

VERMONT AGENCY OF TRANSPORTATION  
**2023 FACT BOOK**  
and Annual Report



Published January 6, 2023



**CHELSEA - THETFORD.** In 2022, a 15-mile paving project on VT Route 113 was completed. The project included a full-depth reclamation of the roadway, superelevation correction, new guardrail, improved signage, drainage, and more.



**BURLINGTON WATERFRONT.** Transportation Secretary Joe Flynn joined members of the Rail & Aviation Bureau, Vermont Governor Phil Scott, Senator Bernie Sanders, and other federal, state, and local representatives for the July launch of Amtrak Ethan Allen Express service to Burlington, VT.

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AOT's Maintenance District Transportation Administrator in the northwest region, Dave Blackmore (right), retired in early 2022 after almost 50 years of dedicated service. AOT Secretary Joe Flynn presented Dave with his official retirement certificate in person.



Montpelier artist Carolyn Shapiro and Abenaki "Missisquoi" artist Abena Songbird, with the assistance of many volunteers, completed two murals on I-89 bridge piers in Gateway Park in Montpelier, adjacent to U.S. Route 2 and the Winooski River. This is the first community-driven art installation completed through AOT's new art installation policy.



AOT Deputy Chief Engineer Erin Sisson (right) joined other Agency staff at the Annual Engineering Excellence Awards hosted by the American Council of Engineering Companies of Vermont. AOT received three awards for excellence in engineering.



**WOLCOTT.** In May 2022, Transportation Secretary Joe Flynn (center) joined VT Fish and Wildlife Commissioner Chris Herrick and others from F&W and the Nature Conservancy as they surveyed work at the Wild Branch Streambank Management Area. This wildlife corridor improvement project provides a clear channel of movement for many different species to safely cross under VT Route 15.



AOT's William Gray, Greg Hitchcock, and Chris Cyr (left to right) were each presented with a military challenge coin by the Vermont National Guard for excellence in supporting and coordinating delivery missions for the COVID-19 response.



In spring 2022, a local Vermonter began an effort to plant sunflowers, the Ukrainian national flower, throughout the state to show support and recognize the challenges facing the people of Ukraine. Working with our own landscape architects and the Vermont Information Center Division, AOT maintenance crews assisted by tilling soil and planting sunflowers at 16 Information and Welcome Centers across the state.

# Agency of Transportation

With oversight from the Vermont Legislature, the Vermont Agency of Transportation (AOT) 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. AOT serves the entire population of the State of Vermont.

## Secretary

Joe Flynn

## SFY 2023 Staff

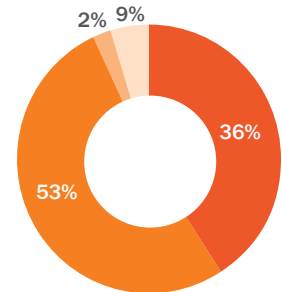
Total 1277

- 237 Department of Motor Vehicles
- 319 Highway Division
- 519 District Maintenance and Fleet
- 127 Finance and Administration
- 75 Policy, Planning, and Intermodal Development

## SFY 2023 Funding

Total Appropriation: \$838.1M

- \$299.1M Transportation Fund
- \$440.3M Federal Funds
- \$19.8M TIB Funds
- \$78.9M Other Sources
  - \$52.6M Local/Other
  - \$3.6M Interdept. Transfers
  - \$22.8M Internal Service



## DEPARTMENTS AND DIVISIONS

<h3>Department of Motor Vehicles</h3> <p>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.</p>	<p><b>\$371M</b> Revenue</p>	<p><b>1.07M</b> Transactions</p>	<p><b>777K</b> Registrations</p>	<p><b>193K</b> Credentials Issued (Licenses &amp; ID Cards)</p>	
<h3>Highway</h3> <p>Oversees prioritization, programming, design, engineering, and construction of projects on the interstate and state highway system; supports municipal projects; manages the safety and overall needs of the Agency's highway assets – bridges, culverts, signals, signs, pavement, and more – from budgeting and conceptualization through construction and ensuring effective operation.</p>	<p><b>74</b> Highway Fatalities, 2021</p>	<p><b>310</b> Major Crashes, 2021</p>	<p><b>325</b> Miles Paved, 2022</p>	<p><b>56</b> Construction Projects Completed, 2022</p>	
<h3>District Maintenance and Fleet</h3> <p>Oversees year-round maintenance of the state highway and interstate network, including bridges, signs, and culverts; provides technical assistance to municipalities; procures and maintains the fleet of trucks and equipment; provides technical services including Pollution Prevention and Compliance, and Bridge Maintenance.</p>	<p><b>1.7M</b> Lane Miles Plowed Winter 21-22</p>	<p><b>\$30.5M</b> Cost of Winter Maintenance</p>	<p><b>89</b> Stormwater Permits Inspected</p>	<p><b>81%</b> Plowtruck Availability (Plow/Dump)</p>	
<h3>Policy, Planning and Intermodal Development</h3> <p>Oversees state-owned rail lines and airports; supports public transit providers; provides statewide planning and policy support, including research, development review, and outreach.</p>	<p><b>91K</b> Passenger Rail Ridership, Vermont- Stations, FFY22</p>	<p><b>3.54M</b> Public Transit Ridership</p>	<p><b>\$2.2M</b> Aviation Grant Awards FFY22 (Federal Share)</p>	<p><b>243</b> Municipalities Engaged in Regional Transportation Planning</p>	
<h3>Finance and Administration</h3> <p>Provides services in contract administration, accounting, budgeting, audit, records management, performance monitoring, hearings, civil rights, labor compliance, training, workforce development, facilities management and logistics, emergency management, safety compliance, and recruitment.</p>	<p><b>424</b> Number of Transportation Facilities</p>	<p><b>\$1.1B</b> Value of Contracts and Grants</p>	<p><b>\$326M</b> Federal Funds Obligated, FFY22</p>	<p><b>178</b> New Employees Hired and Onboarded</p>	<p><b>13</b> Completed Performance Engagements</p>

Note: All data is from State Fiscal Year 2022 (SFY22), unless otherwise noted.  
Definitions: FFY refers to Federal Fiscal Year; SFY refers to State Fiscal Year

## MISSION

Through excellent customer service, provide for the safe and efficient movement of people and goods in a socially, economically, and environmentally sustainable manner.

## VISION

A safe, reliable, and environmentally sustainable 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

Provide a sustainable and energy efficient, advanced technology transportation system.

### GOAL FIVE

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

## Amtrak Ethan Allen Service Extension to Burlington

On July 29, 2022, Amtrak service on the Ethan Allen Express began in Burlington, Ferrisburgh-Vergennes, and Middlebury after years of work to secure funding and plan and complete multiple construction projects.

Vermont's western rail corridor between Rutland and Burlington had been without passenger rail service since 1953, with the exception of a short period from December 2000 to February 2003 when The Champlain Flyer provided service between Charlotte and Burlington. When the Ethan Allen Express service between New York City and Rutland launched in 1996, planning began to restore the Burlington service and connect Vermont's largest city with New York City.

The extended Ethan Allen Express project included three new stations, 26 crossing upgrades, nine bridge upgrades, 21 different track projects that involved full surfacing of the 67 miles of track between Rutland and Burlington, 36 miles of new continuously welded rail, several new switches, and bank stabilization and sub-surface stabilization projects.

The funding for the projects came from federal and state funds. The federal funds were provided by FHWA for crossing improvements and the FRA for the rail, bridge, and station upgrades. The total cost for these projects was \$117 million, including \$88 million in federal funds and \$29 million in state funds.

The contractors that partnered with AOT for design and construction were Vanasse Hangen Brustlin (VHB), Kubricky Construction Corporation, J. Hutchins, Engineers Construction (ECI), Markowski Excavating, and CHA Consulting. Additionally, assistance from Vermont Rail System was instrumental to the completion of these projects.

The Ethan Allen Express now has Vermont stations in Burlington, Ferrisburgh-Vergennes, Middlebury, Rutland, and Castleton.



### I-89 Richmond Emergency Culvert Replacement

In late April 2022, AOT Maintenance crews detected a sink hole in the shoulder of Interstate 89 southbound in Richmond. A short section of the shoulder was closed to keep traffic away from the depression. During the next week, maintenance crews monitored the changes of the depression, and as the situation rapidly changed with the depression extending into the southbound driving lane, the Highway Division determined that the southbound driving lane needed to be closed as the culvert condition was worsening much faster than expected and an emergency closure of the southbound lane was necessary. The cause of the failure was rust that had created small holes and resulted in soil being drawn away from the road. While this process appeared at the surface as a sink hole, the real problem was occurring at the culvert 50 feet below.

Contractor S.D. Ireland was hired for the project and quickly began 24/7 construction on crossovers to facilitate the repair of the culvert and sink hole. The crossovers were needed in order to move traffic off the southbound lanes. Given the immediacy of the situation and the need to move many tons of dirt, AOT's District Maintenance & Fleet Division assisted by providing trucks, equipment operators, and drivers to help expedite the work. The crossovers opened in early June.



The contractor removed almost 45,000 cubic yards of earth in order to reach the failing culvert below the interstate. Anchors were set in place during excavation to support the retaining wall to keep the project area stable and safe during construction.



During the summer of 2022, half of the 96-inch pipe was removed and replaced with a 10' x 14' concrete box culvert under I-89 southbound.

Following excavation and removal of the south half of the pipe, the portion under the northbound lane was inspected by AOT staff and determined to be in slightly better condition than the failed portion on the downstream half. As a result, a poured concrete invert or pipe bottom was completed to extend the life of the northbound section of pipe for many years to come. The work necessary to make this a successful project was a collaborative effort by many people within the Agency and with our partner agencies and contracting community. This effort showed the teamwork and spirit of our employees and their dedication to working tirelessly to get the job done.

At the end of August, the traffic pattern was changed to a "zipper merge," a merging technique used for high volumes of traffic that requires drivers to use both lanes until they reach the merge point and then take turns merging into the single lane of traffic, like a zipper closing. Zipper merges are common elsewhere but new in Vermont, adding another layer of challenges to this project as drivers needed to be educated and driving behavior changed.

In late October, the project was completed on schedule and on budget, and the crossovers were removed, enabling the interstate to re-open fully to both directions of traffic.



## Vehicle Electrification

The State of Vermont continues to be a leader in vehicle electrification, ranking first in the nation with more public chargers per capita than any other state and fourth highest in electric vehicle adoption. AOT plays an integral role in that effort in four key areas.

### PUBLIC INFRASTRUCTURE

AOT serves on an interagency workgroup (with the Agency of Natural Resources, Agency of Commerce and Community Development, and Public Service Department) that has leveraged almost \$5 million in state capital and Volkswagen settlement funds to build more than a hundred public electric vehicle charging stations and in 2022 provide home charging access to more than 6,000 households at affordable housing developments throughout Vermont. In the coming year, AOT will support the planning and implementation of \$10 million in newly authorized state funds to expand charging access to workplaces, more multi-unit housing developments, downtowns, and other community attractions.

The State also has invested in the continued buildout of its charging network along highway corridors to put a fast charger within about 30 miles of almost every address in Vermont. During the next five years, AOT is slated to receive about \$21 million for the National Electric Vehicle Infrastructure (NEVI) program and \$32 million for the Carbon Reduction Program through the Bipartisan Infrastructure Law (BIL). Vermont completed its initial NEVI plan in

July 2022 and is currently working on a Carbon Reduction Strategy to determine the most cost-effective, impactful programs and projects that will reduce greenhouse gas emissions.

### STATEWIDE VEHICLE INCENTIVE PROGRAMS

With the support of its non-profit partners, AOT administers several income-sensitive vehicle incentive programs, with the greatest benefits delivered to households with the lowest incomes. Capstone Community Action has managed the State's used efficient vehicle program, MileageSmart, since its inception, and AOT selected the Center for Sustainable Energy through a competitive solicitation process to assume responsibility for the New PEV Incentive Program and to launch two new initiatives in 2022: the first statewide electric bike incentive program in the country; and Replace Your Ride, which encourages Vermonters with lower incomes to replace their older, inefficient vehicles with new or used PEVs or cleaner transportation options such as bikes, electric bikes, and shared mobility services.

### STAKEHOLDER AND POLICY SUPPORT

AOT continued to support vehicle electrification efforts through collaboration with partner agencies, peer state departments of transportation, local distribution utilities, community-based and private sector organizations. Through its partnership with Drive Electric Vermont, AOT has funded a range of activities from research and pilot projects to technical assistance and consumer awareness that help to advance vehicle electrification in the State of Vermont.





**LEADING BY EXAMPLE: E-BUSES AND ELECTRIFICATION OF AOT'S FLEET**

In addition to maintaining fare-free service, investing in microtransit and other mobility pilots, the Public Transit Program and AOT have forged ahead with the State's transition of public transit vehicles to electric, releasing its Zero-Emissions Transition Plan in January 2022. For the sixth year in a row, the Federal Transit Administration (FTA) awarded AOT with a Low and No Emissions Grant, which to date has supported the purchase of 27 fully electric transit buses in Vermont: five electric buses are currently in service and an additional 22 have been ordered. AOT is also working with the Agency of Natural Resources to use a portion of the remaining VW Settlement funds for the non-federal match funds required with each e-bus purchase (a great example of interagency coordination to address Vermont's climate goals). The Public Transit Program will continue to apply for competitive federal funds and has embarked on a "Zero-Emission Transition Plan" with the goal of transitioning to an all-electric transit fleet in the future.



The Agency is likewise committed to vehicle and equipment electrification in its own operations where viable alternatives exist, from light-duty pickup trucks to a new Volvo compact excavator and a range of power tools (saws, carts, jackhammers, mowers, etc.) that were previously gas- or diesel-powered. Drive Electric Vermont is working with AOT to develop a formal electrification strategy for the Agency that can be implemented with federal support during the next five years. AOT has ordered six Ford Lightning fully electric pick-ups and approximately 12 gas-hybrid vehicles. Additionally, AOT installed Level 2 chargers at all District garages.



The battery powered all-electric ECR25 Compact Excavator is the first model in a new line from Volvo, making it the first electric machine of its kind in our fleet. This piece of equipment produces zero emissions and less noise, reduces energy costs, and requires less maintenance.



**BENNINGTON.** The Agency installed new Level 2 EV chargers at AOT Maintenance District garages throughout the state.

### Emergency Repair on VT Route 125 in Addison

Heavy rain on October 31, 2021, in addition to a high groundwater table and soft, sensitive soils contributed to the failure of more than 200 feet of VT Route 125 in Addison. This failure resulted in a roadway that was impassable to the travelling public and prompted AOT to immediately close VT 125, evaluate and appropriately sign a detour, and provide appropriate warning or notice of this change to users of the roadway.



Crews began geotechnical analysis of the site and associated design activities. The design focused on geotechnical modeling that would ensure a stable slope and included placement of select materials as well as placement of Type II stone fill. The design also included the installation of underdrain and cross lateral drains spaced every 25 feet along the project length, as well as a benched area adjacent to the lake to provide access. This project was advertised for construction on January 25th, 2022, and construction activities began in March 2022. Construction crews worked throughout the spring and summer to implement the design and restored traffic on VT 125 on June 6, 2022. This \$1.3 million-dollar project was complex but resulted in a finished product that provides a stable slope, addresses subsurface water in the vicinity of the roadway, and rebuilt lakeside usable space for adjacent landowners, consistent with pre-existing conditions.



### Paving Program

The Agency's Paving Program works to develop and deliver capital improvement projects that have a primary focus on preserving and improving the roadway surface. The state fiscal year 2023 as-passed Paving Program budget is \$158,820,094, the highest on record. This budget funds three primary project phases: preliminary engineering, which includes the design efforts and activities on a project; right-of-way, which includes the acquisition of property and/or easements necessary to construct the project; and construction of the project. Within the Paving Program there are a wide range of pavement treatments that are utilized in order to preserve our network, extending from leveling projects to complex reclaim projects. In addition to improving the surface of the travel lanes and shoulders, many projects also include additional corridor improvements such as the installation of centerline rumble stripes, culvert replacements, rail/highway crossing improvements, traffic signal improvements, and bike/pedestrian improvements. This record budget resulted in the paving of 325 miles, a significant increase over recent years, and has resulted in improved conditions for all users across the transportation network.



### Modernization Project

The DMV Core Modernization project officially kicked off in June 2022. This first stage of the project focuses on vehicle services and will expand the online services that are offered to the public. The project is in its definition stage where business processes are being studied, outlined, refined, and designed. This stage was expected to transition by the end of 2022 to the base configuration stage. Testing is scheduled to begin in spring of 2023, and vehicle services will be live in November 2023.

## Reduction of Trucks Stuck on VT Route 108 in Smugglers Notch

Every year, as VT Route 108 opens to thru traffic connecting Stowe and Jeffersonville, tractor-trailers attempt to pass, illegally, through a bendy and rugged piece of the byway called Smuggler's Notch. This is a phenomenon that the Agency and local municipalities have been concerned with for many years. When trucks become stuck in the Notch, the result is frustration, aggravation, and opportunity costs for local motorists; emergency services operational costs; and direct fines to the operator of the truck.



From 2011-2020, the average number of “stuckages” per season in the Notch was 8.8. In July 2021, the Agency performed a Road Safety Audit that entailed bringing local stakeholders together to tour the terrain and discuss solutions. The group consisted of AOT planners, designers, and traffic engineers; local municipalities; DMV Enforcement; local law enforcement; legislators; ski resort owners; Vermont Department of Forests, Parks, and Recreation leaders; the local planning commission; and consultant engineers.



