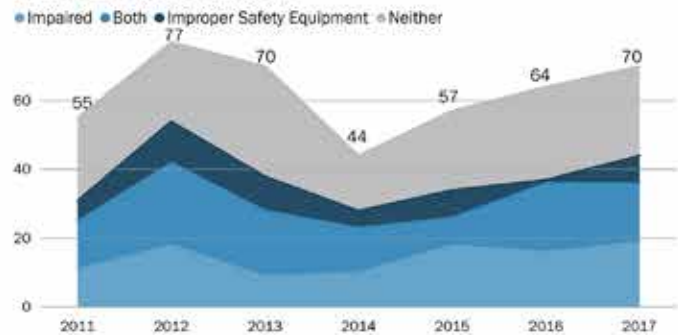


Crashes where a Driver Tested Positive for Marijuana\*

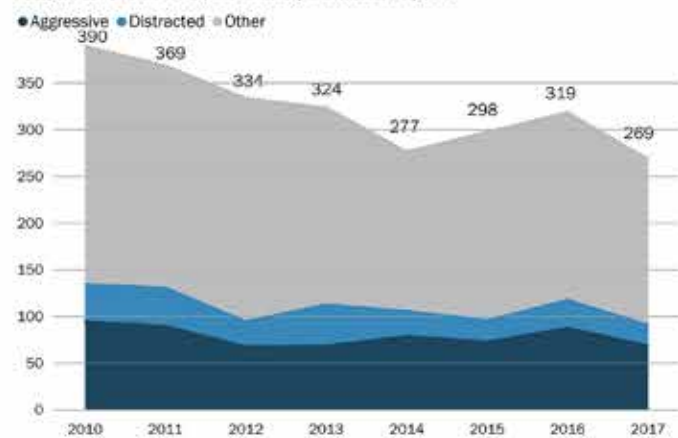


\*Marijuana was decriminalized 7/1/2013 and legalized 7/1/2018.

Fatalities, by calendar year



Major Crashes Reported, by calendar year



The office of Highway Safety works in collaboration with DMV Enforcement and Vermont State Police to enforce safe speeds and curb distracted driving.





Maintenance workers replace a plow blade in preparation for a coming winter storm.



With excess amounts of snow, VTrans crews “wing back” snow mounds on the roadside to make room for the next big storm.

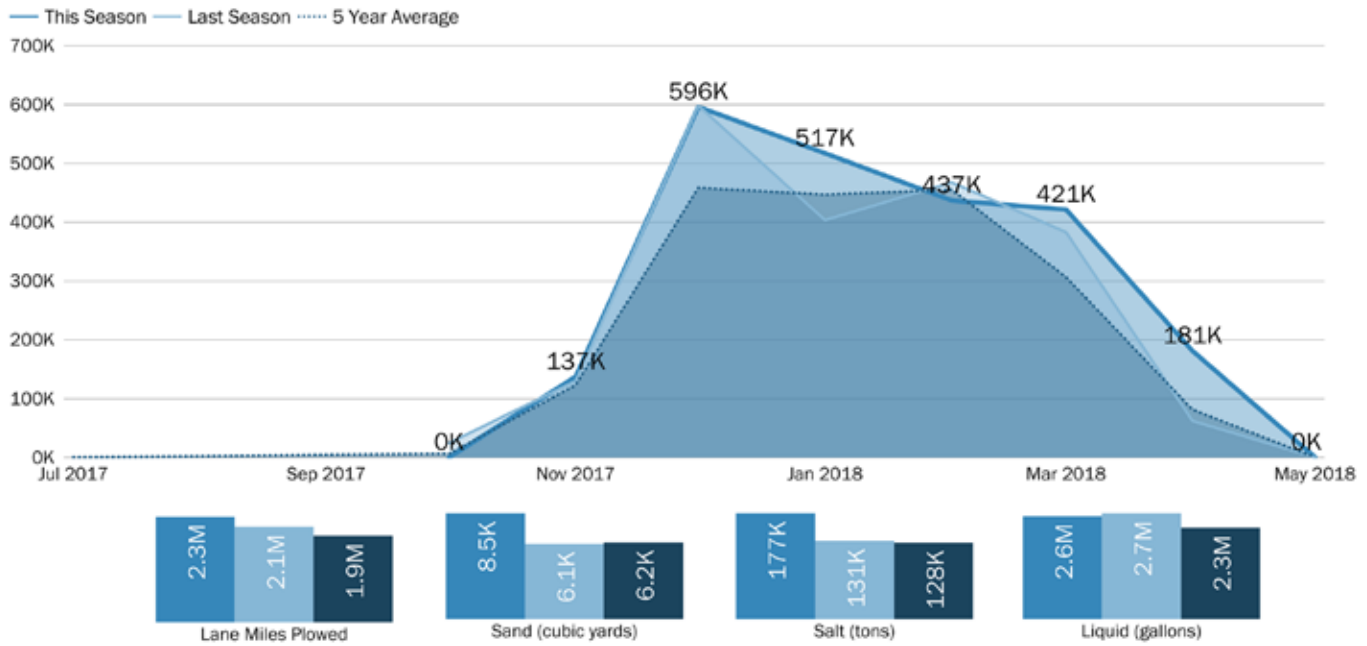


The current fleet supporting winter highway maintenance efforts consists of 248 dump trucks, 82 pickups with plows, 54 loaders, and 8 graders.

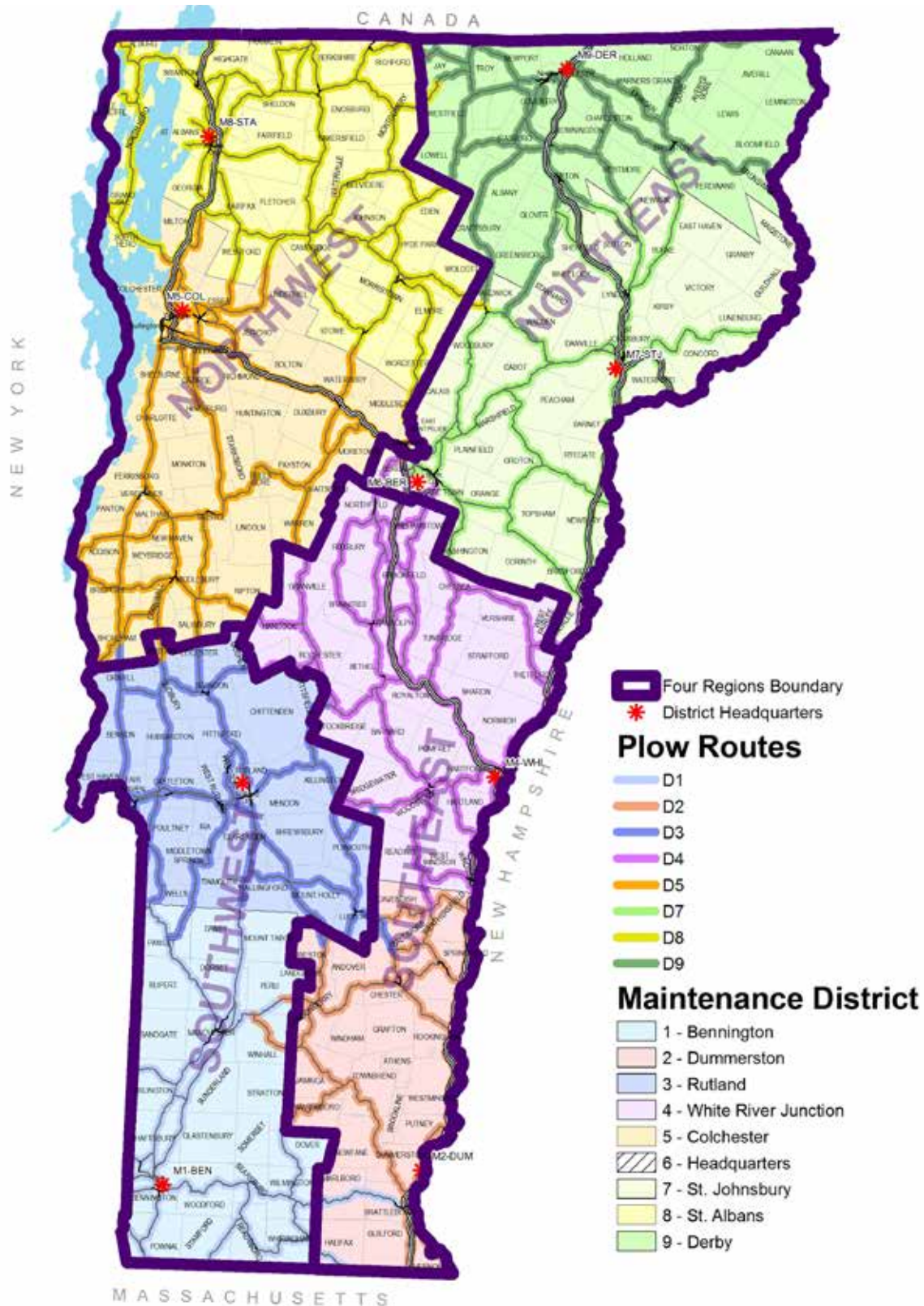


# HIGHWAY: WINTER MAINTENANCE STATISTICS

Total Lane Miles Plowed compared with Recent Seasons



SOUTHWEST		SOUTHEAST		NORTHWEST		NORTHEAST	
<b>District 1</b> Bennington East Dorset Readsboro Wilmington Marlboro	<b>District 3</b> Brandon Castleton Clarendon Ludlow Mendon Rutland Sudbury	<b>District 2</b> Ascutney Chester Dummerston Jamaica Londonderry Rockingham Springfield	<b>District 4</b> Randolph Rochester Royalton Thetford Tunbridge White River Jct Windsor Williamstown Woodstock	<b>District 5</b> Chimney Corners Colchester Essex Middlebury New Haven Waitsfield Middlesex	<b>District 8</b> Cambridge Eden Enosburg Georgia Lyndon N. Hero Highgate Montgomery Morrisville St. Albans	<b>District 7</b> Bradford W. Danville Lunenburg Lyndon Newbury North Montpelier Orange St. Johnsbury	<b>District 9</b> Barton Bloomfield Canaan Derby Irasburg Island Pond Westfield
<b>218.5K</b> Lane Miles Plowed	<b>312.0K</b> Lane Miles Plowed	<b>188.6K</b> Lane Miles Plowed	<b>311.7K</b> Lane Miles Plowed	<b>315.2K</b> Lane Miles Plowed	<b>371.1K</b> Lane Miles Plowed	<b>311.7K</b> Lane Miles Plowed	<b>258.4K</b> Lane Miles Plowed
<b>\$3.4M</b> Cost of Winter Maintenance	<b>\$4.6M</b> Cost of Winter Maintenance	<b>\$3.6M</b> Cost of Winter Maintenance	<b>\$6.5M</b> Cost of Winter Maintenance	<b>\$6.2M</b> Cost of Winter Maintenance	<b>\$5.9M</b> Cost of Winter Maintenance	<b>\$5.6M</b> Cost of Winter Maintenance	<b>\$4.0M</b> Cost of Winter Maintenance
<b>15.2K</b> Salt (tons)	<b>21.0K</b> Salt (tons)	<b>18.7K</b> Salt (tons)	<b>29.9K</b> Salt (tons)	<b>32.3K</b> Salt (tons)	<b>24.6K</b> Salt (tons)	<b>21.6K</b> Salt (tons)	<b>13.5K</b> Salt (tons)
<b>1449</b> Sand (cubic yards)	<b>568</b> Sand (cubic yards)	<b>0</b> Sand (cubic yards)	<b>995</b> Sand (cubic yards)	<b>605</b> Sand (cubic yards)	<b>751</b> Sand (cubic yards)	<b>2302</b> Sand (cubic yards)	<b>1874</b> Sand (cubic yards)



In conformance with the National Bridge Inventory, Vermont maintains a historical record of all bridges subject to the National Bridge Inspection Standards (NBIS). These standards establish requirements for inspection procedures, frequency of inspections, qualifications of personnel, inspection reports, and both the preparation and maintenance of a state bridge inventory. The NBIS apply to all short and long structures located on public roads. Short and long structures are defined below.

**"Highway" Structure Population** (as submitted to FHWA in April 2018)

Structure Type	Interstate	State Highway	Town Highway	Other	Total
Long Structures	313	811	1,652	7	2,783
Short Structures	211	1,056	*	*	1,267
<b>Total</b>	<b>524</b>	<b>1,867</b>	<b>1,652</b>	<b>7</b>	<b>4,050</b>

**DEFINITIONS**

**Long Structure**

Bridges having a span length greater than 20 feet in length and located on public roads.

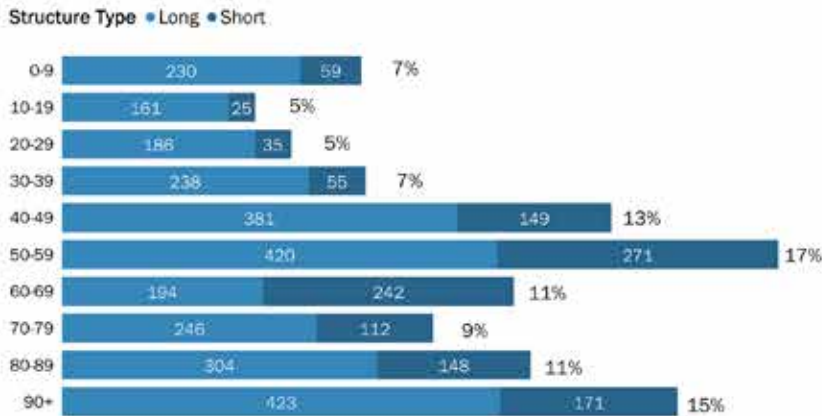
**Short Structure**

Bridges having a span length of greater than six feet up to or equal to 20 feet and located on public roads.