The result of this work was a report that outlined actions that could potentially improve the situation. AOT took the lead in the project and initiated several efforts, including:

- Scheduling local law enforcement patrols to stop trucks before entering the pass
- Revitalizing the local sign architecture by assessing sign quality, sight distance considerations, and general positioning on the roadway
- Conducting a highly detailed and sophisticated terrain assessment of the Notch area to better understand specific vehicular constraints
- Changing statutory language to include more specific dimensions of vehicles that are forbidden from passing
- Increasing outreach to local news outlets and freight hauler trade organizations
- Working with GPS companies to explore options for “blacking out” the Notch for route planning
- Conducting an engineering Scoping Study to assess longer-term and larger engineering potential countermeasures such as roundabouts, chicanes, and vertical barriers

These efforts began in 2021 and are ongoing. During the 2021 and 2022 seasons, there have been five stuckages each year. This represents about a 40% reduction from previous yearly averages and therefore great progress. The specific cause of this reduction is very difficult to identify, and the Agency acknowledges that it could be a statistical anomaly. Regardless, AOT will continue efforts to reduce the number of stuck trucks in the Notch.

## Collaboration between Highway Division and District Maintenance & Fleet Division on Projects Funded by the Federal IJJA

The Agency programs and delivers projects that address specific asset or safety needs. In addition, AOT has been identifying and considering additional corridor needs within the context of these projects and continually working to identify efficient ways to complete this work. This has been especially important considering the increased funding levels and number of projects being delivered by the Agency. This has helped to foster an increased level of coordination between the design teams and the District Maintenance and Fleet Division, and has specifically resulted in the administration of select corridor culvert replacement projects in advance of paving project by District personnel. This effort has proven efficient for several reasons: personnel with direct knowledge of the issues within a project length identify

locations; simplified plans; specification and estimate packages are developed, thus minimizing the project schedule; and a larger bidding pool, as these smaller earthwork contracts attract more bidders. Most importantly, the consideration and advancement of corridor culvert replacements minimize the likelihood of maintenance needs directly after a roadway is paved. To date, these projects have been successful, and AOT looks forward to continuing and expanding on this collaboration and effort.



### Interagency Collaboration with the Agency of Natural Resources at Lake Willoughby

In 2017, the Vermont Department of Forests, Parks and Recreation (FPR) approached AOT's Maintenance District 9 with a conceptual plan for a project at the south end of Lake Willoughby to address roadside parking, stormwater management, and other trail-related issues. This was received with great enthusiasm as the District had been fielding many questions and concerns about the increase in

visitors at the southern end of the lake and the roadside parking and pedestrian activity there that lacked proper facilities to safely accommodate. Though the Agency was intrigued by the conceptual proposal, there were concerns about what was proposed within the right-of-way as AOT must follow specific guidelines to maintain the safety of the traveling public. FPR refined their original concept based on AOT's feedback and developed a draft plan to begin the permitting process.



In 2020, after FPR submitted the required permit applications, the public comment periods began, and FPR was faced with questions and concerns about the proposed project, many of which were related to the State highway and ROW. FPR contacted AOT's local district for assistance with answering some of the questions from public meetings, and AOT soon recognized the need to fill a vital role to support the project and ensure that it would come to fruition. The District helped to alleviate concerns, which ultimately lead to the approval of several permits, specifically the stormwater-related issues and the town Zoning permits. FPR advertised the project in the summer of 2022, and it was awarded to J. Hutchins, Inc. Construction began mid-summer and was substantially completed by late fall with minimal work to finalize in the spring of 2023.



**Water Quality Compliance**

- 11 projects in the project development process were designed pursuant to, applied for, and obtained permit coverage under the State Operational (post-construction) Stormwater Program
- 10 projects constructing new stormwater treatment practices
- 89 previously constructed projects with stormwater treatment practices were inspected and maintained
- 28 of the 104 active construction projects required Construction Stormwater Permit coverage and implemented erosion prevention and sediment controls, with a total of 264 compliance visits by agency staff
- 58 practices identified, 20 designed, and 17 constructed to meet the agency’s Flow Restoration Reduction Targets across 10 stormwater impaired watersheds.



**FIGURE 1.** Annotated map of stormwater-related areas of concern/action at the AOT St. Johnsbury Maintenance Facility

**USE OF UNMANNED AIRCRAFT SYSTEMS (UAS) FOR WATER QUALITY COMPLIANCE**

In 2022, the Water Quality Unit explored UAS-based imagery captured by the Agency’s UAS Program. Using field inspections and GIS-based analysis, the Unit uses UAS imagery to document and map pervious and impervious surfaces at maintenance facilities. Imagery is also used to delineate areas of concern, erosion or sediment deposits, hazardous materials storage areas, equipment washing locations, snow removal areas, and proposed development sites and best management practices at each facility. The imagery and information collected are accessible through ArcGIS Online for AOT employees to view. The information collected is processed into Stormwater Pollution Prevention Plans (SWPPPs) with a corrective action plan to address areas of concern.



**FIGURE 2.** UAS (drone) imagery of Danville Pond.

Additionally, several flights over Operational Stormwater Permit sites were conducted. AOT inspects all permit sites annually, some more frequently to observe how treatment handles different flows throughout the year. Figure 2 allows for a birds-eye view to paint the full picture of how treatment is functioning and if maintenance is needed. Figure 3 captures the construction of a gravel wetland as part of a stormwater retrofit project within the medians of Interstate 89 in St. Albans. These photos and imagery are valuable visual aids in maintenance and future reconstruction later in the treatment’s life cycle.

The number of traffic signals with remote communication capabilities increased from 74 to 104 (64% of the system). Six signals on US Route 7 were replaced. They were some of the oldest in the system with the highest traffic volumes in the state. AOT signal replacement and upgrade projects reduced the number of signals in poor condition from 36 to 28 during 2021.



**FIGURE 3.** Drone imagery of Exit 19 on Interstate 89 in St. Albans.



**DONATE LIFE.** In May 2022, DMV Commissioner Wanda Minoli and DMV staff received the Life Saver Award from the New England Donor Service for the Department's continued efforts in educating and asking about organ donation when issuing drivers licenses.



**ESSEX.** With more job and career fairs resuming after the pandemic, DMV representatives attended events to promote recruitment and tell their own stories about working and advancing in different sections of the Department.



As part of the Agency's efforts to incorporate more climate-friendly vehicles and equipment to its fleet, Vermont DMV became the first law enforcement agency in the world to use a Harley-Davidson LiveWire fully electric police motorcycle.



Justin McClane (left) was the 2022 Examiner of the Year. This award is given to an examiner who displays a high level of conduct and strict adherence to the practices and principles of the profession.

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 2023 Staff

Total: 237

## SFY 2023 Funding

Total Appropriation: \$39.7M












## Locations

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



While many DMV services such as license and registration renewals and address changes are now available online, when customers need to go to a DMV office, they are greeted by friendly professionals ready to assist with their motor vehicle needs.

## PERFORMANCE & ASSETS

Enforcement & Safety				
	9,166	5,878	549	1,076
	Commercial Vehicle Violations, CY22	Commercial Safety Inspections, CY22	Dealers Licensed, CY22	Inspection Stations, CY22
Operations				
	193K	777K	502K	156K
	Credentials Issued (Licenses & ID Cards)	Registrations	Online Transactions	Walk-in Traffic
Finance & Logistics				
	\$371M	\$47.1M	177K	
	Total Revenue	Revenue for Other Programs (i.e. Education, Wildlife)	Pieces of Mail Received	

Note: All data is from State Fiscal Year 2022 (SFY22), unless otherwise noted  
Definitions: CY refers to Calendar Year.

### Online Tax Estimator

The DMV worked to develop a tax estimator that launched this year. The tax estimator allows for anyone to run their vehicle information for the purpose of knowing how much purchase and use tax will be owed at the time of registration. The tax estimator is available online to the public. A person can use vehicle information in combination with other factors such as trade-in amount, exemption status, and vehicle mileage to precisely calculate the correct purchase and use tax before going to a DMV location or even before purchasing a vehicle. The tax estimator extends the services offered online and streamlines the registration process for new vehicles.

### Entry Level Driver Training Roll-out

The new federal Entry Level Driver Training requirements went into effect on February 7, 2022. Vermont Commercial Driver's License (CDL) staff and examiners were trained on the new requirements and the Report Out of State Test Results Next Generation (ROOSTR NG) system. The State of Vermont participates in CDL Skills Testing for out-of-state drivers, greatly improving reciprocity within the National CDL Program.

### Scheduling Services

The DMV has increased the number of services available online to include enhancements to the scheduling system. Feedback from customers and staff have been extremely favorable. The scheduling system allows for better planning for our customers. It also makes it less stressful on staff. There are no longer waiting rooms full of customers unsure of how long they will wait before they are served. Some Google reviews from our customers include:

- "Very quick. Had an appointment scheduled, they managed to get us in early and they were very prompt."
- "Much better system they have in place. In and out!"
- "Probably one of my better experiences with the DMV. As long as you make an appointment before hand. People with appointments go first."

### Process Improvement

During the past year, DMV employees have reviewed existing documentation for procedures and processes to align with expectations as described in the State's Self-Assessment of Internal Controls (SAIC). The Department staff has been encouraged to look critically at its existing practices and make suggestions for improvements that may be considered for implementation. Also, the Finance & Logistics Team moved all documents from paper format to electronic format.



DMV Inspectors conduct a weight detail on U.S. Route 4.



DMV Enforcement Inspector Beebe conducting speed enforcement on Interstate 89.



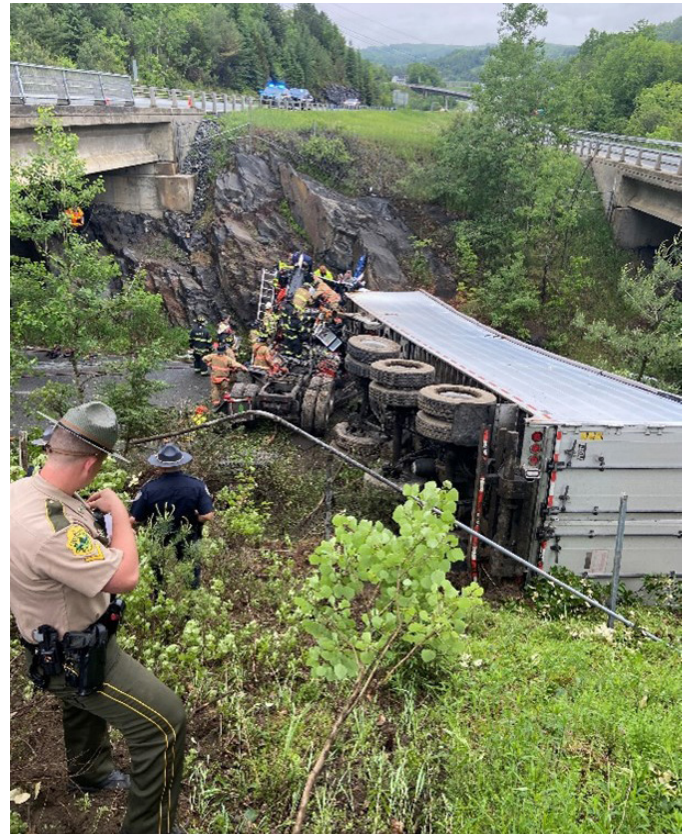
**Ten-Point Public Safety Enhancement and Violence Prevention Action Plan Framework**

The sworn officers of the Enforcement and Safety Division have stepped-up and provided law enforcement support to the Vermont State Police, local departments, and our federal partners. A new DMV duty is response to commercial vehicle crashes in VSP coverage areas where inspectors conduct post-crash inspections and also are now tasked with investigating the crash. This effort, where feasible, is intended to free up troopers so they can be available for other priority calls for service. Following the direction and intent of the Governor’s Ten Point Plan, DMV detectives from the northern Criminal Investigative Unit are also part of the Chittenden County Gun Violence Task Force. DMV inspectors have provided staff resources for numerous police operations (search warrants and arrest warrant services), in conjunction with other state and federal authorities to assist understaffed municipal agencies with gun violence and illegal narcotics investigations. DMV Enforcement and Safety Division is one of only a handful of Vermont law enforcement agencies that is fully staffed, with 27 sworn inspectors, at this time.



**Implementation of Inspection Sticker Print-on-Demand**

In January 2022, the DMV in partnership with the Department’s inspection system vendor, Parsons, successfully implemented a new inspection sticker print-on-demand system. This business-friendly technology solution was in full use by all 1,076 Vermont State Inspection Stations by late spring of 2022. The convenience of printing inspection stickers as needed means that businesses no longer must maintain an escrow account with the DMV, and they are not at risk of running out of stickers while waiting for their next order. The printers were provided free of charge to the inspection stations, and the system works only with the proprietary Automated Vehicle Inspection Program (AVIP) tablets, which greatly reduces fraud and errors. Another positive result for businesses is a reduction of burglaries for stickers, as the sticker stock has no “street value,” thus reducing the ease of counterfeiting of stickers and use of stolen stickers.



DMV Enforcement Officers joined Vermont State Police to investigate a tractor trailer crash on Interstate 91



**K-9 UNIT.** DMV Enforcement K-9s Annie and Jonah found a great way to keep cool during training.

**Revenues FY2022, in millions**

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

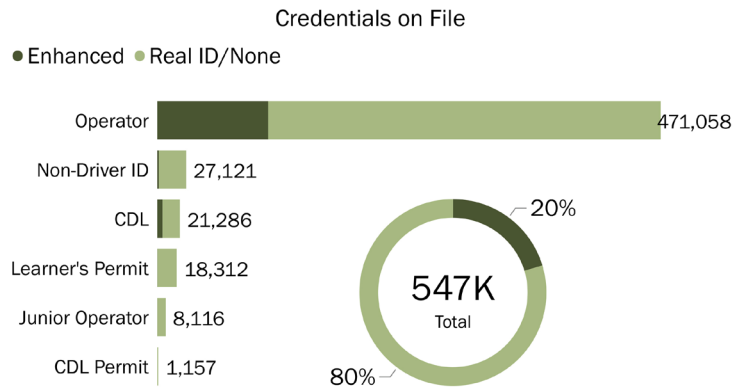
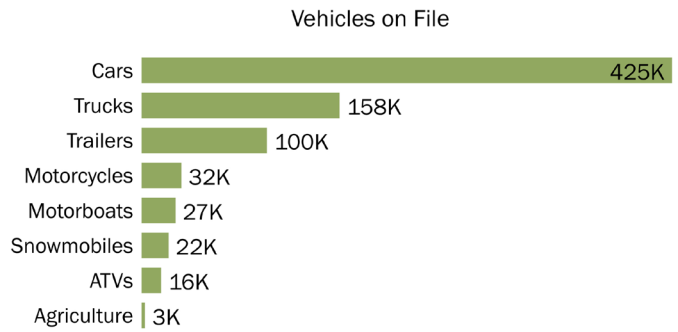
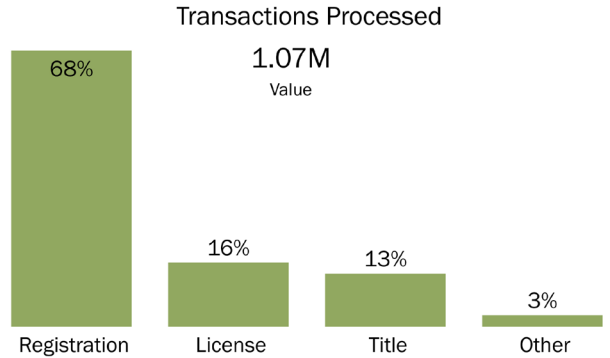
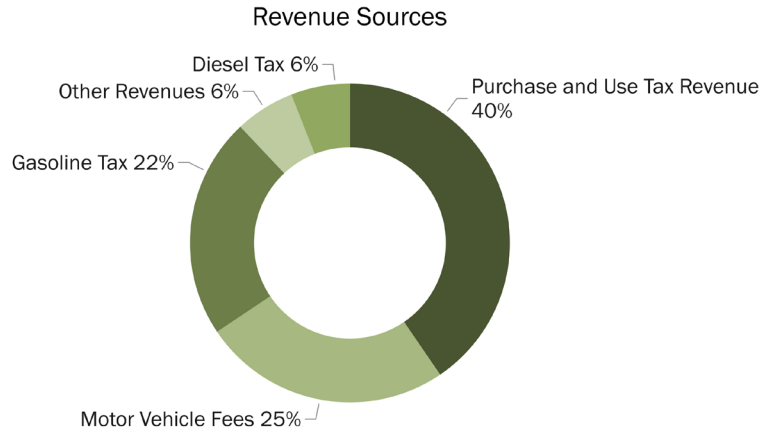
Motor Vehicle Fees (Licenses & Registrations)	\$87.8
Gasoline	\$78.2
Purchase & Use	\$141.3
Diesel	\$18.8
Other Revenue (Includes Title Certificates, Oversize Permits, State Civil Traffic Fines, Inspection Sticker Fees, and other sources)	\$21.1
<b>Total</b>	<b>\$347.2</b>

**Other Revenues FY2022, in millions**

Transportation Infrastructure Bond Gasoline	\$21.6
Transportation Infrastructure Bond Diesel and Other	\$2
<b>Total</b>	<b>\$23.6</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



# Finance and Administration

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

**Director**  
Jayna Morse
























**SFY 2023 Staff**  
Total: 127

**SFY 2023 Funding**  
Total Appropriation: \$19.9M



**RECRUITMENT.** From job and career fairs to internships and touch-a-truck events, AOT is constantly reaching out to diverse groups of students and professionals to show them how much a career at the Agency can offer.