\* VTrans does not maintain an inventory of or inspect town highway or other short structures.

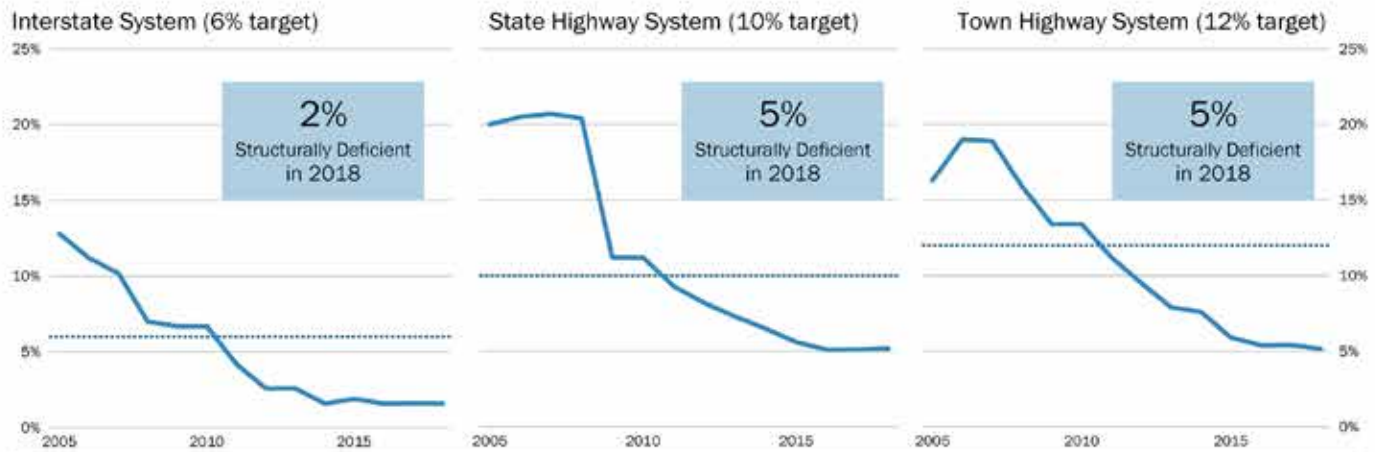
Note: Part of this year's structure population increase is due to the inclusion of bridges that are on the border with neighboring states.

**Structure Count by Age** (in years)



GRAND ISLE, VTrans staff inspect a bridge in the Champlain Islands

**Percent Structural Deficiency Over Time by System**



## Performance Measures

Automated surveys are conducted annually to determine pavement conditions across the state. Each segment of road is rated on a scale of 0 to 100 based on rutting, cracking, and roughness. These are then weighted by their respective traffic volumes. The VTrans goal for performance is 70.

## Conditions Over Time

While the "Travel Weighted Average Network Condition" graph measures VTrans performance for the majority of road users, the "Unweighted Condition Distribution" graph measures the Agency's performance for all users, including those on low volume roads. The VTrans goal for the percentage of roads in very poor condition is no more than 25%.

### Good

Like new pavement with few defects perceived by drivers  
Composite Pavement Condition Index 80-100

### Fair

Slight rutting, and/or cracking, and/or roughness become noticeable to drivers

Composite Pavement Condition Index 65-79

### Poor

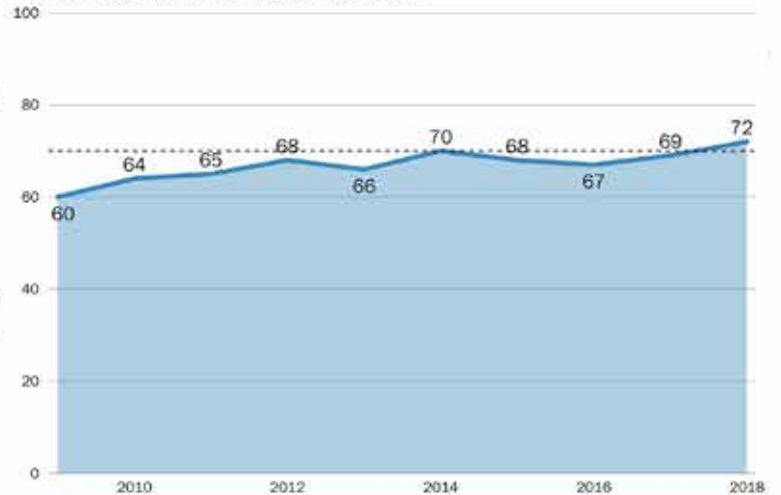
Multiple cracks are apparent, and/or rutting may pull at the wheel, and/or roughness causes drivers to make minor corrections

Composite Pavement Condition Index 40-64

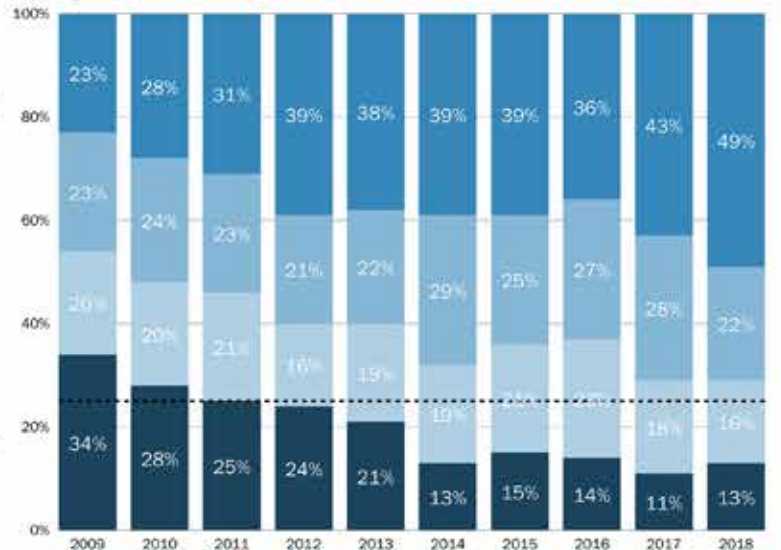
### Very Poor

Significant cracks may cause potholes, and/or rutting pulls at the vehicle, and/or roughness is uncomfortable to occupants. Drivers may need to correct to avoid defects.  
Composite Pavement Condition Index 0-39