## PERFORMANCE & ASSETS

Financial Management, Business Support	 <b>\$326M</b> Federal Funds Obligated, FFY22	 <b>\$315M</b> Billing Revenue	 <b>58.9K</b> Number of Payments Made	 <b>\$481M</b> Value of Payments Made	
Contract Administration	 <b>432</b> Number of Contracts and Amendments	 <b>408</b> Number of Work Authorizations, 2022	 <b>\$875M</b> Value of Contracts and Amendments	 <b>761</b> Number of Grants and Amendments	 <b>\$223M</b> Value of Grants and Amendments
Performance, Audit, Records Management, and Hearings	 <b>401</b> Public Records Requests, 2022	 <b>41</b> Number of Subrecipients Reviewed	 <b>13</b> Completed Performance Engagements	 <b>123</b> Number of Hearings Held	
Training, Safety, and Civil Rights	 <b>2,257</b> State & Municipal Technical/Development Trainings	 <b>500</b> State & Municipal Safety Trainings	 <b>178</b> New Employees Hired & Onboarded	 <b>4.5K</b> Cumulative On-the-Job Training Hours, FFY22	 <b>5.5%</b> Disadvantaged Business Enterprise Participation
Facilities and Emergency Management	 <b>59</b> Number of Maintenance Complexes	 <b>29</b> Number of Facilities with Renewable Energy	 <b>32</b> Number of Mission Essential Functions Monitored & Supported	 <b>25</b> Number of FEMA Emergency Relief Projects	 <b>65</b> Number of FHWA Emergency Relief Projects

Note: All data is from State Fiscal Year 2022 (SFY22), unless otherwise noted.

## Performance

### AOT INNOVATES!

The Agency is committed to innovation and enhancing performance in order to serve Vermonters and the traveling public better. In summer 2022, AOT launched a framework for collecting employee ideas, innovations, and problem-solving efforts of all sizes and impacts. Capturing these ideas and recently achieved successes provides AOT with an opportunity to support, recognize, and share this great work across the agency. Our employees are the greatest source of new ideas because they know our work better than anyone else and can quickly identify areas for change and improvement. AOT Innovates! has a central repository of submissions, highlights innovation challenges, and provides resources and learning opportunities, and much more.

### AGENCY PERFORMANCE SYSTEM (APS)

The Agency Performance System supports the collection of valuable information and data that illustrate progress toward critical goals throughout the agency and displays them with detailed, dynamic data visualizations or dashboards. Phase I included the development and publication of 20 data visualization dashboards to the Agency Performance Portal. These Power BI dashboards show the Agency's story of operations and performance for each division.

### VTrans Training Center (VTTC)

The Agency prides itself on creating and supporting a learning environment. VTTC provides effective tools and resources to develop a skilled, engaged, and growth-oriented workforce through online learning, hybrid learning, and in-person training. This benefits the individual learner, their team, and the overall organization.



Emerging from the pandemic, the VTrans Training Center now leverages technology to deliver training. Staff have worked with stakeholders to offer in-person, remote, or hybrid modalities for trainings, improving training accessibility. Redesigned training with hybrid options accommodates customer needs with best practices specific to the modality of delivery.

The AOT municipal training program, Vermont Local Roads, increased the number of equipment training topics to Municipal Customers to address workforce pressures/turnover. Vermont Local Roads utilized State Transportation Innovation Counsel funding to provide asset management training incorporating tools used on mobile devices to modernize data accessibility.

The Safety Program developed an in-person Trenching and Excavation Competent Person Training to improve field worker safety and instituted District Safety Task Forces in all Highway Maintenance Districts to support behavior-based safety and improve safety outcomes. The Safety team also conducted site visits to 88 construction projects and performed annual inspections for 100% of AOT Aviation, Lab, and Garage facilities.

## Contract Administration

Contract Administration continues to streamline and build efficiencies within the Construction Management System (CMS) for AOT and the construction contracting community. We are currently working to create interactive dashboards, additional standard templates, and forms, and to incorporate processes not included in the 2021 roll-out, such as standard template merge proposals and contract documents, and automated notifications for significant milestones such as award and contract execution.

Contract Administration completed the Finance and Maintenance (F&M) Agreement lean event, which created efficiencies and automation of the F&M process by utilizing internal resources such as VPINS. This automated workflow organizes and tracks F&M agreements status from initial request to the final distribution of the fully executed agreements while also providing approved standardized language, trackable document changes, and automated notifications. AOT is expected to save significant money and time with this implementation.

Contract Administration is collaborating with the Rail and Aviation Bureau to create value-added process improvements through a coordinated effort amongst process participants, stakeholders, and end users. The team is mapping and analyzing the current state, identifying pain points and opportunities with the intent to commit to a future state and an implementation plan to achieve these improvements.

Contract Administration has identified 16 different grant programs within AOT and is working diligently to support each customer by standardizing grant processes and templates, while also developing a heat map to assist programs with scheduling their Notice of Funding Opportunities and award start dates. Additional grant achievements include establishing a standard signature routing process with the Agency of Digital Services (ADS) for scopes of work that relate to Information Technology (IT), generating new grant

templates for new funding sources such as the America Rescue Plan Act (ARPA), developing processes for Request for Qualification (RFQ) type solicitations, developing a more efficient and effective VTrans Granting Plan for State Fiscal Year 2024.

Contract Administration has been working with the Office of Purchasing & Contracting (OPC) to design and implement a statewide electronic solution for the solicitation of goods and services. VTbuys (previously ePro or eProcurement) will be the State of Vermont's online platform for sourcing competitive solicitations, contracting, supplier management, and other procurement activities, and it will be available to all agencies and suppliers. Release 1 is anticipated in early 2023 and will include setting up Suppliers in the new system. Release 2 is anticipated in late 2023 and will provide the platform to begin solicitations, contracting, second-tier solicitations, and invoicing. All AOT Services Contracts, Job Order Contracts (JOC), and Indefinite Delivery Indefinite Quantities (IDIQ) contracts will be processed through VTbuys in order to provide consistency throughout the State and a simple process for our suppliers.



AOT's Contract Administration team toured the new North Hero - Grand Isle Drawbridge on U.S. Route 2 in the Champlain Islands.

Contract Administration worked with AOT programs, FHWA, and ACEC to incorporate all services retainer type contracts into the Work Authorization Section. As of November 2022, there are 30 primary contracts that process second-tier solicitations through this group, with includes Work Authorization Requests (WARs), Work Order Requests (WORs), Budget Adjustment Requests (BARs), and invoice review and approval.

## Civil Rights

The Civil Rights Bureau is responsible for ensuring compliance with all federal and state requirements regarding equal employment opportunity, contract compliance, and the participation of disadvantaged, minority, and women-owned businesses on contracts and grants awarded by the Agency. Civil Rights works to

ensure equal opportunity and access for all AOT employees, job applicants, contractors, and the public, and to promote inclusion, fairness and equity, and a culture of dignity and respect.



## RECRUITMENT, HIRING, AND ONBOARDING

In 2022, the Civil Rights Bureau coordinated the Agency's participation in more than a hundred outreach and recruitment events and worked in close collaboration with the Agency's hiring managers to arrange for the participation of staff and equipment at job fairs, career panels, and conferences. Agency employees are the best ambassadors to promote AOT as an employer of choice.

Despite a variety of workforce challenges, AOT achieved unprecedented levels of internal hiring and promotion for State Fiscal Year 2022, particularly for historically underrepresented populations. AOT hired and onboarded 178 new hires into its permanent workforce, a rebound from 100 new hires the preceding year. Eleven percent of new hires identify as Black, Indigenous, and People of Color (BIPOCs). Another area of significant progress has been the hiring and promotion of females, particularly in non-traditional careers in science, technology, engineering, and mathematics (STEM) and the trades.



Sonya Boisvert, Civil Rights Program Manager, and Greg Smith, General Manager for District 6, staffed the AOT booth at the 13th Annual Central Vermont Job Fair offering potential employees insight into working at AOT.

**YOUTH OUTREACH**

Youth is vital to the transportation industry, and today's students represent the pool of workers from which the transportation industry will recruit its future work force. To expose students to rewarding and diverse careers in the transportation industry, AOT promotes year-round youth outreach by participating in numerous career fairs, panels, and conferences; serving as a host site for students engaged in Community Based Learning or short-term job shadows; employing and paying 16- and 17-year-olds in the Intern Maintenance Worker Program; and providing an annual summer program for high school and middle school students each summer as part of FHWA's National Summer Transportation Institute (NSTI). In 2022, thirty-three students participated in the AOT NSTI Program.



**NSTI SUMMER CAMP.** After several years of pandemic restrictions, students were able to take full advantage of a wide variety of transportation activities, including a flight aboard a small jet aircraft.



VSAC hosted Kingdom Connect, a chance for students in grades 6-8 to explore career opportunities. AOT staff interacted with approximately 440 students from 14 schools, holding three hands-on workshops: Candy Bridges, Plow Trucks, and Signs. Nearly 100 students attended the AOT workshops



Members of the Northeast Region Fleet crew visited Hazen Union High School in Hardwick for their J-Term, a few weeks in June when the students explore career opportunities.

**PARTNERSHIPS**

The Civil Rights Bureau networks extensively with other state agencies, academic institutions, contractors, trade groups, and community-based organizations to build a robust applicant pool and build a workforce that thrives and embraces the AOT culture of respect, teamwork, safety, and innovation. During 2022, AOT partnership projects included work with the Vermont Office of Racial Equity on the Statewide Language Access Project, Regional Planning Commissions on the Transportation Equity Framework Project, State of Vermont Enterprise on the successful resettlement of New Americans, and Vermont Works for Women on gender and racial equity in the infrastructure workforce.

**TRAINING**

The Civil Rights Bureau works in collaboration with the VTTC and the Department of Human Resources (DHR) to develop and deliver training that promotes the Agency's Respectful Workplace Commitment. Since 2013, more than 3,000 employees have received Ouch! training, through New Employee Welcome, Pathway to Supervision, Transportation Leadership Institute, and Workplace Civility and Unconscious Bias training.

With the use of funding from FHWA, the Civil Rights Bureau also provides training and job opportunities in highway construction for women, minorities, and other disadvantaged individuals that have encountered barriers to employment. During FY 2022, more than a hundred participants in the Agency's Employment Diversity in Highway Construction (EDHC) Program entered and/or advanced in the transportation industry with subsidized training and certification. Program successes included 46 Commercial Driver's License (CDL) permits, 37 CDL licenses, and 11 On-the-Job Training graduations. Almost 30% of EDHC participants were New Americans from 22 different countries of origin.

## ECONOMIC OPPORTUNITY

Federal law requires all state departments of transportation to maintain a Disadvantaged Business Enterprise (DBE) Program and a Small Business Program to ensure that minority, women, and small business owners have an equal opportunity to participate in federally funded projects. These programs help to develop and promote historically disadvantaged businesses, assist eligible businesses in becoming certified, and encourage participation in government contracting and procurement opportunities.

In addition to meeting its federal mandate, AOT promotes the DBE and Small Business Programs as an affirmative means to fulfill the philosophy that all business, regardless of ownership, should be allowed equal freedom and opportunity to compete for contracts. The Agency is committed to policies and procedures that ensure nondiscrimination in the award and administration of all contracts.



**WOMEN CAN DO.** Vermont Works for Women hosted its annual Women Can Do! event in Randolph for the first time since 2019. Drawing over 260 high school students from 12 counties across the state, the event provided a valuable hands-on exploration of non-traditional career paths. The Agency had three hands-on activities in the Indoor and Outdoor Action Expo: Culvert Inspection, about applied technology; Engineering, about bridge design and civil engineering opportunities; and Digging in the Dirt, about heavy equipment operation. More than 20 AOT employees attended and interacted with the students, and the Civil Rights staff provided information at the AOT booth in the Resource Hall throughout the day.

More than 250 women- and minority-owned businesses are currently certified as DBEs by AOT, performing a wide range of transportation-related services, including bridge and highway construction, engineering and design services, environmental consulting, marketing and public relations, information technology, community participation and outreach, and transportation planning. In FY 2022, certified DBEs were awarded 5.54% of all AOT federally-funded contracts. During 2022, AOT added 73 newly certified DBEs to the program, an increase of almost 30%.



**WINDSOR.** Engineers from AOT's Highway Division attended the "Kids Engineering Day" at the American Precision Museum in February 2022. Adults and children had fun building bridge trusses out of toothpicks and gum drops, testing catapults, and experimenting with the river demonstration table from Agency of Natural Resources.

## Continuous Improvement

Continuous Improvement worked collaboratively with transportation program, FHWA, and ADS project participants to implement improvements to the Project Closures (Final Voucher) process. The improvements target defined accountability, more effective work, higher quality deliverables, project and process transparency, and shorter time durations in completing the closure hand-off to Financial Operations and final voucher hand-off to FHWA.

Notable improvements include embedded process triggers to advance closure promptly, enhancements in the Appian platform and VPINS application, streamlined closing of expenditure accounts and contracts in STARS, the elimination of paper routing, and dashboard development to track performance using new workflows.

In 2022, project closure activity has led to the release of nearly \$8,000,000 in federal funds.

## Audit

The Audit section assisted with facilitating the FY22 Statewide Agency CLA Single Audit for the Highway Division. This in-depth review of the division's business practices resulted in no findings for the entire Agency of Transportation. This accomplishment demonstrates the exemplary effectiveness of AOT internal controls of our business management systems.

Additionally, the Audit team completed FY 22 Consultant financial reviews with the added challenge of incorporating PPP (Federal Paycheck Protection Program) that was implemented Loan data into the calculations. A substantial number of consultants doing business with AOT utilized these federally sponsored loans in FY20. The processing time for reviewing consultant financials with PPP loan data was nearly double the average time for standard consultant financial & indirect cost reviews.

In March 2020, the World Health Organization declared the outbreak of COVID-19 as a pandemic. This pandemic affected business operations and cashflow disruptions for our consultants and vendors. As a result, the Federal Government incorporated the Paycheck Protection Program (PPP), as authorized by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) and was administered through the Small Business Administration (SBA). Funds provided by this PPP loan allow businesses to maintain payroll costs, keep employees from loss of work during the COVID-19 pandemic and to continue business operations. Early in year 2021, the federal government had granted forgiveness of these loans.

Our architectural and engineering (A&E) service consultants provide an indirect cost rate calculation that is applied to calculate total costs. As a result of the forgiveness of the PPP loans, the amount of the loan forgiveness had to be removed from the calculation, so the federal government did not get charged for funds they gave to our consultants. This caused many questions on how to handle these forgiven loans which impacted federal regulations, states approval requirements, and CPA audits. It also got complex since many consultants provide services to commercial and federal clients but only needed to be adjusted for the federal contracts.

The Audit Bureau needed to learn and do their due diligence to ensure nearly 100 of our A&E consultants handled the removal of the federal funds from their indirect cost rate. The Audit Bureau worked diligently to keep up with the approval process for these adjustments to ensure they were completed accurately and efficiently so the timing of contract awards were not jeopardized.

During FY22, Audit made significant updates to the subrecipient monitoring process. An annual grant assessment was created to collect information about our subrecipients and their grants management processes. This assessment provides us easy access

to information that is necessary to complete monitoring using a risk-based approach. In addition to monitoring, this update also allowed for a more efficient pre-award risk assessments process.

In FY2022 the Records Management section archived into digital format over 105 boxes of material from the Emergency Management Division in less than a month. This task would have normally taken a fully staffed team 6-8 weeks. However, this work was completed with reduced staff in less time through implementation of newly developed process improvement methods. In addition, all members of the Records Management team completed the GARA (Government Archives and Records Administration) certificate program, which has greatly facilitated the AOT completing needed work with VSARA.

## Emergency Management

- AOT maintained an Incident Command from since the onset of the COVID-19 pandemic. On April 1, 2022, after more than two years, the Transportation Incident Command Center demobilized in synch with the SEOC.

- Communications Resiliency

AOT procured and assigned 30 satellite phones to staff determined to be essential during an emergency.

AOT will have 30+/- staff licensed by the FCC to operate HAM radios when traditional mediums of communications are unavailable, or unreliable.

- Supported the effort to create F&A general business priorities and Mission Essential Functions. This can serve as a playbook, with easy reference when the primary functional owner is unavailable, or traditional business operations are significantly interrupted.

- Digitized 125 legal boxes of FHWA-Er and FEMA-PA legacy records.

- Applied for and chosen for the student project curriculum associated with the Vermont Public Managers Program (VCPM). AOT will work with the VCPM group to identify modernized, accessible, and unified document retention in a cloud-based environment for all FHWA-ER and FEMA-PA documentation.

- Commenced the development for Emergency Procedures Plans across all AOT facilities.

- Development of Incident Command training that aligns with the FEMA training requisite, coupled with AOT specific organization and response processes.

- 9 staff trained, and certified as SEOC Partner Level, supporting the MARS section.





## Facilities

**Tunbridge Green Facility:** Completed first fully green facility that uses no fossil fuels. This garage was the first to be retrofit with heat pumps and has a 32 -panel solar array.

**Electric Vehicle charging infrastructure:** Completed a project with District Maintenance & Fleet crews to install (13) Level 2 dual-head charging stations. All District offices and Central Garage now have the ability to charge the EV Fleet.

**AOT Space Book:** Created the first AOT space book that details 424 owned facilities. This list details all locations with address, building square footage, year built, replacement cost, and site acreage.

**St. Albans:** Procured future site for the new garage complex that has easier access to the interstate corridor and will alleviate traffic congestion in the downtown area.

**Facilities Projects:** As of December 1st of this fiscal year we have completed 507 projects both planned and unplanned.

**JOC Contract Management:** Implemented JOC tracking sheet to in real time track all JOC expenditures, run queries to provide any data set to better understand budget needs. We plan to share this template with other sections to have consistent record keeping.

## Hearings

AOT Hearings strives to continuously improve the service we provide to our customers: VTrans, DMV, and their customers. We are always looking for ways to clarify the hearing process for our customers. This past year we added an additional point of contact step to our intake process for our pro se customers whose license suspensions resulted from an adjudication in a Vermont court. Adding one extra point of contact at the time of intake improves the quality of

information provided to the customer at the start of the process and has reduced scheduling delays for appeals of an original Superior Court judgment.

Hearings worked with the Project Delivery Bureau and VAOT Legal to update and document procedures for how the Agency processes minor alterations hearings notices. The improved process places the responsibility for noticing minor alteration hearings with the AOT Hearings Unit, freeing AOT Right of Way staff from issuing the hearing notice. The new process clearly defines deadlines and responsibilities for all parties involved and has resulted in a more efficient and transparent process, eliminating previous pinch points.

One of the many hearing types that comes before us are Vermont-issued suspensions that result from a suspension issued by another state. As part of the national Driver License Compact (DLC) and other Non-Resident Violator Compacts (NRVC), Vermont honors operator license suspensions issued by other compact member states. For example, if a licensed Vermont operator is placed under suspension in New York, Vermont will issue a suspension of that individual's Vermont license until they have cleared their suspension in New York. In 2022, Hearings implemented a process to allow out-of-state attorneys not licensed to practice in Vermont to be admitted for the sole purpose of representing their client at an AOT administrative hearing. This allows the DMV customer to continue to work with the attorney handling their out-of-state matter, even if they aren't licensed in Vermont, and relieves them of the potentially onerous burden of retaining additional local counsel if they wish to retain legal representation to object to the Vermont DMV suspension in a hearing before our tribunal.



**WARRENS GORE.** In addition to affecting road surfaces, cold snaps and extreme winter weather can impact infrastructure under the roadway. Maintenance crews are tasked with keeping culverts unobstructed, which sometimes necessitates thawing a frozen culvert.



**FAYSTON.** Many maintenance projects require collaboration among different district garages, like this guardrail repair along VT Route 17 that saw three different crews team up to remove, replace, and clean up the project area in one efficient afternoon.



**STATEWIDE.** Spring is always a busy time for litter picking for our maintenance crews, and 2022 was no different. By season's end, the Districts collected almost 450 tons of trash from the roadside.



**COVENTRY.** When they aren't busy with their many winter-specific maintenance tasks, our crews work on other year-round tasks such as brush cutting to keep sightlines clear and safe on the roadway.

# District Maintenance and Fleet

The District Maintenance and Fleet Division oversees year-round maintenance of the state highway and interstate network, including bridges, signs, and culverts; provides technical assistance to municipalities; procures and maintains the fleet of trucks and equipment; provides technical services including Pollution Prevention and Compliance, and Bridge Maintenance

## Director

Wayne Gammell

## SFY 2023 Staff

Total: 519

## SFY 2023 Funding

Total Appropriation: \$127.2M



**LAKE WILLOUGHBY.** While our maintenance crews often battle the extreme elements that Vermont's different seasons bring, their work also takes them to places where the unique scenic beauty of the Green Mountain State is on full display.

## PERFORMANCE & ASSETS

Summer Maintenance	 436 Tons of Trash Collected	 17.8K Acres Mowed	 124K Linear Feet of Ditching	 5,692 Linear Feet of Culverts Replaced	 21.7K Linear Feet of Guardrail Repaired	 10.8K Patching, Tons of Asphalt
Winter Maintenance	 \$30.5M Cost of Winter Maintenance*^	 125.4K Salt Used (Tons)*	 3,112 Sand Used (Cubic Yards)*	 1.7M Lane Miles Plowed*	 1.4M Gallons of Liquid Salt Used	
Fleet Operations	 327 Preventative Maintenance Accomplished	 3.16% % Vehicles Hybrid/Electric	 \$13.3K Average Fleet Repair Costs	 68% Fleet Vehicles Less Than 8 Years Old	 81% Plowtruck Availability (Plow/Dump)	
Water Quality/Hazardous Materials	 27 Hazardous Material Spills Responded To	 13% VTrans Lake Champlain Phosphorus TMDL implemented	 89 Stormwater Permits Inspected	 475 Impervious Acres Covered By Stormwater Permit		

Note: All data is from State Fiscal Year 2022 (SFY22), unless otherwise noted.

\* Data from 2021-2022 Winter Season

^Figure does not include equipment costs











## VTrans Central Garage

The VTrans Central Garage purchases, maintains, and administers the Agency’s fleet of vehicles and equipment using an internal service fund. Vehicles and equipment are rented to the maintenance districts, DMV, and other VTrans’ divisions. Rental income from those customers covers depreciation, service, and overhead. We continue to focus on returning our plow truck fleet to an 8 to 10-year replacement schedule. Timely replacements minimize costly repairs and breakdowns, and provide good service to Vermont’s travelers. The new trucks and equipment provide the latest updates to emissions systems and increases in fuel economy.



SFY 2023 Staff  
51

### CENTRAL GARAGE PERFORMANCE & ASSETS

Assets	 <b>256</b> Snowplows (Heavy Trucks)		 <b>106</b> Graders, Excavators, & Loaders	
	 <b>158</b> Warranty Jobs		 <b>112</b> Light, Medium Trucks with Plows	
Budget	 <b>2,744</b> Work Orders		 <b>\$763K</b> Auction	
			 <b>\$22.8M</b> Internal Services Funds	
Internal Performance	 <b>14%</b> Truck Age (Plow/Dump) <15% Older than 8 yrs		 <b>81%</b> Plowtruck Availability (Plow/Dump)	
			 <b>52%</b> Utilization Targets (Plow/Dump) >85% used more than 32 hrs/month	

Note: All data is from State Fiscal Year 2022 (SFY22), unless otherwise noted.



**NAME A PLOW PROGRAM.** Following the great success of last year's Name A Plow program, more than 70 more schools participated in 2022 to give new monikers to AOT's remaining nameless plows.



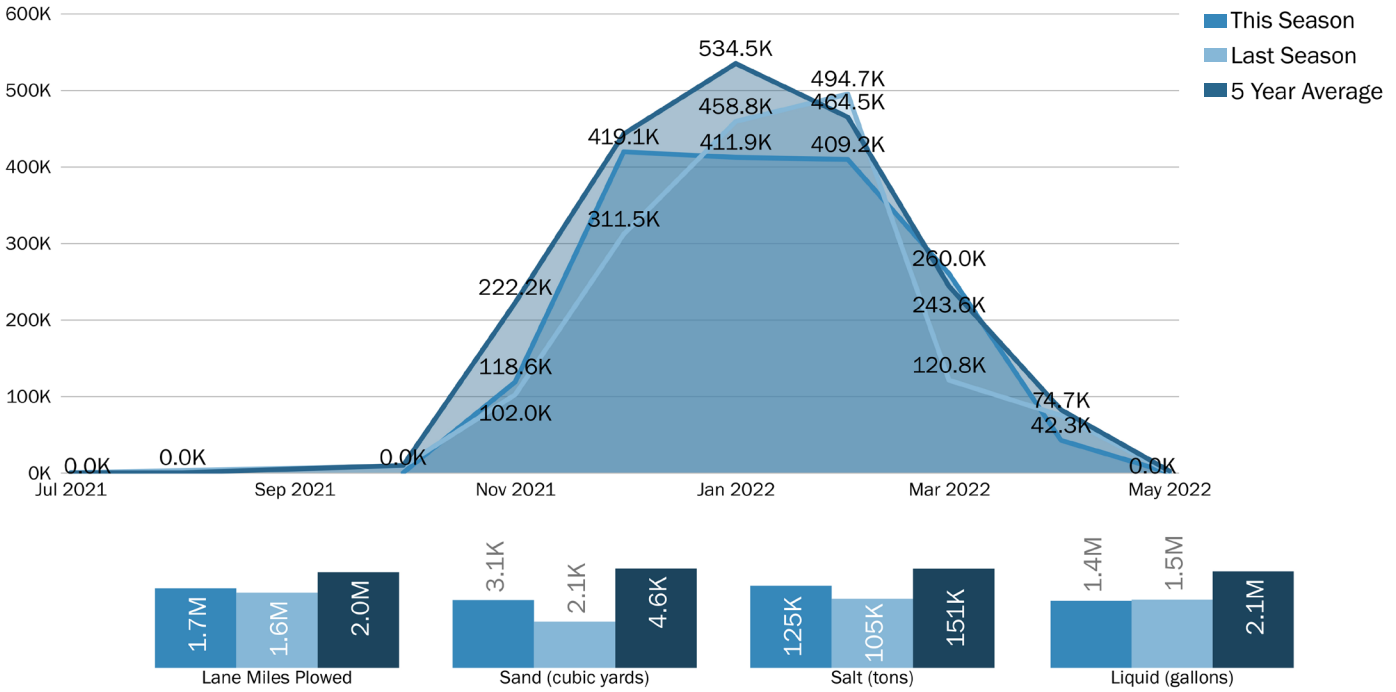
**FRANKLIN.** Even after a winter storm is over and snowplows have cleared a roadway, our maintenance crews stay busy. A crew pushed back snowdrifts caused by wind gusts along VT Route 120.



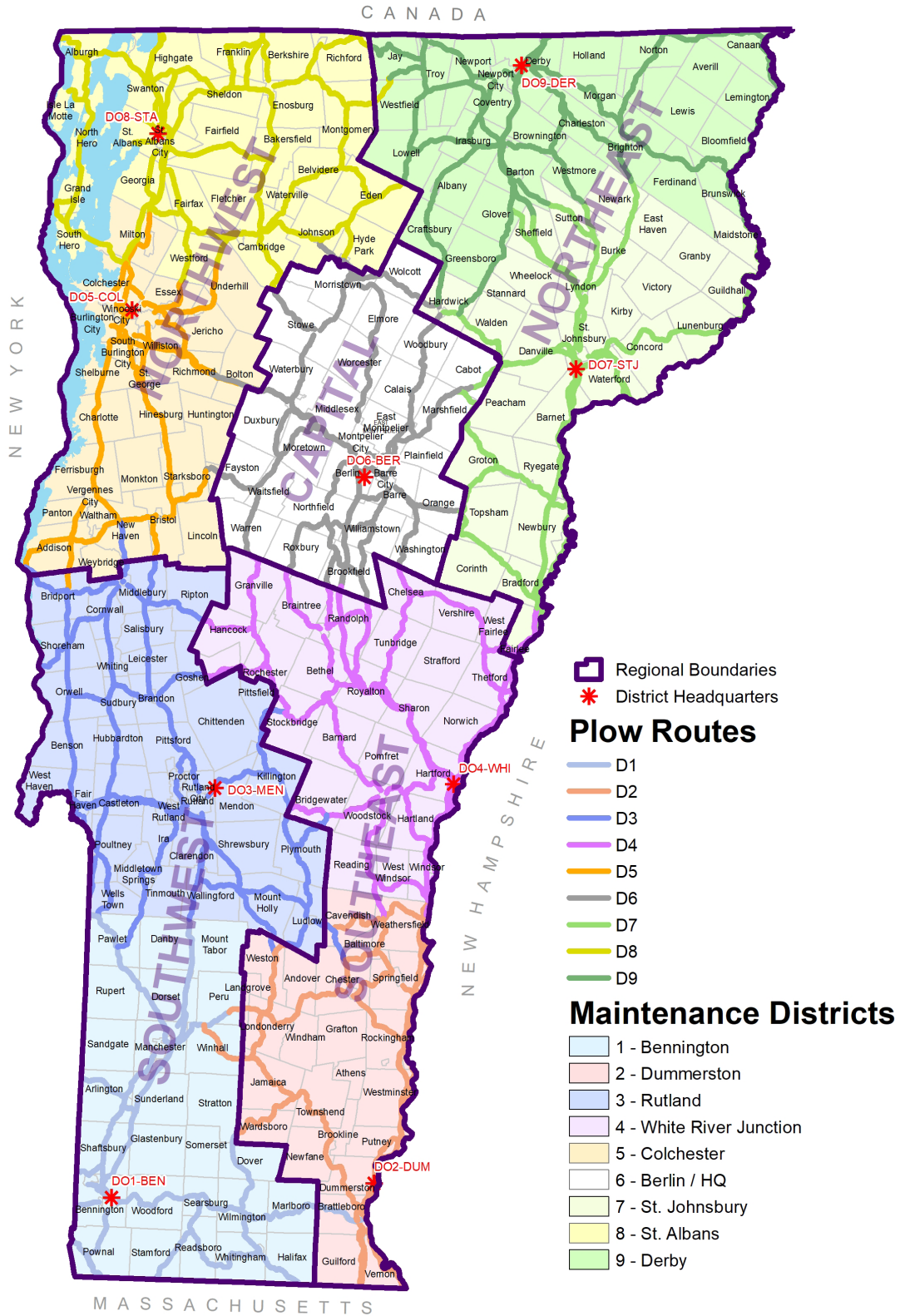
In addition to the many fun new plow names in 2022, AOT introduced a very special new member of the fleet: Rudolph the Holiday Snowplow. Outfitted with almost 5,000 lights, Rudolph visited different towns and events around Vermont in December 2022, spreading smiles and good cheer while also serving as a recruitment tool for the AOT District Maintenance & Fleet Division.

# 30 DISTRICT MAINTENANCE & FLEET: WINTER MAINTENANCE STATISTICS

Total Lane Miles Plowed compared with Recent Seasons



SOUTHWEST		SOUTHEAST		CAPITAL	NORTHWEST		NORTHEAST	
<b>District 1</b> Bennington East Dorset Marlboro Readsboro Wilmington	<b>District 3</b> Brandon Castleton Clarendon Ludlow Mendon Middlebury Rutland Sudbury	<b>District 2</b> Ascutney Chester Dummerston Jamaica Londonderry Rockingham Springfield	<b>District 4</b> Randolph Reading Rochester Royalton Thetford Tunbridge White River Jct Windsor Woodstock	<b>District 6</b> Middlesex Morristown N. Montpelier Orange Waitsfield Williamstown	<b>District 5</b> Chimney Corners Colchester New Haven	<b>District 8</b> Cambridge Eden Enosburg Georgia Highgate Montgomery N. Hero St. Albans	<b>District 7</b> Bradford Lunenburg Lyndon Newbury St. Johnsbury W. Danville	<b>District 9</b> Barton Bloomfield Canaan Derby Irasburg Island Pond Westfield Westmore
<b>168.2K</b> Lane Miles Plowed	<b>178.8K</b> Lane Miles Plowed	<b>146.8K</b> Lane Miles Plowed	<b>149.9K</b> Lane Miles Plowed	<b>158.5K</b> Lane Miles Plowed	<b>150.7K</b> Lane Miles Plowed	<b>272.9K</b> Lane Miles Plowed	<b>180.2K</b> Lane Miles Plowed	<b>255.0K</b> Lane Miles Plowed
<b>\$2.9M</b> Cost of Winter Maintenance	<b>\$3.4M</b> Cost of Winter Maintenance	<b>\$2.9M</b> Cost of Winter Maintenance	<b>\$4.0M</b> Cost of Winter Maintenance	<b>\$3.3M</b> Cost of Winter Maintenance	<b>\$3.0M</b> Cost of Winter Maintenance	<b>\$3.9M</b> Cost of Winter Maintenance	<b>\$3.4M</b> Cost of Winter Maintenance	<b>\$3.8M</b> Cost of Winter Maintenance
<b>12.9K</b> Salt (tons)	<b>16.0K</b> Salt (tons)	<b>15.4K</b> Salt (tons)	<b>17.3K</b> Salt (tons)	<b>16.4K</b> Salt (tons)	<b>11.0K</b> Salt (tons)	<b>12.4K</b> Salt (tons)	<b>12.5K</b> Salt (tons)	<b>11.4K</b> Salt (tons)
<b>917</b> Sand (cubic yards)	<b>172</b> Sand (cubic yards)	<b>0</b> Sand (cubic yards)	<b>54</b> Sand (cubic yards)	<b>1,032</b> Sand (cubic yards)	<b>40</b> Sand (cubic yards)	<b>3</b> Sand (cubic yards)	<b>866</b> Sand (cubic yards)	<b>30</b> Sand (cubic yards)

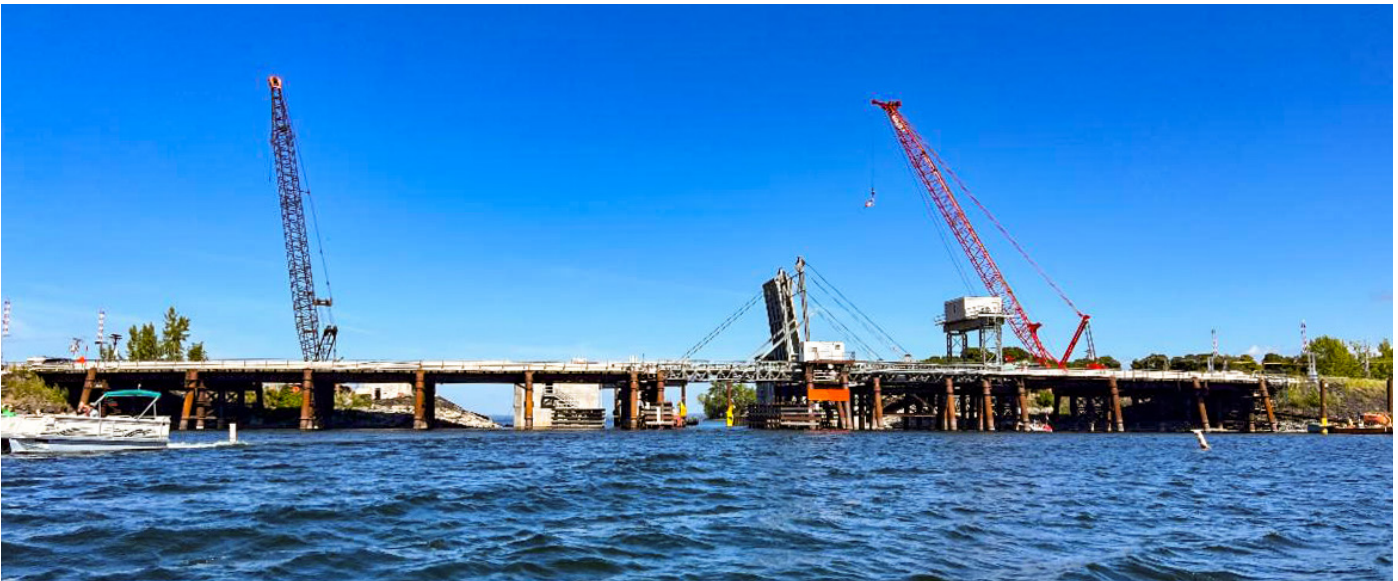




**WOODFORD.** A multi-year ledge stabilization project on VT Route 9 was largely completed in 2022. The rockface was cut 30 feet back from the roadway, improving sight distances and safety from potential rock falls.