Travel Weighted Average Network Condition



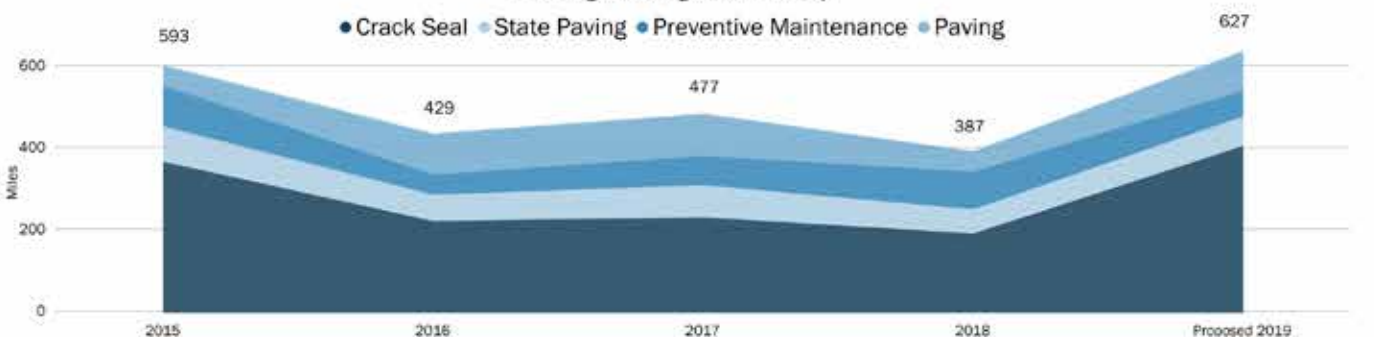
Unweighted Condition Distribution



## Paving Mileage Maps

Paving mileage maps are available through VTransparency, the Agency's public information website, at [vtrans.vermont.gov/vtransparency](http://vtrans.vermont.gov/vtransparency).

Paving Mileage Summary





**CUTTINGSVILLE.** A crew from the VTrans Rail section performs a bridge inspection using a specialized “snooper” truck. The photo was captured by the Agency’s new aviation drone.



**NEWPORT.** A twin engine plane takes off from the runway at Northeast Kingdom International Airport.



**BENNINGTON.** A look down a newly extended runway at William H. Morse State Airport.



**MIDDLESEX.** The VTrans Rail Program is responsible for hundreds of miles of track and railroad crossings around the State. This photo depicts a section of the NECR, which is privately owned by Genesee & Wyoming.

# Policy, Planning, and Intermodal Development (PPAID)

The Division of Policy, Planning, and Intermodal Development oversees state-owned rail lines and airports; supports public transit providers; provides statewide planning and policy support, including research, development review, mapping, and outreach.

## Director

Michele Boomhower

## SFY 2019 Staff

Total: 72















## SFY 2019 Funding

Total Appropriation: \$83.5 M



**BENNINGTON.** Morse State Airport reopened following major improvements to the main runway and replacement of the lighting system thanks to a \$4.5 million grant from the Federal Aviation Administration.

## PERFORMANCE & ASSETS

Rail				
	21 Rail Projects Completed in 2018	2021 Year targeted to complete Amtrak to Burlington service	94.5K Passenger Rail Ridership, Vermont Stations, FFY18	
Aviation				
	\$1.3M Grant Awards FFY17 (Federal Share)	3.7K Feet of Runway Rehabilitated/Constructed, 2018	5442 Cape Air Rutland Passenger Service Ridership	5024 FAA Enplanements, 2017
Public Transit				
	4.74M Total Trips, FFY18	24% Local Funding Share Statewide	\$2.8M Total fare revenue collected statewide FFY18	
Policy, Planning, and Research				
	8 Research Projects Completed	394 Section 1111 Permits Issued	234 Municipalities Engaged in Regional Transportation Planning	72 Town Highway Maps Updated and Published

Note: All data is from State Fiscal Year 2018 (SFY18), unless otherwise noted.  
Definitions: FFY refers to Federal Fiscal Year  
SFY refers to State Fiscal Year



Amtrak ridership from Vermont-based stations only:  
 Ethan Allen Express: 16,901  
 Vermonter: 77,576  
 Total: 94,477

### Passenger Rail Service

The State of Vermont partners with Amtrak to provide rail service.

**Amtrak Vermonter:** runs on the New England Central Railroad (NECR/GWI) from Saint Albans to Brattleboro, continues through Massachusetts and Connecticut, and then down the Northeast Corridor to New York City and Washington, DC.  
[www.amtrak.com/vermonter-train](http://www.amtrak.com/vermonter-train)

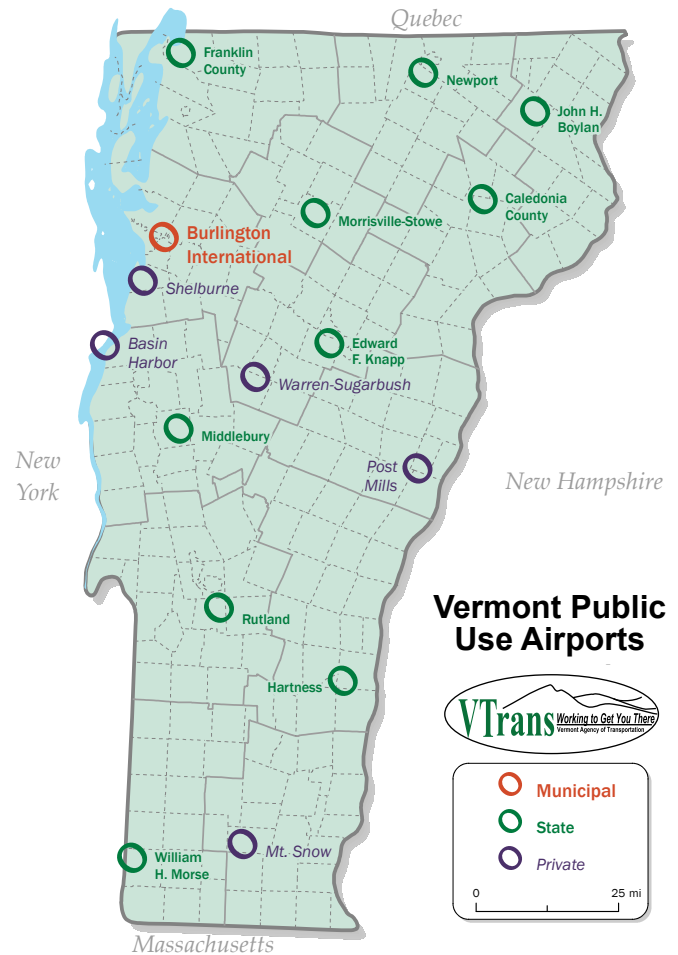
**Amtrak Ethan Allen Express:** runs on the Clarendon and Pittsford Railroad (CLP) from Rutland to Whitehall, New York, and continues south to Albany and on to New York City.  
[www.amtrak.com/ethan-allen-express-train](http://www.amtrak.com/ethan-allen-express-train)

### FY2018 Amtrak Ridership and Revenue

Lines	Ridership	% Change	Revenue	% Change
Vermonter	97,509	-2.2 %	\$6,495,403	+2.3
Ethan Allen Express	49,669	-0.6%	\$3,004,394	+6.8%

### Aviation

The Aviation Program manages 90 runway lane miles at 10 state-owned airports in Vermont, providing a safe environment for users of the system, preserving the publicly-owned infrastructure, promoting aviation-related activities, and expanding travel opportunities.





The Policy, Planning, and Research Bureau is responsible for state transportation planning, policy analysis, mapping, research and development, and permitting services.

**Discretionary Grants Submitted & Funding Awarded**

**Vermont Regional Freight Rail Corridor Upgrade Project (BUILD Grant Program)**

Rehabilitate or replace 31 rail bridges along the Vermont Railway between Rutland and Hoosick, NY in order to bring bridges up to the 286,000 lbs. carload standard. *Awarded \$20 million.*

**Vermont Amtrak Safety Project (CRISI Program)**

Rock and slope stabilization and rock fall detection system at several sites along the NECR Railroad where the Vermonter Amtrak service operates. *Awarded \$2 million.*

**Vermont Rural Bridges (CGBP Program)**

Rehabilitation of a bundle of bridges which include 2 bridges in Montgomery, 1 bridge in Georgia, and 3 large culverts in Hinesburg, Middlebury, and Chittenden. *Potential Award Pending.*

**Regional Planning**

Through the Transportation Planning Initiative (TPI), the Agency provides grants to Vermont's 11 Regional Planning Commissions (RPCs) for transportation planning and to facilitate collaboration between municipalities and the agency.

More information at [vtrans.vermont.gov/planning/policy-planning/regional](http://vtrans.vermont.gov/planning/policy-planning/regional)

TRANSPORTATION PLANNING INITIATIVE ACCOMPLISHMENTS				
Enhance cooperation and coordination between Agency, RPCs, and municipalities	Better connect Federal, regional, and statewide transportation planning	Provide technical assistance to municipalities	Advance Agency Strategic and Long-Range Transportation Plans	Provide a mechanism for improved public outreach and education
<b>234</b> Municipalities actively engaged in regional transportation planning	<b>133</b> # of Coordination Activities in Support of Public Transit	<b>43%</b> TPI budget spent on municipal technical assistance.	<b>341</b> Data collection activities conducted for Agency	<b>152</b> Municipalities assisted with transportation related grants

**RESEARCH**

The Research Section assures completion of the Agency research program, represents the state on regional and national research efforts and fulfills the Federal mandate to provide required transportation research. In 2018, eight projects were completed on topics such as accelerated bridge construction, workforce retention, strategies to reduce wildlife mortality on highways, and unmanned aircraft systems. More information at [vtrans.vermont.gov/planning/research](http://vtrans.vermont.gov/planning/research)

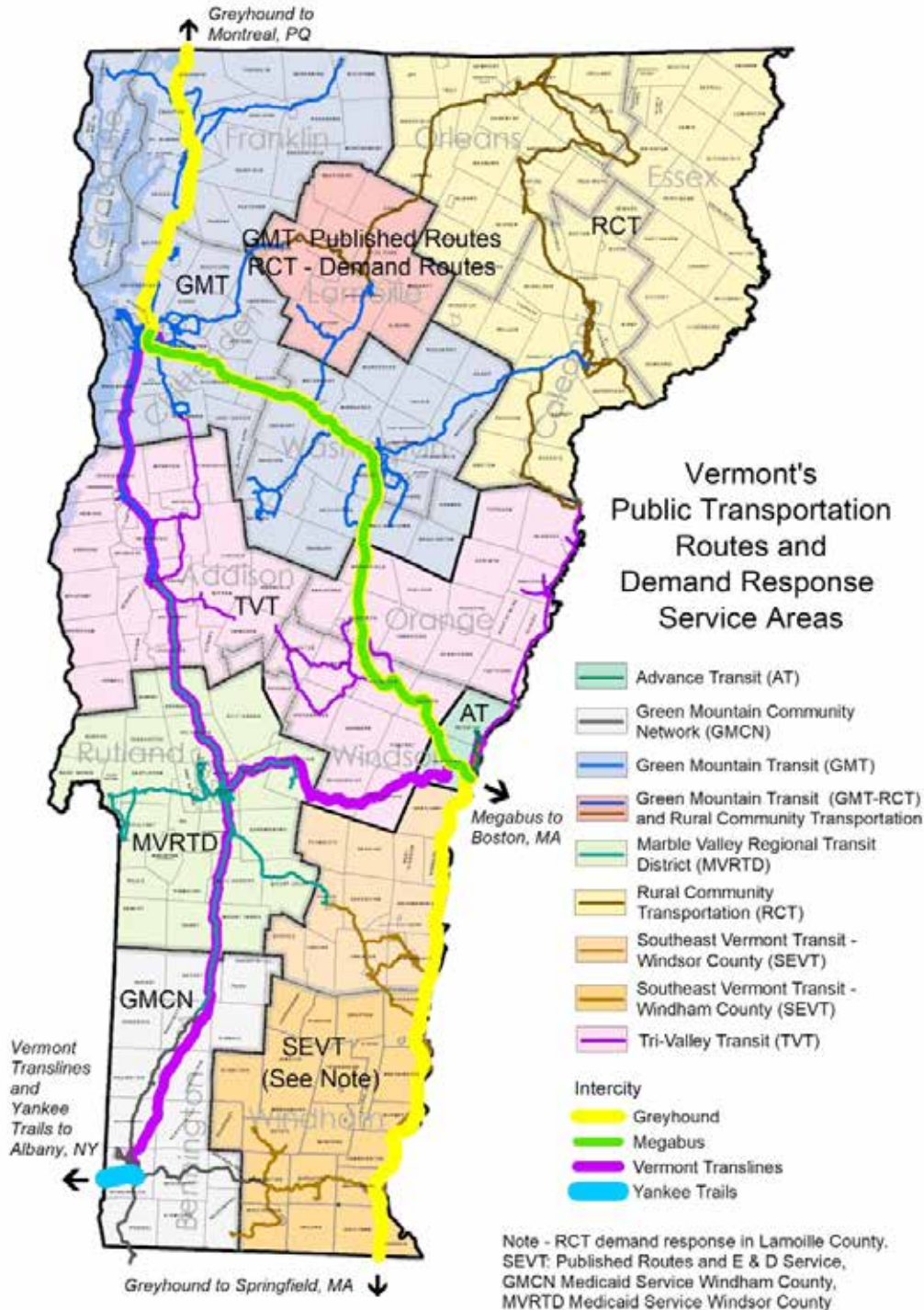


**PAVING THE WAY FOR INTELLIGENT COMPACTION IN VERMONT**  
Evaluating Intelligent Compaction data today can pave the way for Vermont's future pavement projects. This research project will provide the Agency with guidelines and recommendations to take advantage of new technology and improve roadway construction.



**EXPLORING THE POTENTIAL FOR ACOUSTIC EMISSION SENSING TO INCREASE BRIDGE LIFE**  
Researchers are determining whether Acoustic Emission (AE) testing can be applied to Quality Assurance/Quality Control efforts. AE has the potential to increase the service life of bridges by identifying the level of cracking in prefabricated reinforced concrete elements.