**PLYMOUTH - BRIDGEWATER.** It was a busy summer along VT Route 100 as crews completed 16 miles of paving, replaced guardrail, and installed rumble strips on the roadway.



**SHARON.** Bridge repairs along I-89 over the White River in Sharon were completed this year. Work included rehabilitating both bridge decks with all structural steel stripped and recoated.



**LYNDON-BARTON.** A 40-mile interstate paving project began along I-91. Spanning three exits, work will also include guardrail replacement and drainage improvements.



The Highway Division oversees the prioritization, programming, design, engineering, and construction of projects on the interstate and state highway system, and supports municipal projects; manages the safety and overall needs of the Agency's highway assets – bridges, culverts, signals, signs, pavement, and many others – from budgeting and conceptualization through construction and ensuring effective operation.

## Director

Ann Gammell

## SFY 2023 Staff

Total: 319













## SFY 2023 Funding

Total Appropriation: \$445.7M



**CHESTER.** A multi-year bridge replacement project began along VT Route 103 in Spring 2022. The bridge deck has been replaced and minor repairs were made to the bridge piers, beams, and bearings. Crews will return in Spring 2023 to complete work on expansion joints, landscaping, and punch list items.

## PERFORMANCE & ASSETS

<h3>Highway Safety</h3>	 <b>74</b> Fatalities, 2021	 <b>310</b> Major Crashes, 2021	 <b>61%</b> % of Fatalities Unbelted, 2021
<h3>Asset Management</h3>	 <b>791</b> Overweight Vehicle Permit Reviews, 2022	 <b>1,958</b> Bridges Inspected, 2021	 <b>4,073</b> Total Structures Maintained
<h3>Project Delivery</h3>	 <b>78</b> # of Projects Advertised, 2022	 <b>69%</b> % Projects Advertised on Time, 2022	 <b>42.6%</b> % of Projects with Estimates Within 10%
<h3>Construction</h3>	 <b>56</b> Construction Projects Completed, 2022	 <b>325</b> Miles Paved, 2022	 <b>6,511</b> Total Lane Miles Maintained

Note: All data is from State Fiscal Year 2022 (SFY22), unless otherwise noted.

### Shelburne Street Roundabout Project

The Vermont Agency of Transportation and the Burlington Department of Public Works improved roadway conditions for all users along U.S. Route 7 (Shelburne Street) as part of the Shelburne Street Roundabout Project in Burlington. The intersection of Shelburne Street, South Willard Street, Ledge Road, Locust Street, Gove Court, and Adams Court serves as a gateway to Vermont's most populated city providing access from locations from the south to the city center. The existing intersection had been identified as a high crash location for approximately two decades, presenting challenges for motorists, pedestrians, and bicyclists with few opportunities for pedestrian street crossings and no dedicated bicycle accommodations. The intersection entered the State's Highway Safety Improvement Program, allowing funding from that program to be allocated for corrective action. The redesign of the intersection into a single-lane modern roundabout addressed these safety concerns and met the ever-changing needs of the City and State transportation networks.



The installation of this modern single-lane roundabout offers a multitude of benefits including continuous traffic flow at low speeds, enhanced user sightlines due to the geometry of the roundabout, and the ability to handle up to 25,000 vehicles daily without additional lanes. Roundabouts have been known to reduce crashes by as much as 72 percent, according to the FHWA. Major improvements to the pedestrian and bicycle accommodations have been implemented throughout: dedicated pedestrian and shared pedestrian and bicycle facilities including sidewalks, shared-use paths, and designated crossing locations with user-activated rapid flashing beacons. In addition, this joint initiative included a significant amount of subsurface work focused on the improvement of drainage and stormwater runoff treatment, upgrades to aging infrastructure, and the relocation and consolidation of utility transmissions underground.

The Shelburne Street Roundabout Project was advertised for construction in the winter of 2021 and awarded to S.D. Ireland Brothers for \$7.7 million. The first season of construction began in August 2021 and focused on underground utility relocations, the installation of new water and sewer lines, and the installation

of new stormwater infrastructure. Crews worked through the winter to complete subsurface utility work. The second season of construction focused on surface reconstruction including the installation of sidewalks and shared-use paths, street lighting, landscaping, sideroad reconstruction, and the construction of the roundabout. Construction was estimated to be completed in the summer of 2023, but the project achieved substantial completion on November 2, 2022, with the opening of the roundabout to traffic, ahead of schedule. Crews will work through spring to complete the few remaining items.

The roundabout will continue to serve as a gateway to the City of Burlington well into the future and include an art installation created by Burlington City Arts and commissioned by the City of Burlington. The completion of the Shelburne Street Roundabout is another future-driven advancement for the Agency and the City, demonstrating Vermont's continued commitment to safety, efficiency, and sustainability in transportation.

### VT Route 9 Wilmington-Brattleboro Paving Project

In 2021, work began on this \$25 million, 12.6-mile project and continued through the 2022 construction season with plans to finish in 2023. The project includes a full depth reclamation and stabilization of the road's subbase and new engineered pavement structure to carry the projected traffic. With this treatment, geometry improvements were made to correct banking and promote drainage. Additionally, the project will add a turning lane at South Road in Marlboro and bicycle and pedestrian improvements in West Brattleboro.



**Newfane Arch Bridge (Bridge 12 on FAS Route 106 - Depot Road)**

In 2022, the Agency replaced the arch bridge over Rock River in Newfane. The historic bridge, constructed in 1908, was a one-lane bridge considered narrow and structurally deficient, with the arch in poor condition and substandard vertical alignment and bridge railing. During the 2022 construction season, the bridge was replaced with a new arch that met historic requirements. The construction necessitated a half-mile detour via VT Route 30 and Grimes Hill Road. Accelerated bridge techniques, including pre-cast elements, were utilized in order to minimize the closure. The project also required challenging methods including cast-in-place concrete to tie the pre-cast elements to the ledge. Following the arch construction, the roadway was paved and striped. The road was restriped as one-way but built wide enough for two lanes in the future, if desired. The total cost of reconstruction was approximately \$4.2 million, and the new bridge is expected to last 75 to 100 years.





**CHAMPLAIN ISLANDS.** After many seasons of construction, the new drawbridge connecting North Hero and Grand Isle along U.S. Route 2 was opened to traffic in early November 2022. The new double leaf bascule bridge is the only one of its kind in Vermont and is opened using a combination of electric motors and hydraulics. Comprised of 87,000 pounds of rebar, 6,200 cubic yards of concrete, and more than 15,000 bolts, the new bridge has a design life of 100 years.



**CALAIS.** A series of bridge replacements continued on VT Route 14. With Bridge 74 completed in 2021, work began on Bridge 77 and Bridge 82, both over the Kingsbury Branch of the Winooski River. Originally built in the 1910s-1920s, all three bridges required significant work to be brought up to modern standards. Bridges 74 and 82 were completely replaced, while Bridge 77 underwent a deck and superstructure replacement but kept the existing substructures due to its better condition. The new expected service life of Bridges 74 and 82 is now 75 years, with the the superstructure of Bridge 77 projected at 40 years.

## Project Delivery Bureau: Environmental

### HISTORIC TRUSS BRIDGES – RE-USED ON LAMOILLE VALLEY RAIL TRAIL

In partnership with FHWA, AOT is installing three historic truss bridges along the Lamoille Valley Rail Trail (LVRT). Bridge No. 7 from East Poultney was removed and transported to temporary storage in Hardwick as a mitigation measure for Poultney BO 1443(53), where it is awaiting rehabilitation. The two other historically significant trusses have been in storage since they were removed. Culvert 91F along the LVRT in Sheldon will be replaced with Morrisville Bridge No. 53, Bridge No. 77 in Bakersfield will be replaced with Berlin Bridge No. 72, and Bridge No. 44 in Hardwick will be replaced by Poultney Bridge No. 7. None of the bridges or culvert being replaced is historic.



**POULTNEY.** The historic truss bridge over the Poultney River proved a challenge to move. Cranes were required on both sides of the bridge in order to safely elevate and relocate the structure to the north side of the chasm for disassembly while avoiding contact with neighboring homes and utilities.

### HIGHWAYS & HABITAT RECEIVES 2022 FHWA ENVIRONMENTAL EXCELLENCE AWARD

AOT and F&WD were awarded a 2022 FHWA Environmental Excellence Award for the Highways & Habitats training program. The Agency has been conducting Highways & Habitats since 2002 and recently revamped the program to a multi-tiered online and in-person training. Tier 1 is an online tutorial available to all of state government through the Learning Management System. Tier 2 takes transportation professionals into the field to explore transportation infrastructure's effects on habitat and collaboratively explore issues and solutions. To date more than 200 people have completed the training, which has enabled project managers and engineers to approach projects with an embedded baseline understanding of road ecology and make informed decisions regarding wildlife and habitat on Federal Aid projects.

## Transportation Management Center (TMC)

In 2022, the TMC continued its tristate partnership with New Hampshire and Maine to maintain and enhance our Advanced Transportation Management System, New England Compass (NEC). The NEC software is the main tool the TMC uses to log mobility-related information, manage Intelligent Transportation Systems, manage road closures and incidents, track active construction projects, and communicate to the public via VT Alert and the 511 Traveler Information website, [newengland511.org](http://newengland511.org). The tristate group executed a new contract with the NEC vendor to maintain the system, enhance and modernize its functionality, integrate with ESRI mapping functions, and publish a new 511 Traveler Information website. The new website went live in October 2022, with a modern look and feel, customizable traffic alerts for subscribers, and a mobile-friendly format.

## Project Selection & Prioritization (VPSP2)

In 2022, AOT and its Regional Planning Commission partners implemented the second year of a two-year pilot of the VPSP2 project selection and prioritization process. This second phase addressed the state and town highway bridge programs. Potential projects were scored using eight criteria: asset condition, safety, health access, environment, community, economic access, resilience, and mobility. The timing of this process allows the Agency to identify and select projects for investment by creating a minimum of five years of projects to advance through the project development process. This allows for better coordination and predictability on the network for communities, maintenance, safety, and many other corridor management considerations. During 2023, the second round of selection will occur for pavement, roadway, traffic, and safety projects as well as future development of VPSP2 for other modes.

## Vermont Asset Management Information System (VAMIS)

The Vermont Asset Management Information System (VAMIS) began as a vision to better manage AOT's assets and grew to include BGS as a partner. The Agency's goal is to incorporate 24 asset classes into VAMIS that will allow for a holistic network-wide approach to managing our inventory and investments. This includes determining various treatments and base level budgetary needs for each asset in our network. Currently, 18 assets are either in the system or under development, including pavement, highway and rail bridges, and small culverts. We are using the information from VAMIS to make budget recommendations for our capital programs for these assets and to develop culvert replacement projects, both on a network-wide basis and in advance of paving projects. The signals and stormwater teams are currently rolling out inspections and work orders in the Operations Management portion of the system. The next major phase of the project will focus on work order management for our Maintenance partners and will start with recording accomplishments that can be related to asset inventories.

### 2022-2026 Strategic Highway Safety Plan Critical Emphasis Areas

#### 1. IMPROVE INFRASTRUCTURE

- a. Lane Departure
- b. Intersections
- c. Speed and Aggressive Driving

#### 2. BEHAVIORAL

- a. Occupant Protection
- b. Impaired Driving
- c. Distracted Driving and Alertness

#### 3. VULNERABLE USERS & ROADWAY USERS

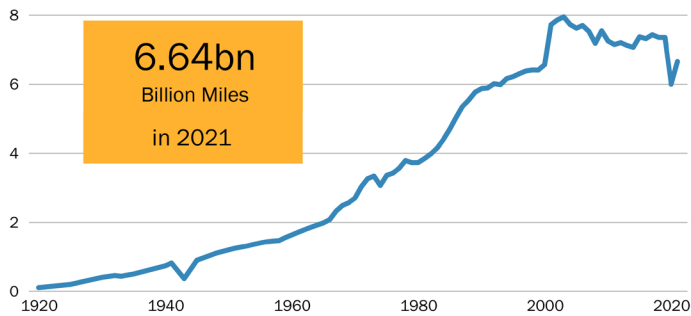
- a. Pedestrians and Bicyclists
- b. Motorcyclists
- c. Younger Drivers
- d. Older Drivers

#### 4. DATA & EMERGING TOPICS

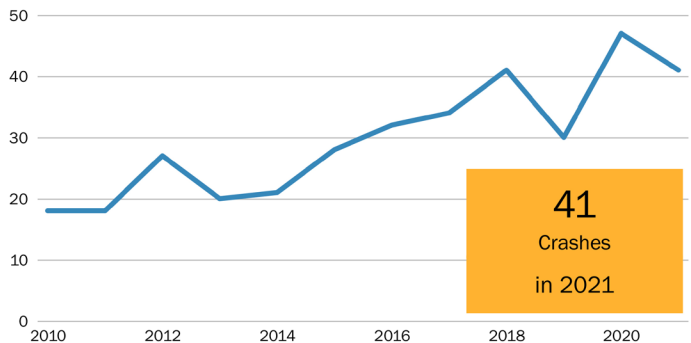
- a. Data Analysis and Integration

Additional crash information is available at <http://apps.vtrans.vermont.gov/CrashPublicQueryTool/>

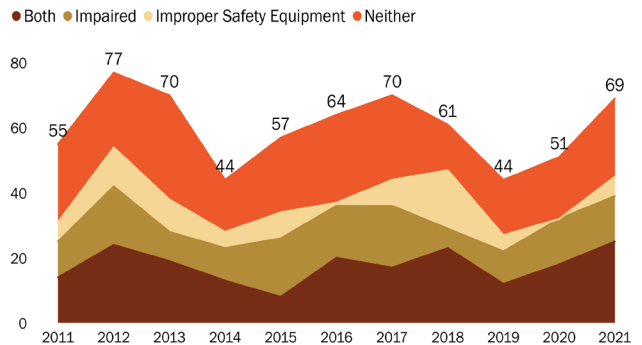
Annual Vehicle Miles of Travel (AVMT), Billions



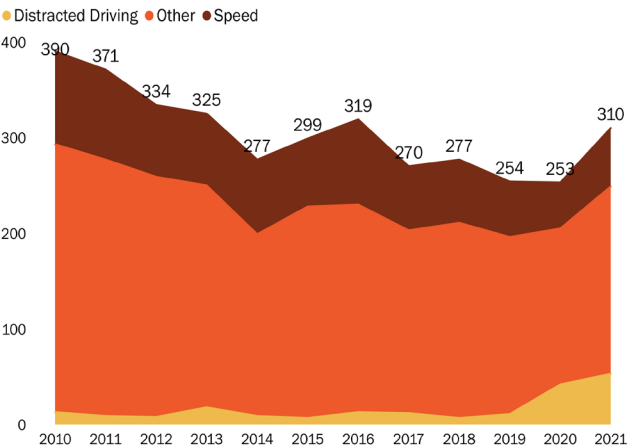
Crashes where a Driver Tested Positive for Marijuana\*



Fatal Crashes, by calendar year



Major Crashes Reported, by calendar year



**DRIVE WELL VERMONT.** As part of the Agency's ongoing mission to instill and support safe driving habits, a newly redesigned Drive Well Vermont website was launched in 2022 offering motorists resources on topics such as distracted driving, motorcycle safety, occupant protection, and more. Visit the site at [DriveWell.VT.gov](http://DriveWell.VT.gov)



**2022 VERMONT HIGHWAY SAFETY AWARDS.** The State Highway Safety Office and Vermont Highway Safety Alliance held their annual Highway Safety Awards at the State House in late October. These awards are presented to highway safety professionals around the state for their exceptional work and commitment to keeping Vermont’s roadways safe for all users.



**GO ORANGE DAY.** As part of National Work Zone Awareness Week in mid-April, AOT employees are encouraged to wear orange to raise awareness for work zone safety. Staff at the VTrans Training Center joined others throughout the Agency in donning their best orange outfits to show their proud support.