The Public Transit Section is responsible for the planning, administration, funding, and oversight of the statewide network of public transit providers. Transit providers operate multiple types of service including fixed-route, fixed-deviated route, commuter, demand response, health care and shopping shuttles, winter seasonal routes, ADA complementary transportation, special services for the state's elders and disabled citizens, and intercity bus services. For more information, visit: [www.connectingcommuters.org/bus-info](http://www.connectingcommuters.org/bus-info)



### Farebox Revenue & Local Share

The Agency has a statewide goal of 20% local share participation for public transportation, which includes fare revenue, private contributions, contracts from outside agencies, payments from cities and towns, and in-kind contributions. Local share analysis found that 24% of statewide transit funding comes from local sources. Of the seven state providers, five charge fares on at least some routes. Other routes are offered fare-free because of local contributions from towns and institutions. Total fare revenue collected statewide in SFY18 was \$2.8 million, the majority of which was in Chittenden County. Fare recovery ratios (% of operating costs covered by fares) range from roughly 1% on some rural and small town routes to 55% on the Montpelier-Burlington LINK Express. The average among all routes that collect fares is 10%. Fare revenue comprises 17% of the operating budget for Green Mountain Transit-Urban.

### Elders & Persons with Disabilities "E&D" Transportation Program

In SFY18, the total amount spent on the E&D program in Vermont was \$4.97 million, 79% of which (\$3.9 million) was federal money. Overall, 201,378 E&D trips were provided in Vermont with Tri-Valley Transit (TVT) accounting for the largest share at 26%. TVT also had the highest percent of the total cost (22%). Southeast Vermont Transit had the highest cost per hour while Marble Valley Regional Transit District had the lowest cost per hour. Rural Community Transportation had the highest cost per passenger trip (because of the long distances traveled for trips in the Northeast Kingdom) while Green Mountain Transit Rural had the lowest cost per passenger trip.

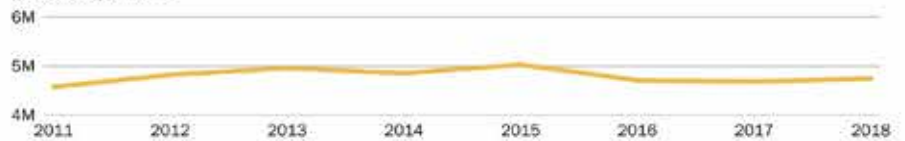
#### E&D Trips by Mode

Van and volunteer driver trips accounted for the majority of E&D trips in SFY 18. Bus and taxi trips accounted for 18% and 2% of E&D trips, respectively. Van trips decreased by 5% from SFY 17 to SFY 18, while bus trips increased by 3%, sedan trips increased by 2% and volunteer driver trips decreased by 1%.

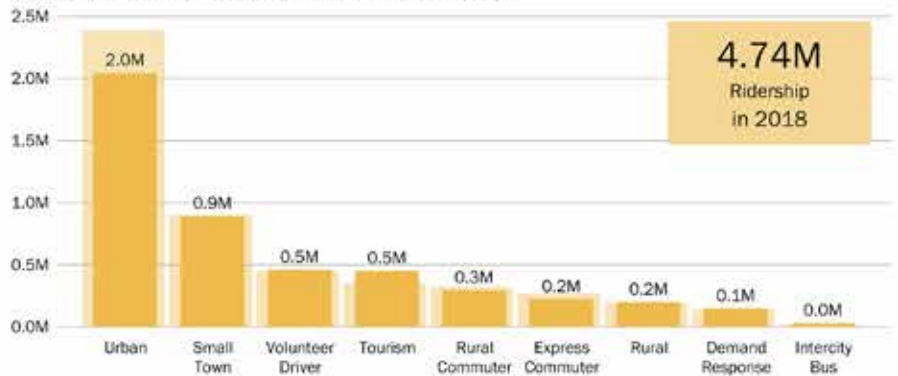
### Ridership Trends

In SFY18, Vermont's public transit systems provided over 4.7 million trips. A little under half of those rides are provided in the Chittenden County region, and the remainder is spread throughout the rest of the State. Over the past year, small town, tourism, volunteer driver, rural and rural commuter bus services saw ridership growth, with rural routes growing by 10%, volunteer driver trips by 8%, intercity by 6%, and the others seeing small gains of 2% or less. Over the same time frame, urban, express commuter, and demand response services experienced moderate decreases in ridership.

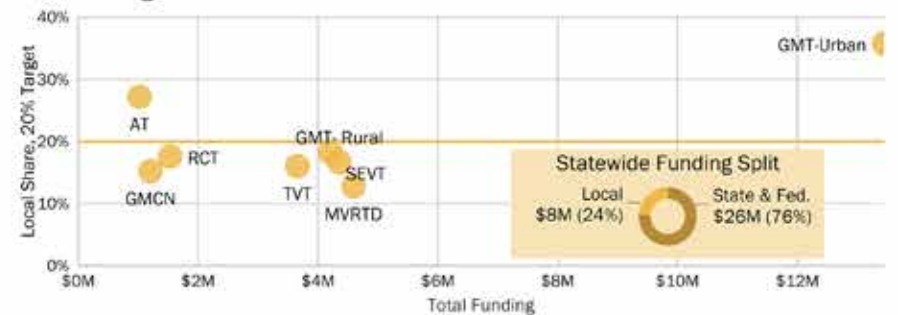
#### Ridership Trend



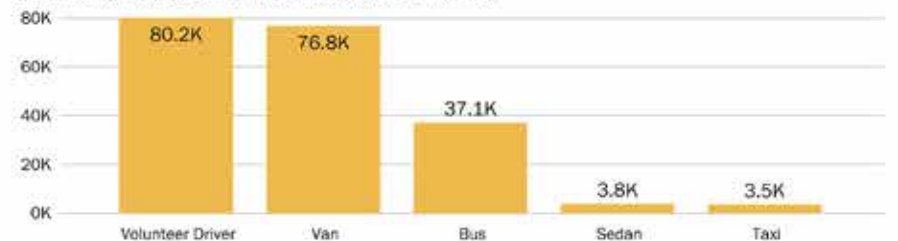
#### Ridership by Service Category vs 5 Year Average



#### Total Funding and Local Share



#### Elders & Persons with Disabilities Ride Modes



## Boards and Councils

**Transportation Board**

John Zicconi  
*Executive Secretary*

David Coen  
*Chair*

Vanessa Kittell  
Richard Bailey  
Wendy Harrison  
Timothy Hayward  
T. Faith Terry

**Motor Vehicle Arbitration Board**

Pauline Liese  
*Lemon Law Administrator*  
(802) 828-2943  
LemonLaw@vermont.gov

David Baker, -Chair  
*Technician Member*

Michael Loschiavo  
*New Car Dealer Member*

David Curtis  
*Citizen Member*

Peter Hood, Vice Chair  
*Citizen Member*

John Manahan  
*Citizen Member*

**Alternates**

Vacant  
*Technician Member*

Gina Germond  
*Citizen Member*

Jeffrey Handy  
*New Car Dealer Member*

**Public Transit Advisory Council**

Joe Flynn  
*Secretary, Agency of Transportation*  
Michele Boomhower is designee

Elaine Haytko  
*Vermont Public Transit Association*

Mary Grant  
*Rural Community Transportation*

Jim Moulton  
*Addison County Transit Resources*

Donna Baker  
*Green Mountain Community Network*

Mark Sousa  
*Green Mountain Transit*

Al Gobeille  
*Secretary, Agency of Human Services*  
Jamie Fisher is designee

Lindsay Kurlle  
*Secretary, Department of Labor*  
Michael Harrington is designee

Mike Schirling  
*Secretary, Agency of Commerce and  
Community Development*  
Richard Amore is designee

Peter Johnke  
*Vermont Center for Independent Living*

Lee Cattaneo  
*Council of Vermont Elders (COVE)*

John Sharrow  
*Mountain Transit*

Chip Desautels  
*Premier Coach*

Dan Currier,  
*Central Vermont RPC*

Meredith Birkett  
*Village Manager, Town of Johnson*

Bethany Whitaker  
*Citizen, Vermont Energy Investment Corp.*

Senator Jane Kitchel, Caledonia

Rep. Mollie Burke, Windham

**Aviation Council**

Joe Flynn  
*Secretary, Agency of Transportation, Chair*

Chris Carrigan  
Paul Carroccio  
Kelly Colling  
George Coy  
Steven Dolgin  
Robert Flint  
Barbara Murphy  
Janice Peaslee

**Rail Council**

Joe Flynn  
*Secretary, Agency of Transportation, Chair*

David Allaire  
Christopher Andreasson  
Charles Baker  
Joann Erenhouse  
Carl Fowler  
Charles Hunter  
Charlie Moore  
Rick Moulton  
Jeff Munger  
Arthur Whitman  
David Wulfson  
Representative Clem Bissonnette

**Vermont Traffic Committee**

Joe Flynn  
*Secretary, Agency of Transportation*

Wanda Minoli  
*Commissioner, Department of Motor  
Vehicles*

Tom Anderson  
*Commissioner, Department of Public Safety*

# Projects Completed in 2018

37

## Rail Maintenance Projects Completed

Project Name & Number	Line	DOT Crossing #	Project Type	Asset
Burlington, Home Ave.	VTR Northern	837-101B	Maintenance	Crossing
Burlington, Holmes Rd.	VTR Northern	851-415G	Maintenance	Crossing
Cavendish, Mtn View Dr.	GMRR	859-847H	Maintenance	Crossing
Cavendish, Depot St.	GMRR	859-848P	Maintenance	Crossing
Fair Haven, Prospect St.	CLP	248-940C	Maintenance	Crossing
Montpelier, Green Mtn Dr.	WACR	837-320P	Maintenance	Crossing
New Haven, US Route 7	VTR Northern	851-367U	Maintenance	Crossing
Rutland, Curtis Ave.	GMRR	851-284F	Maintenance	Crossing
Rutland, Park St.	VTR B&R	851-276N	Maintenance	Crossing
Vernon, VT Route 142	NECR	247-370N	Maintenance	Crossing
Wallingford, Hartsboro Rd. (North)	VTR B&R	851-241M	Maintenance	Crossing
Wallingford, Hartsboro Rd. (South)	VTR B&R	851-234C	Maintenance	Crossing
West Burke	WACR	851-913M	Maintenance	Crossing

## Rail Standard and Emergency Projects Completed

Project Name & Number	Line	DOT Crossing #	Project Type	Asset
Bellows Falls-Chester GMRC(22) - Phase 3	GMRR		Programmed Project	Track
Ferrisburgh STP 2035(16)	VTR Northern	851-371J	Programmed Project	Crossing
Ferrisburgh STP 2035(17)	VTR Northern	851-380H	Programmed Project	Crossing
Ferrisburgh STP 2035(18)	VTR Northern	851-389U	Programmed Project	Crossing
Rutland-Leicester FRTII(024) - TIGER V	VTR Northern		Programmed Project	Rail
Rutland-Burlington VTRY(9) - TIGER VII	VTR Northern		Programmed Project	Rail
Sunderland WCRS(19), BR 64	VTR B&R		Programmed Project	Bridge
Sunderland WCRS(25), BR 63	VTR B&R		Programmed Project	Bridge

## Highway Projects Substantially Completed

Project Name & Number	Route Number	Description of Work
BENNINGTON NH 2966(1) & BENNINGTON STP 2973(1)	US 7,VT 9, 67, 67A	Resurfacing existing roadway.
BERLIN-GUILDHALL NHG SIGN(59)	US 2	Replace existing signs and posts
BRATTLEBORO NH 2000 (27)	US 5 AND VT 9	Traffic markings
CAVENDISH-SHREWSBURY NH 2975(1)	VT ROUTE 103	Reconstruct rail crossing(s)
CHARLOTTE FEGC 019-4(20)	US 7	Rebuild existing roadway
COLCHESTER CMG PARK (47)	P&R	Park and ride
COLCHESTER STP 5600(9) S	US 7	Resurfacing existing roadway
DANBY BF 0130 (3)	TH 1	Replace existing bridge
DERBY IM 091-3 (49)	ALT 5 - TH 1	Replace existing bridge
ESSEX STP 5400 (7)	VT2A	Traffic signal replacement
FERRISBURGH STP 2035 (16), STP 2035 (17), and STP 2035 (18)	VTR	Rail crossing upgrades
GEORGIA IM 089-3 (72)	I-89	Ledge removal and stabilization
GUILFORD-BRATTLEBORO IM SURF (60) & (61)	I91	Resurfacing existing roadway
HARDWICK-DANVILLE STP 2122(1)	VT15	Resurfacing existing roadway
JOHNSON BF 0248 (4) JOHNSON BF 0248 (7)	VT 15, VT 100C	Culvert replacement
LONDONDERRY BF 016-1 (33)	VT 11	Rehabilitate existing culvert
LUDLOW HES SGNL(44)	V103	Traffic signal replacement
MANCHESTER STRB16 (1)	VTR	Replace existing bridge
MANCHESTER STRB16(2) WALLINGFORD STRB16(3) and STP0138(13)	VTR	Rail bridge rehabilitation
MIDDLESEX IM 089-2(41)	US 2	Replace existing bridge
POWNAI-BENNINGTON NH RMBL(3), BENNINGTON-WILMINGTON NH SURF(51)	US7 & VT9	Resurfacing existing roadway
RANDOLPH CMG PARK(21) C/2	PARK AND RIDE	Resurface existing park and ride
RYEGATE IM 091-2(80)	I91	Ledge removal and stabilization
SANDGATE BO 1441(30) (RE-ADVERTISED)	TH 9	Replace existing bridge
SOUTH BURLINGTON IM CULV(24) & GEORGIA IM CULV(25) (DB)	I-89	Design and construction of culverts
SOUTH BURLINGTON STP SCRP(8)	VT 116	Culvert replacement
SOUTH BURLINGTON-WILLISTON NH 2944(1) & WILLISTON NH 2949(1)	US 2 & VT 2A	Resurfacing existing roadway
ST. ALBANS CITY STP 2957 (1) & SWANTON STP 2958 (1)	VT 7	Resurfacing existing roadway
ST.JOHNsbury-LYNDON STP 2936(2)	US 5	Reconstruct rail crossing(s)