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 the preparation and maintenance of a state bridge inventory. The NBIS applies to all long structures located on public roads; VTTrans has elected to include short structures in our inventory, as well. Short and long structures are defined below.

## “Highway” Structure Population (as submitted to FHWA in March 2022)

	Interstate	State Highway	Town Highway	Other	Totals
Long Structures	314	815	1673	7	2809
Short Structures	204	1056	*	*	1260
Totals	518	1871	1673	7	4069

### DEFINITIONS

#### Long Structure

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

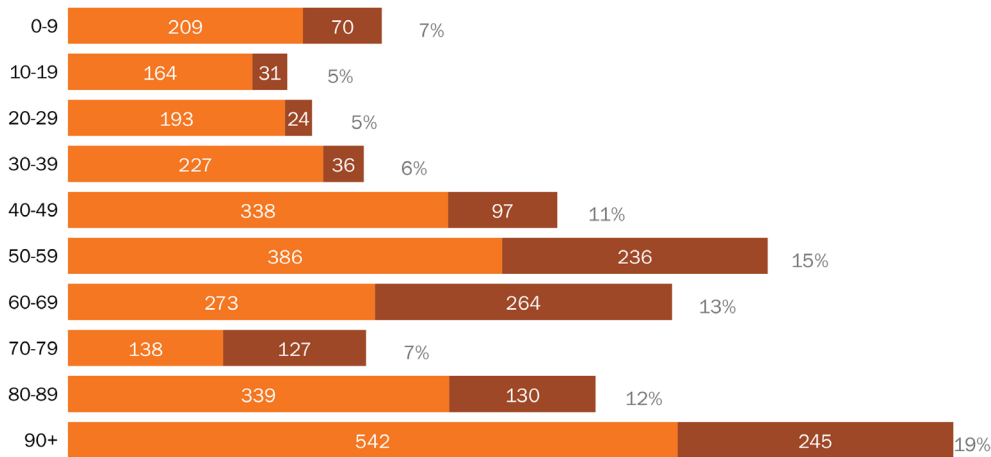
#### Short Structure

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

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

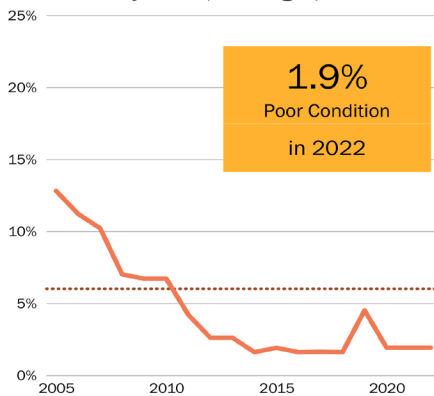
## Structure Count by Age (in years)

Structure Type ● Long ● Short

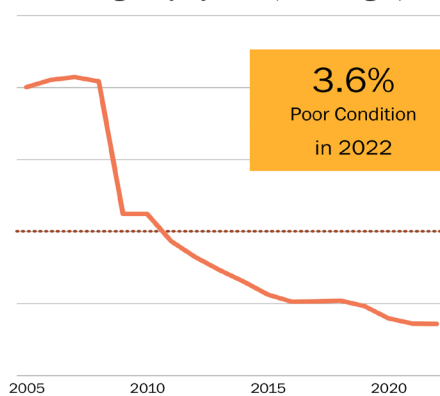


## Percent in Poor Condition Over Time by System

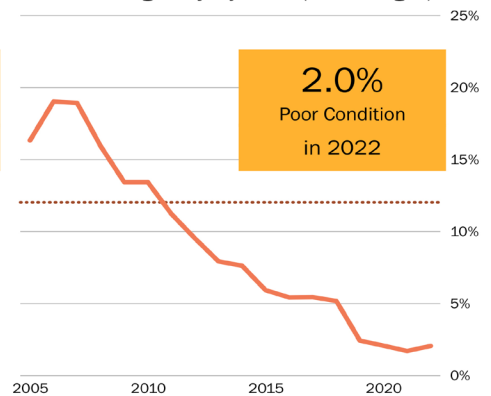
Interstate System (6% target)



State Highway System (10% target)



Town Highway System (12% target)





### 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

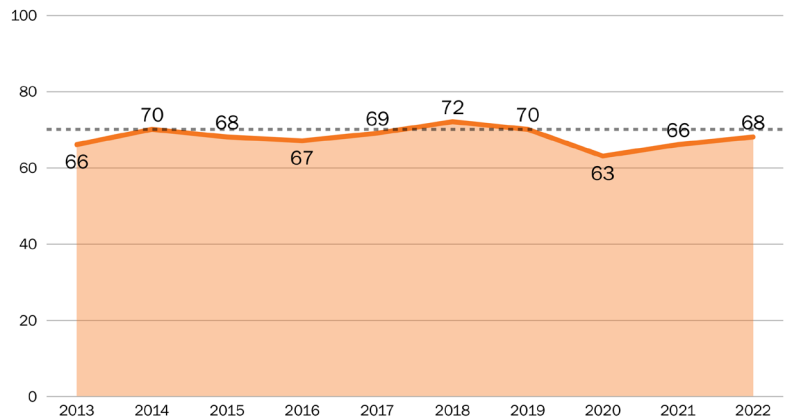
**Poor**

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

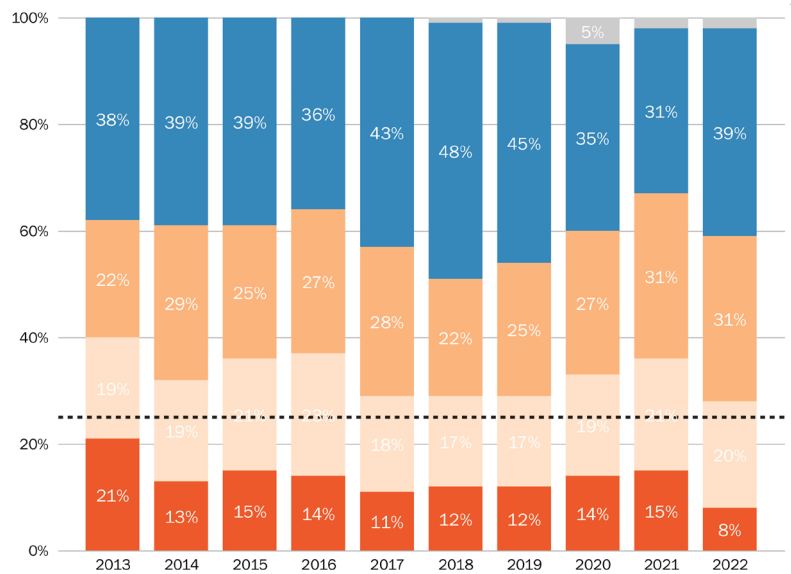
**Very Poor**

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



Conditions Over Time, Unweighted\*

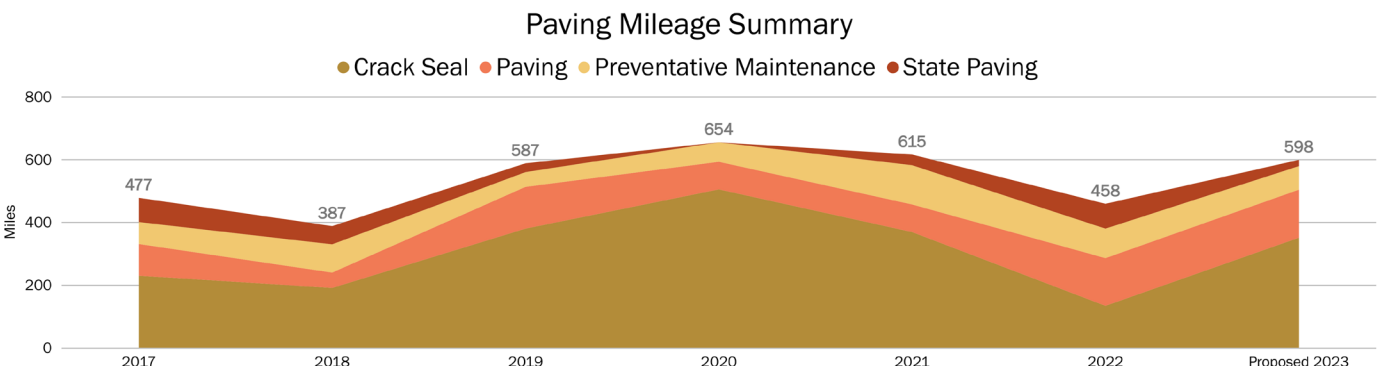


\*Gray bars represent data not available at time of publication.

### Paving Mileage Maps

Paving mileage maps are available through VTransparency, the Agency’s public information website, at <https://vtransparency.vermont.gov/>.

### Paving Mileage Summary (Two-lane miles, rounded to the nearest mile)





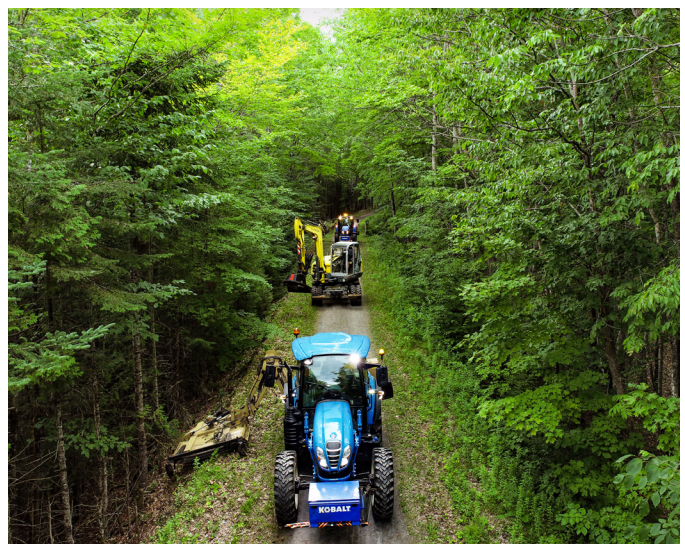
**MIDDLEBURY.** As part of the renewed Amtrak service between NYC and Burlington, new train platforms were built for stops in downtown Middlebury and Ferrisburgh-Vergennes, where the old train depot was also fully restored.



**STATE AIRPORTS.** AOT opens up the State airports for many other uses to support federal, state, and local programs. Franklin County State Airport in Highgate played host to first responders from around Vermont to help facilitate proper safety training.



**BERLIN.** Vermont's state airports serve other forms of aviation in addition to powered aircraft. The Vermont Civil Air Patrol holds annual summer camps offering youth pilots training for gliders, which is often the first solo flight for many.



**RAIL TRAILS.** Maintaining almost 150 miles of rail trails is a challenge. Summer months are spent cutting back vegetation in large swaths to keep the trails wide and clear for users to be able to see clearly and avoid tall grasses, obstructing tree limbs, and other hazards.

# 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; and provides statewide planning and policy support, including research, development review, mapping, outreach, and environmental policy and sustainability.

## Director

Michele Boomhower

## SFY 2023 Staff

Total: 75

## SFY 2023 Funding

Total Appropriation: \$106M



**ADDISON.** Amtrak crews completed many practice runs for the Ethan Allen Express along the rail corridor throughout the spring and summer in preparation for its launch in July 2022.

## PERFORMANCE & ASSETS

<b>Rail</b>	 40 Rail Projects Completed in 2022	 93 Total Miles in the Lamoille Valley Rail Trail Upon Completion	 91K Passenger Rail Ridership, Vermont Stations, FFY22
<b>Aviation</b>	 \$2.2M Grant Awards FFY22 (Federal Share)	 6 Aviation Projects Completed in 2022	 11,824 Cape Air Rutland Passenger Service Ridership, FFY22
<b>Public Transit</b>	 3.54M Public Transit Ridership	 \$35.21M Federal Funds Invested in Statewide Transit Program	 27 Number of e-Buses Funded
<b>Research, Permitting, Planning, and Mapping</b>	 6 Research Projects Completed	 324 Commercial Highway Access Permits Issued	 1 Corridor Plans Completed
<b>Environmental Policy and Sustainability</b>	 583 New Plug-in Electric Vehicles Incentivized, FFY22	 228 Used Fuel-Efficient Vehicles Incentivized, FFY22	 279 Electric Bikes Incentivized, FFY22
		 \$2.67M Total Incentive Funds Issued, FFY22	 81% Total Incentive Funding Directed Towards Households with Lower Incomes, FFY22

Note: All data is from State Fiscal Year 2022 (SFY22), 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: 21,462  
 Vermonter: 69,481  
 Total: 90,943

### Passenger Rail Service

The State of Vermont partners with Amtrak and the states of New York, Massachusetts, and Connecticut to provide the following intercity passenger rail services:

**Vermonter:** Provides service between St. Albans and Washington, DC. Traveling along the New England Central Railroad in Vermont and New Hampshire, the Vermonter travels through Massachusetts and Connecticut, joining the Northeast Corridor at New Haven. Major city stops include New York City, Philadelphia, and Baltimore before terminating in Washington, DC.  
[www.amtrak.com/vermonter-train](http://www.amtrak.com/vermonter-train)

**Ethan Allen Express:** Provides service between Burlington and New York City. Traveling along the Clarendon and Pittsford Railroad (CLP) from Rutland to Whitehall, New York, the Ethan Allen Express travels along the western corridor of Vermont to Castleton before heading west along the Hudson Valley of New York to Albany, where it joins the Empire Corridor into New York City.  
[www.amtrak.com/ethan-allen-express-train](http://www.amtrak.com/ethan-allen-express-train)

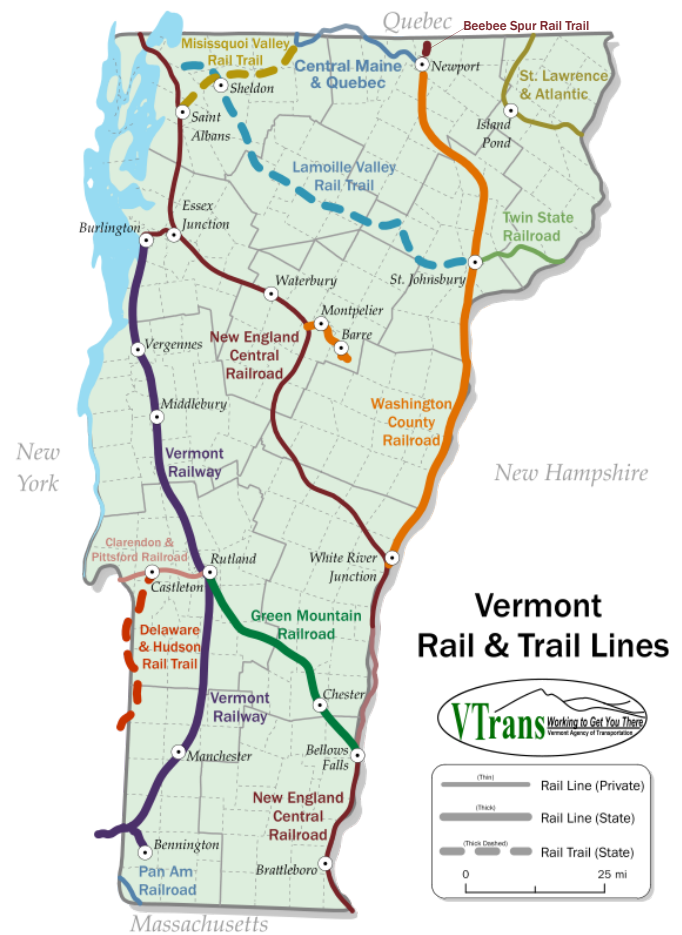
#### FY2022 Amtrak Ridership and Revenue

Lines	Ridership	% Change	Revenue	% Change
Vermonter	87,276	+369.5	\$2,782,334	+115.9
Ethan Allen Express	63,360	+460.9	\$1,599,580	+138.4

### Rail

Rail continues to advance projects associated with the federal BUILD grant that was received in 2019. A total of 31 bridge projects are associated with this \$20 million federal grant from the U.S. DOT Better Utilizing Investments to Leverage Development (BUILD) program. The projects include improvements for a freight capacity of 286,000 pounds along 53 miles of the Vermont Railway from Rutland to Bennington, and onto Hoosick, New York. Funding will support several years of design and construction into 2025. The improvements will reduce truck traffic along U.S. Route 7 and adjacent highways, enable the expansion of intercity passenger rail, and ensure good condition for the rail bridges for the next 75-100

years. The third phase of construction is scheduled to begin in the 2023 season. Rail is also working on the preliminary design for a track replacement project along the same section of the corridor to help improve safety for freight movements. The Agency is exploring funding opportunities to assist in the cost of a future construction project. AOT is also continuing to do preliminary design work on other rail corridors such as the Green Mountain Railroad and the Washington County Railroad to upgrade the bridges to 286,000 pounds capacity.



## Aviation

The Aviation Program manages 90 runway lane miles at ten 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.