## Highway Projects Substantially Completed, continued

Project Name & Number	Route Number	Description of Work
STATEWIDE HES RMBL (4)	US 7	Traffic markings and rumble strips
STATEWIDE IMG MARK (116)	I-89 I-91 I-93 I-189	Traffic markings
STATEWIDE NE STPG SIGN (62)	US 302,VT 14,122 242	Replace existing signs and posts
STATEWIDE NORTH REGION STP HRRR (22)	VARIES	Replace existing signs and posts
STATEWIDE SOUTH REGION STP HRRR (23)	VARIES	Replace existing signs and posts
STATEWIDE SOUTH REGION STPG SIGN(57)	VT7B, VT103, VT140,	Replace existing signs and posts
STATEWIDE STP CRAK(35)	VARIES	Crack sealing
SUNDERLAND WCRS(25) SUNDERLAND WCRS(19)	VTR	Replace existing bridge
WALLINGFORD ER STP 0138 (11)	VT 140	Slope stabilization
WATERFORD BF 0225 (4) & WATERFORD BF 0225 (5)	VT 18	Replace existing bridge
WILLISTON-ESSEX STPG SGNL(46)	US2, VT2A, VT15	Traffic signal replacement
WOODSTOCK VILLAGE BF 020-2 (43)	US 4	Replace existing bridge

## Municipally Managed Construction Projects Substantially Completed

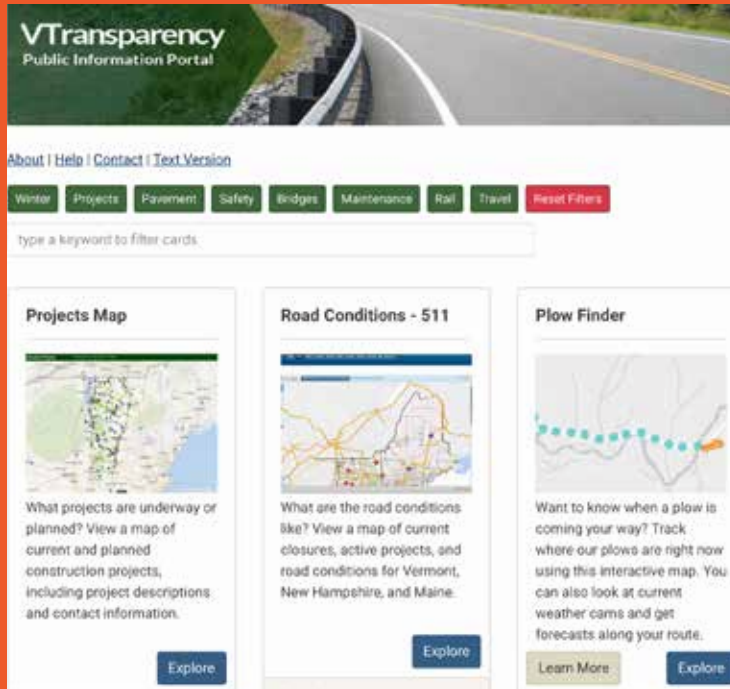
Project Location	Project Number	Description of Work
Alburgh	STP 028-1(20)	Streetscape, sidewalk, and crosswalk improvements to US2 and adjacent local streets within the village.
Barre Town	STP EH06(19)	Construction of sidewalk along Websterville Road and Mill Street.
Brattleboro	ST BP16(20)	Installation of two RRF systems on Western Avenue.
Burke	STP BIKE(65)	Construction of a new sidewalk adjacent to VT114 in the Village.
Colchester	STP SDWK(20)	Design and construction of sidewalk along Mountain View Drive.
Colchester-South Hero	STP BP19(1)	Rehabilitation of the Colchester Causeway caused from storm damage.
Essex Jct.	STP 5300(14)	Roadway widening, bike lanes, sidewalks, and streetscape improvements on VT15 (Pearl St.), from Post Office Square to the 5 Corners, and signal improvements at Post Office Square.
Fairlee	ST PRDP(171)	New park and ride facility.
Fairfield	TAP TA16(9)	Construction of a salt shed on Gilbert Hill Rd. at the Fairfield Town Garage.
Jericho	STP BP14(2)	School crossing improvements at Browns River School and Underhill ID School.
Montpelier	ST BP17(22)	Installation of RRFB's at four high need intersections in downtown (Main Street at Barre Street, Elm Street at Vine Street, Elm Street at Pearl Street, and Bailey Ave. at the bike path.
Morristown	STP MVRL(1)	Construction of sidewalk, retaining walls, reinforced embankments and pedestrian railings, along VT100 in Morrisville.
North Bennington	STP BP13(9)	Construct of sidewalk along Main St. (VT67) from Depot St. to the Village line, and along Houghton St. East.
North Bennington	TAP TA14(9)	Roof repair and related rehabilitation of the Train Depot.
Poultney	ST BP16(22)	Construction of sidewalk on Beaman Street.
South Burlington	STP SDWK(10)	Construction of sidewalk along VT116 (Hinesburg Rd.).
St. Albans	HPP 8000(17)	Improvements to the Federal Street corridor, from the US7/St. Albans state highway intersection to the intersection of US7/Lower Newton Street.
St. Albans City	TAP TA16(3)	Construction of sidewalks along Catherine, Lake and Federal Streets, street re-alignments, pedestrian lighting and a pedestrian island.
Statewide Better Roads		Construction - 116 Municipal Mitigation projects at various locations statewide.
Swanton	ST PRDP(155)	Installation of electric vehicle charging equipment at park and ride facility.
Vergennes	STP BP15(6)	Construction of sidewalk on the East side of Main St (VT 22A) from Kennedy Bros. to Champlain Discount Foods.
Vergennes	ST BP17(28)	Installation of RRFB's at four crosswalks on Route 22A and one at the intersection of New Haven Road, Green Street and King Street.
Williston	STP SDWK(21)	Construction of 10-foot wide path along VT 2A.

## Municipally Managed Scoping Projects Substantially Completed

Project Name	Project Number	Description of Work
Hardwick	STP LVHT(3)	Scoping study for a new pedestrian bridge over the Lamoille River.
Morristown	STP EH10(16)	Feasibility study for a sidewalk and bike lane with streetscape, along VT100 in Morristown.
Statewide Better Roads		Road Erosion Inventories - 35 Road Erosion Inventory projects at various locations statewide.







**VTRANSPARENCY**  
 Data is an essential part of everything the Vermont Agency of Transportation does, and turning that data into useful information for our customers is the goal of VTransparency. The VTransparency team has taken data from sources all over the agency to create tools for getting answers to some of the questions we get most often.  
[vtrans.vermont.gov/vtransparency](https://vtrans.vermont.gov/vtransparency)

Our story doesn't end here. Follow us on social media to stay current on our latest developments. There's always something new happening at VTrans.



VTransOnTheRoad



@AOTVermont



@aotvermont



VTransTV

We hope you've enjoyed this year's edition of the Fact Book. To access additional reports, statistics, maps, contact information, and more visit [vtrans.vermont.gov](https://vtrans.vermont.gov).



One National Life Drive, Montpelier, VT 05633  
 (802) 828-2657