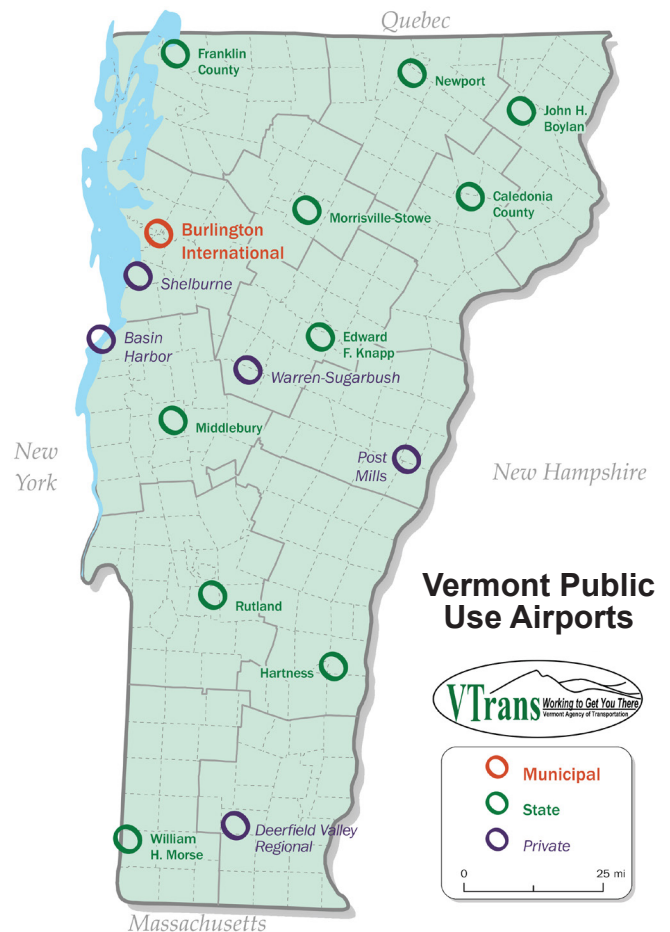
The Agency has awarded a contract and will begin construction of the next project at Franklin County Airport to reconstruct the existing 3,001-foot runway and widen the existing runway from 60 feet to 75 feet. The project will be completed during the 2023 construction season. AOT is also continuing the design for the next phase of the Franklin County Airport project, which will extend the runway by 1,000 feet, making the total runway length 4,001 feet. The Agency began the design phase for a runway reconstruction project at the Springfield Airport to improve the surface condition and safety areas. Tree clearing within aviation flight paths continued at many airports; this FAA requirement must be fulfilled in order to apply for federal grants. Master planning efforts were expected to be completed in Middlebury and Rutland, as well as an update of the Knapp Airport Master Plan.

### FRANKLIN COUNTY STATE AIRPORT TREE OBSTRUCTION REMOVAL (HIGHGATE AV-FY21-014)

This project removed approximately 16.1 acres of obstruction trees on the approach surface to Runway 19 on existing aviation easements and airport property and allowed certification of free and clear 20:1 clearance surface to Runway 19 to the FAA. The project aims to maintain safe aircraft traffic around the airport facility, and removal of the obstructions was completed on-time under frozen ground conditions with stump herbicide application to prevent future growth in the Runway 19 approach surfaces. JP Sicard was awarded the IDIQ contract for Right-of-Way clearing. The overall design, permitting, and construction project cost was approximately \$1.2 million. AOT will apply for a reimbursable FAA grant in Spring 2023 for a portion of the project cost.



**NORTH CLARENDON.** A bird's-eye-view of Rutland Southern Vermont Regional State Airport.



### Vermont Public Use Airports



- Municipal
- State
- Private

0 25 mi

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

**Planning Projects Highlights**

**State Rail Plan**

A short- and long-range plan to improve Vermont’s state rail network for freight and passenger rail. The Plan is required to ensure that Vermont continues to remain eligible for various Federal Railroad Administration passenger rail grants.

**State Freight Plan**

A short- and long-range plan to maintain and improve Vermont’s highway, airport and railway freight infrastructure and operating conditions. The Plan is required in order to obligate approximately \$32 million in federal highway freight dollars.

**State Airport System Plan**

A 10-year policy plan to guide the development of Vermont’s public use airports. The Plan is required by the Federal Aviation Administration, which serves as the policy basis for federal airport grants.

**Regional Planning**

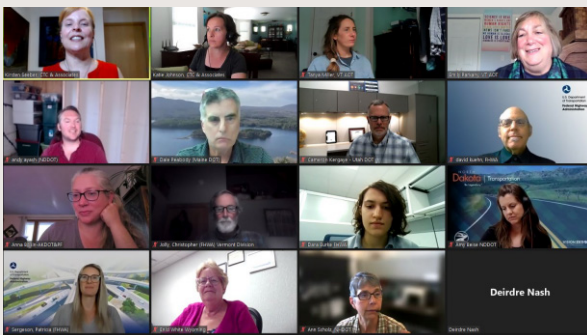
Through the Transportation Planning Initiative (TPI), the Agency provides grants to Vermont’s 11 Regional Planning Commissions (RPCs) for transportation planning and to facilitate collaboration between municipalities and the Agency.

More information at <https://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>243</b> Municipalities actively engaged in regional transportation planning	<b>57</b> # of Coordination activities in support of public transit	<b>50%</b> TPI budget spent on municipal technical assistance.	<b>63</b> Municipal transportation related feasibility/project definition studies completed/undertaken	<b>126</b> Municipalities assisted with transportation related grants

**RESEARCH**

The Research section assures oversight of the agency research program including managing externally-conducted research projects and representing the State on regional and national research efforts in order to fulfill the federal mandate to manage transportation research that benefits Vermont. In 2022, Research hosted a hybrid (in-person and virtual) Research and Innovation Symposium that featured 27 projects spanning Materials, Structures and Construction, Asset Management and Maintenance, and Planning and Safety. More information is available at <https://vtrans.vermont.gov/planning/research>.



**EIGHT-STATE VIRTUAL RESEARCH PEER EXCHANGE**

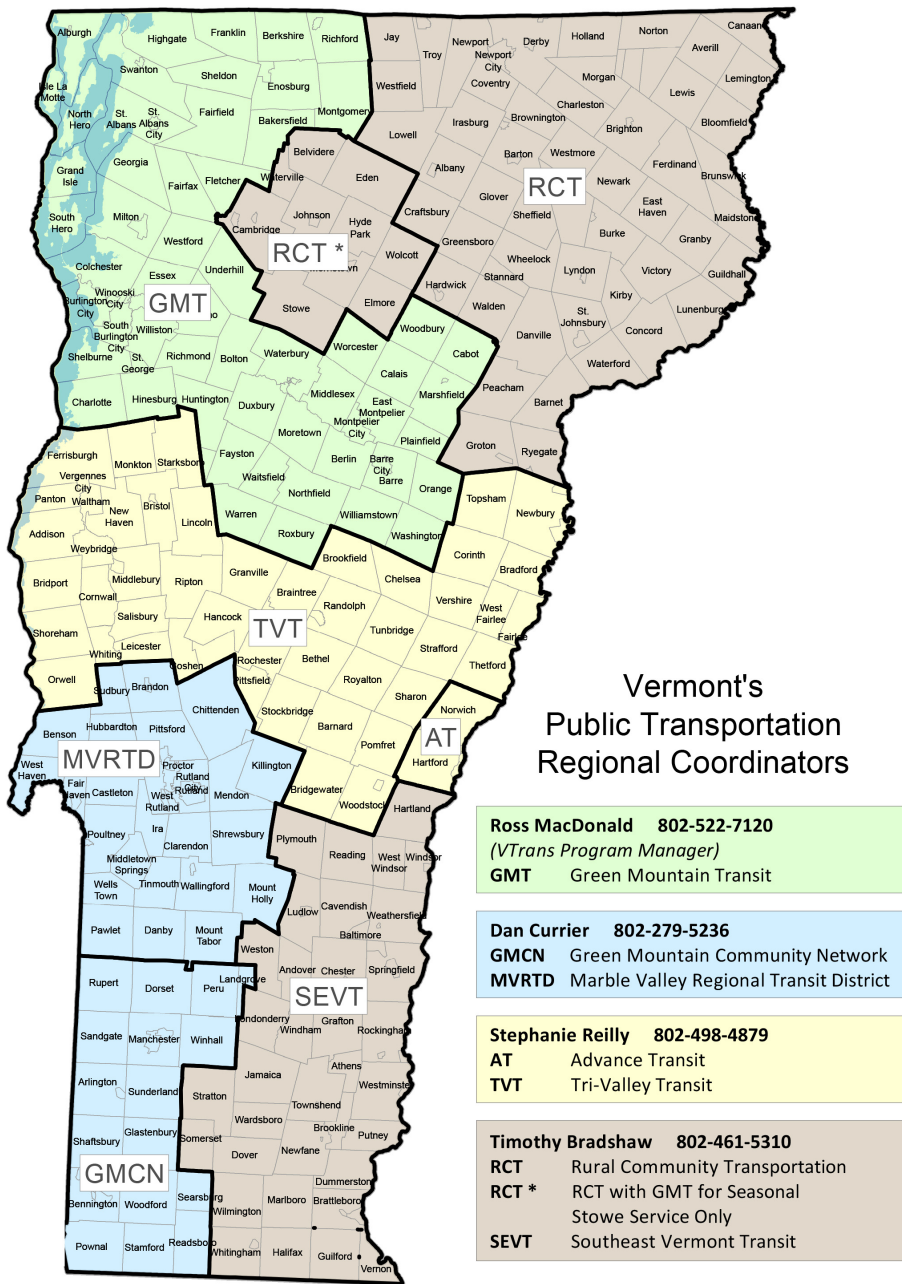
AOT hosted a FHWA-required Research Peer Exchange with 7 other states and FHWA covering interactions with materials staff, qualitative and quantitative research evaluation, and leadership engagement.



**DYNAMIC CONE PENETROMETER (DCP) DATA ANALYSIS**

This small research project synthesized and analyzed data collected related to six pavement construction projects. The study found that DCP is a reliable, low-cost tool for assessing pavement layers and should be used after roadway bases have stabilized.

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 older adults and people with disabilities, and intercity bus services. Transit services provide vital access to communities, local businesses, educational institutions, employment, national bus connections, adult day services, medical services, and tourism destinations. For a list of all public transit providers visit [www.connectingcommuters.org/bus-info](http://www.connectingcommuters.org/bus-info).



Map Produced by the Vermont Agency of Transportation Mapping Section - 6/29/2020

### Electric Buses

The Agency's Public Transit Program is dedicated to electrifying the transit fleet as quickly as available funding allows. The testing, procurement, and operation of a variety of electrified transit vehicles is underway, and the Agency is assembling the case studies and metrics necessary to ensure electric transit vehicles are capable of maintaining the routes and services currently in place. AOT has received six federal awards and one award from the Volkswagen Settlement to purchase 27 electric buses along with the associated charging and utility infrastructure. To date, AOT has received grants totaling \$16,178,534, with the largest award in 2022 (\$9,151,125). The State and its public transit organizations have provided the non-federal match (\$2,827,641) to purchase these fully electric transit buses.

### Demand Response Transportation

Demand Response, formerly the Elders and Persons with Disabilities Transportation (E&D) program, is provided throughout the state. While many towns are not served by traditional transit routes, all Vermonters can use this eligibility-based mobility service. This program operates in conjunction with the Non-Emergency Medical Transportation Medicaid Program, and AOT has piloted programs to better serve non-eligible requests with the Rides to Wellness, and the Recovery and Job Access programs. Demand response services carry more than 550,000 passengers per year, with volunteer drivers accounting for a large percentage of those trips. The pandemic resulted in a reduction in the number of volunteers available for this service, and the agency is addressing this issue with a statewide outreach and marketing campaign to regain and grow our volunteer driver (now called "Community Driver") capacity.

### Ridership Trends

The pandemic had different effects on different types of services. Tourism routes and commuter routes were decimated by the pandemic, with many services losing 80% or more of their riders in FY21. Regular local bus routes and shopping shuttles were affected less, with ridership losses of 50% or less. In FY22, routes oriented toward shopping recovered more quickly than those oriented toward commuting. Tourism routes made a healthy comeback in FY22 and are projected to do well in FY23. Overall, ridership has rebounded to roughly 80% of pre-pandemic levels and is projected to keep rising throughout SFY'23.

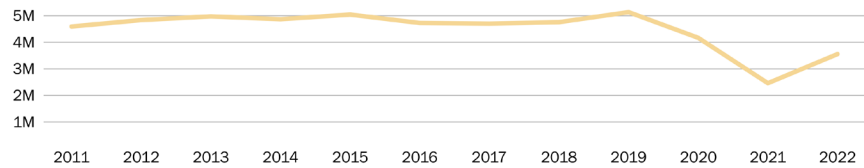
### Microtransit

This real-time on-demand transit service mode has been considered by every public transit provider in the state. With the initial pilot, MyRide by GMT in Montpelier, moving into its third year, Vermont is poised to further explore the value of this form of transit service. During the past year, there were 12 feasibility studies and five microtransit pilot awards. Those awards were granted with a goal of testing this service in a wide array of communities (Morrisville, Manchester, Windsor, Barre, and Rutland) to determine the best fit for microtransit in Vermont.

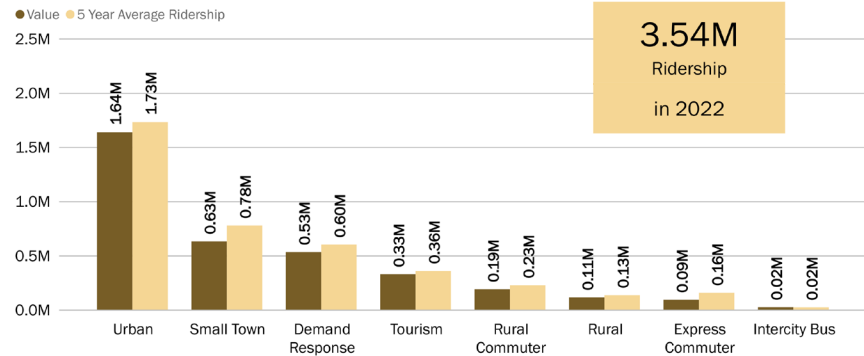
### Mobility and Transportation Innovation Grant Program (MTI)

Enabled by the Legislature with the passage of the 2020 Transportation Bill (Act 121), the MTI program is designed to support innovative strategies and projects that improve mobility and access to services for transit-dependent Vermonters, reduce the use of single occupancy vehicles, and reduce greenhouse gas emissions. The grant applications are open to municipalities, local or regional planning agencies, transit agencies, school districts or schools, non-profit organizations, and citizen groups focused on providing public transportation resources and access. In FY22, seven projects were awarded \$331,150 to address a range of issues and opportunities including advancing transportation equity, assessing new

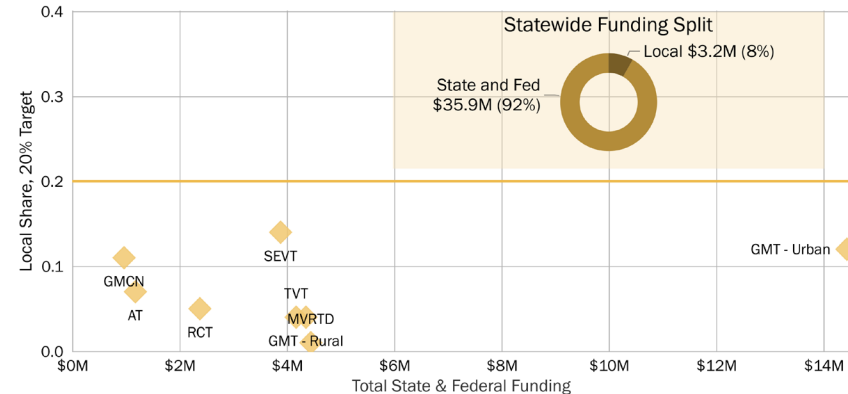
Ridership Trend



Ridership by Service Category vs 5 Year Average



Total Funding and Local Share



third-party services, and community involvement and assistance with the microtransit pilot in Montpelier. A full list of MTI activities can be found at <https://vtrans.vermont.gov/public-transit/mti>.

### Transportation Demand Management (TDM)

In addition to the MTI grant program, Public Transit’s “Go! Vermont” program operates and supports transportation demand management activities throughout the state. This program is designed to be a “one-click/one-call” resource for Vermonters who want to reduce the financial and environmental impacts of driving alone. Services include a multi-modal trip planner, automated vehicle location app for real-time bus location information, and links to Vermont’s bus providers and routes. Go! Vermont also offers employers assistance in helping their workers commute to their jobs, including carpool matching, vanpools, and employer advocacy communications. This program also promotes volunteer drivers, the E&D program, and Guaranteed Ride Home (GRH), a benefit for bus riders, vanpoolers, and carpoolers. If someone faces an unforeseen change of plans such as a work-related or family emergency that prevents them from taking the bus or traveling via a carpool, GRH reimburses travel fees up to \$70.





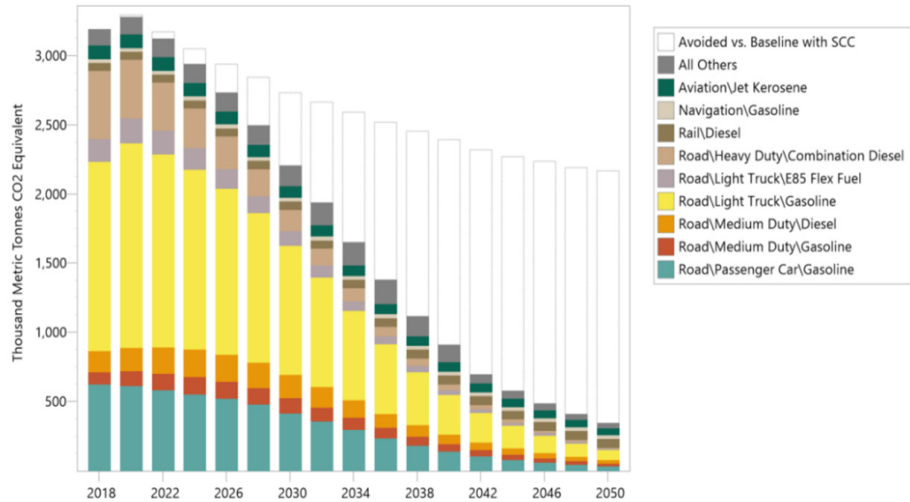
**GO! VERMONT.** Since partnering with the Transit App in 2020, Go! Vermont has helped thousands of Vermonters find transportation with a real-time bus locator and trip planning tool. In 2022, Go! Vermont gave users a free upgrade to the Transit Royale app, which offers additional features, customization options, and complete access to the app across more than 300 cities supported worldwide.

The Environmental Policy and Sustainability Program (EPS) is a newly created program committed to developing policy and implementing solutions that minimize climate and environmental impacts from transportation. In addition to vehicle electrification efforts summarized in the Accomplishments Section, the EPS Program currently focuses on carbon reduction and resilience.

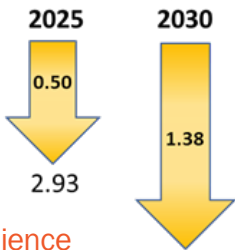
**Carbon Reduction**

Per the requirements of the IJIA Carbon Reduction Program, AOT has developed a scope of work and contracted with Cambridge Systematics, Inc. for development of the AOT Carbon Reduction Strategy (CRS). The CRS will prioritize funding towards projects that most cost effectively reduce transportation emissions. The consultant team has developed a draft concept tool to quantify the impacts on GHG emissions from projects included in the SFY 23 program. The tool will be refined and applied to the SFY 24 program for presentation early in the 2023 legislative session. Stakeholder and public engagement will occur through the first half of 2023 and a draft Strategy will be developed by early fall 2023.

Transportation Emissions Mitigation Scenario Avoided vs. Baseline  
100 Yr GPW, Point of Emissions and Indirect Allocated to Demand



**Transportation GHG Reduction Requirements (MMTCO2e)**



**Transportation Key Indicators for 2025 and 2030**

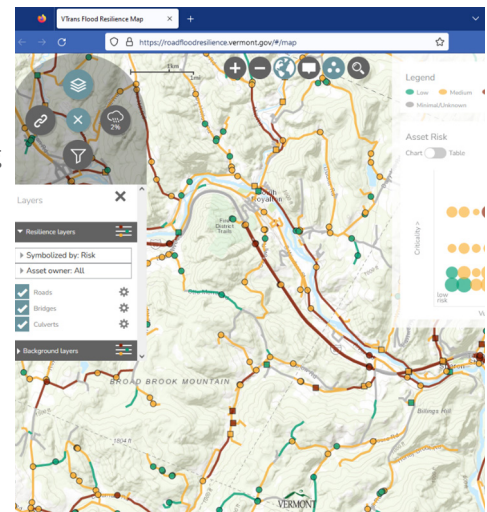
Transportation	2025	2030
Number of EVs	27,000	126,000
EV Share of Sales	17%	68%
VMT Reduction from Baseline	1.9%	3.5%
EV share of VMTs	5%	23%
EV Managed Charging	27%	50%

Pathways Analysis Report\_Version 2.0

**Resilience**

The IJIA Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Formula Program serves to help make surface transportation more resilient to natural hazards. AOT is developing a Resilience Improvement Plan to guide PROTECT investments which, once approved by FHWA-VT, will reduce the non-federal match for resilience improving projects. The resilience plan and supporting PROTECT funding provide a significant opportunity for AOT to proactively implement projects, including those that use natural infrastructure, to address highly vulnerable components of the transportation system.

The Transportation Resilience Planning Tool (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 including the repeat damage information provided in the Part 667 Report. The TRPT was initially developed and tested in three pilot watersheds in 2017, and, as of 2022, covers the entire state. A statewide training effort is underway to provide training on the TRPT to a wide variety of users, including District staff, project designers, local municipalities, and regional planners. The TRPT will be used to inform transportation corridor plans, tactical basin plans, project scoping, capital programming and hazard mitigation planning for state and local highways.



## Statewide Rail Trails

On July 1, AOT became responsible for the operations and maintenance of four rail trails: the Beebe Spur (BSRT, 6 miles), the Delaware and Hudson (DHRT, 19 miles), the Missisquoi Valley (MVRT, 26 miles), and the Lamoille Valley (LVRT, 93 miles), for a total of 149 miles of rail-banked trails. This milestone came after decades of planning and coordination between the State, VAST, RPCs, and countless other organizations and volunteers that helped to get the LVRT to where it is today: a nationally recognized asset for multi-use transportation, recreation, tourism, and economic development. The Agency is responsible for local and regional coordination, maintenance, marketing, communications, and general oversight. These trails are all-season and serve as economic drivers for many communities. In warmer months, the trail can be used for walking, jogging, hiking, cycling, and horseback riding. Local snowmobile clubs maintain and groom the trail in winter for snowshoeing, Nordic skiing, snowmobiling, and dog sledding.

### Lamoille Valley Rail Trail (LVRT)

#### MANAGEMENT PLAN

The Agency completed the first comprehensive Long Range Management Plan for the LVRT. The Management Plan identifies ways that the LVRT can spur or complement economic development efforts, improve user experience, provide connections to other existing and planned facilities, connect to communities along its length, and offer a range of transportation options, while establishing necessary asset maintenance and operational procedures to ensure the trails continued enjoyment for years to come.

#### COMMUNITY GRANT PROGRAM

The Agency is working with communities along the trails to maximize use and economic benefit. Thanks to Senator Sanders' Federal Earmark enabling legislation, the Agency was able to develop the LVRT Community Grant Program, a funding opportunity for municipalities along the LVRT to improve trail amenities and visitor experience. Ten towns were awarded a total of \$697,030.40.

#### CONSTRUCTION

The design and permitting of the LVRT began in 2009. The trail conversion work included clearing and grading, drainage remediation, bridge replacements and rehabilitation, sign installations, and crossing improvements. The Vermont Association of Snow Travelers (VAST) began construction in 2014 with the segment from St. Johnsbury to Danville, completed in 2015. The segment from Morristown to Cambridge was completed in 2017 with the replacement of Bridge 68 in Cambridge. VAST completed approximately 33 miles of trail, funded with 80 percent federal dollars through AOT, with the remaining amount from town assistance, private donations, and VAST's own investment.



A new rail trail bridge was installed over VT Route 15 to connect segments of the LVRT in Walden.

The Agency assumed responsibility for construction of the remaining 49 miles of trail in 2018. The remaining construction includes the rehabilitation of 37 bridges, several hundred culverts, and approximately 20 cattle passes; repairs to approximately 50 embankment washouts; and dozens of roadway crossings. In 2020, funding for the completion of the LVRT under an accelerated schedule was approved due to the tremendous efforts of Governor Phil Scott. Governor's FY2021 budget allocated \$2.8 million toward the construction of the LVRT. This funding was matched by \$11.3 million in federal funds.

In summer 2021, an additional segment opened between Sheldon and Swanton expanding the trail to a total of 45 miles of completed trail. The majority of the remaining work was completed in fall 2022 and included a priority bridges contract and three segments of trail.



Completed LVRT bridge in Wolcott.



New trail bridge in Greensboro Bend.

## 2022 Boards and Councils

**Transportation Board**

John Zicconi  
*Executive Secretary*

David Coen  
*Chair*

Richard Bailey  
Wendy Harrison  
Timothy Hayward  
Pam Loranger  
Mark Nicholson  
Philip Zalinger

**Motor Vehicle Arbitration Board**

John Zicconi  
*Lemon Law Administrator*  
(802) 828-2943  
LemonLaw@vermont.gov

David Baker, Chair  
*Technician Member*

Michael Loschiavo  
*New Car Dealer Member*

Gina Germond  
*Citizen Member*

Peter Hood, Vice Chair  
*Citizen Member*

Vacant  
*Citizen Member*

**Alternates**

Vacant  
*Technician 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*

Caleb Grant  
*Rural Community Transportation*

Jim Moulton  
*Tri Valley Transit*

Terence White  
*Green Mountain Community Network*

Jon Moore  
*Green Mountain Transit*

Jenney Samuelson  
*Secretary, Agency of Human Services*  
Kelly Dougherty, Angela Smith-Dieng,  
and Stephanie Beck are her designees

Michael Harrington  
*Commissioner, Department of Labor*

Lindsay Kurrle  
*Secretary, Agency of Commerce and  
Community Development*  
Richard Amore is designee

Peter Johnke  
*Vermont Center for Independent Living*

Brenda Siegle  
*Council of Vermont Elders (COVE)*

John Sharrow  
*Mountain Transit*

Chip Desautels  
*Premier Coach*

Devon Neary,  
*Vermont Assoc. of Planning and  
Development Agencies (VAPDA)*

Meredith Birkett  
*Village Manager, Town of Johnson*

Lucas Herring  
*Barre*

Senator Jane Kitchel, Caledonia

Rep. Mollie Burke, Windham

Gwynn Zakov  
*Vermont League of Cities and Towns*

**Aviation Council**

Joe Flynn  
*Secretary, Agency of Transportation, Chair*

Chris Carrigan  
Paul Carroccio  
Kyle Clark  
Cliff Coy  
Steven Dolgin  
Robert Flint  
Bill Hanf  
Jamie Hildebrandt  
Nicholas Longo  
Douglas White

**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  
Arthur Whitman  
David Wulfson

**Vermont Traffic Committee**

Joe Flynn  
*Secretary, Agency of Transportation, Chair*

Jennifer Morrison  
*Commissioner, Department of Public Safety*

Wanda Minoli  
*Commissioner, Department of Motor  
Vehicles*

# Projects Completed in 2022

## Rail Maintenance Projects Completed

Project Name & Number	Line	DOT Crossing #	Project Type	Asset
Alburgh, VT Route 78	NECR	171-041A	Maintenance	Crossing
Arlington, Old Depot Rd.	VTR B&R	851-178X	Maintenance	Crossing
Barre City, Blackwell St.	WACR M&B	837-344D	Maintenance	Crossing
Barre City, Websterville Rd.	WACR M&B	837-363H	Maintenance	Crossing
Barre City, Willey St.	WACR M&B	837-339G	Maintenance	Crossing
Berlin, US Route 302	WACR M&B	837-334X	Maintenance	Crossing
Burke, Hayden Xing	WACR Conn	850-914U	Maintenance	Crossing
Cavendish, Depot St.	GMRC	859-848P	Maintenance	Crossing
Cavendish, Mountain View Rd	GMRC	859-847H	Maintenance	Crossing
Dorset, Mad Tom Rd.	VTR B&R	851-219A	Maintenance	Crossing
Ferrisburgh, US Route 7	VTR North	851-375L	Maintenance	Crossing
Ludlow, E. Hill Rd.	GMRC	859-853L	Maintenance	Crossing
Lyndon, Broad St.	WACR Conn	850-919D	Maintenance	Crossing
Lyndon, Depot St.	WACR Conn	850-917P	Maintenance	Crossing
Lyndon, Hill St.	WACR Conn	850-918W	Maintenance	Crossing
Lyndon, Memorial Dr.	WACR Conn	850-920X	Maintenance	Crossing
Manchester, Richville Rd.	VTR B&R	851-200H	Maintenance	Crossing
Milton, McMullen Rd.	NECR	247-328P	Maintenance	Crossing
Pittsford, Whipple Hollow Rd.	CLP	837-138R	Maintenance	Crossing
Pittsford, Whipple Hollow Rd.	CLP	837-139X	Maintenance	Crossing
Richmond, Cochran Rd.	NECR	247-319R	Maintenance	Crossing
Royalton, Royalton Hill Rd.	NECR	247-559X	Maintenance	Crossing
Rutland, Depot Ln.	CLP	248-925A	Maintenance	Crossing
Rutland, Forest St.	VTR North	851-292X	Maintenance	Crossing
Rutland, S. Main St.	GMRC	851-286U	Maintenance	Crossing
Rutland, West St.	VTR North	851-293E	Maintenance	Crossing
Shelburne, Champlain Dr.	VTR B&R	851-409D	Maintenance	Crossing

## Programmed & Emergency Rail Projects and Rail Trail Projects

Project Name & Number	Line	DOT Crossing #	Project Type	Asset
Arlington VTRY(23), Bridge 59.5	VTR B&R		Programmed Project	Bridge
Arlington VTRY(24), Bridge 61	VTR B&R		Programmed Project	Bridge
Barre City STP 6000(30), Berlin St.	WACR M&B	837-342P	Programmed Project	Crossing
Burlington PLAT(3)	VTR North		Programmed Project	Platform
Burlington STP 2035(15) C/2, College St.	VTR North	837-102H	Programmed Project	Crossing
Burlington STP 2035(27), King St.	VTR North	837-101B	Programmed Project	Crossing

## Programmed & Emergency Rail Projects and Rail Trail Projects (continued)

Project Name & Number	Line	DOT Crossing #	Project Type	Asset
Burlington STP 2035(28), Maple St.	VTR North	837-100U	Programmed Project	Crossing
Burlington VTRY (51)	VTR North		Programmed Project	Track
Burlington VTRY (52)	VTR North		Programmed Project	Track
Burlington VTRY(50)	VTR North		Programmed Project	Switches
Manchester VTRY(28), Bridge 72.5	VTR B&R		Programmed Project	Bridge
Montpelier STP 6400(30), Pioneer St.	WACR M&B	837-327M	Programmed Project	Crossing
Rutland-Burlington VTRY (54)	VTR North		Programmed Project	Track
Sheldon SWRT(3)	MVRT		Programmed Project	Rail Trail
St. Johnsbury WCRL(24), Bridge 538	WACR Conn		Programmed Project	Bridge
Swanton - St. Johnsbury STP LVRT(10)	LVRT		Programmed Project	Bridge
Swanton - St. Johnsbury STP LVRT(11)	LVRT - Cambridge to Sheldon		Programmed Project	Rail Trail
Swanton - St. Johnsbury STP LVRT(12)	LVRT - Hardwick to Morrystown		Programmed Project	Rail Trail
Swanton - St. Johnsbury STP LVRT(13)	LVRT - Danville to Hardwick		Programmed Project	Rail Trail

## Aviation Projects Completed

Airport	Project Name	Project Type	Asset
E.F. Knapp, Berlin	Environmental Assessment	FAA Airport Improvement Program	Airport
E.F. Knapp, Berlin	Obstruction Study	FAA Airport Improvement Program	Airport Safety
Franklin County, Highgate	Obstruction Removal - North	FAA Airport Improvement Program	Approach Surfaces
Rutland-Southern Regional, Clarendon	Master Plan Update	FAA Airport Improvement Program	Airport
Rutland-Southern Regional, Clarendon	Aircraft Rescue Fire Fighting - Firefighter Suits	FAA Airport Improvement Program	Equipment
Statewide	Pavement Maintenance - 2022	FAA Airport Improvement Program	Airfield Pavements

## Aviation Projects Underway

Airport	Project Name	Project Type	Asset
E.F. Knapp State, Berlin	Master Plan Update	FAA Airport Improvement Program	Approach Surfaces
Franklin County State, Highgate	Avigation Easements	FAA Airport Improvement Program	Approach Surfaces
Franklin County State, Highgate	Runway & Taxiway Extensions	FAA Airport Improvement Program	Runway & Taxiway
Franklin County State, Highgate	Reconstruct & Widen Runway and Lighting Improvement	FAA Supplemental Grant	Runway
Hartness State, Springfield	Avigation Easements	FAA Airport Improvement Program	Approach Surfaces
Hartness State, Springfield	Reconstruct Runway	FAA Airport Improvement Program	Runway
Middlebury State, Middlebury	Master Plan Update	FAA Airport Improvement Program	Airport
Middlebury State, Middlebury	Obstruction Removal Phase 2	FAA Airport Improvement Program	Airport Safety
Middlebury State, Middlebury	Replace Fuel Farm	Capital Program	Fuel Systems
Morrisville-Stowe State, Morrystown	Install Fuel Farm	Capital Program	Fuel Systems
Morrisville-Stowe State, Morrystown	Extend Taxiway & Expand Apron	FAA Airport Improvement Program	Taxiway & Apron

### Aviation Projects Underway (continued)

Airport	Project Name	Project Type	Asset
Northeast Kingdom International, Coventry	Replace General Aviation Terminal	Northern Border Regional Commission	Terminal
Rutland-Southern Regional, Clarendon	Rehabilitate Apron	Capital Program	Apron
Rutland-Southern Regional, Clarendon	Rehabilitate Runway	FAA Supplemental Grant	Runway
William H. Morse State, Bennington	Rehabilitate Apron	Capital Program	Apron
Statewide	Pavement Maintenance - 2023	FAA Airport Improvement Program	Airfield Pavements
Statewide	Hangar Master Permitting	Capital Program	Airports

### Highway Projects Substantially Completed

Project Name & Number	Route Number	Description of Work
ALBURGH NH FPAV(59) & SWANTON NH FPAV(58)	US 2	Pavement Resurfacing
BARRE CITY STP 6000(30)		Railroad Crossing Improvements
BERLIN IM DECK(42) IM DECK(43) IM DECK (44) IM DECK (45)	I-89	Bridge Rehabilitation
BRAINTREE BF 0241(51)	VT 12	Bridge Rehabilitation
BRATTLEBORO-WESTMINSTER IM SURF(69)	I-91	Pavement Resurfacing
BROOKFIELD STP 0241(49)	VT 12	Ledge and Slope Stabilization
BROOKFIELD-MONTPELIER IM SURF(67)	I-89	Pavement Resurfacing
BROWNINGTON-CHARLESTON STP FPAV(53)	VT 5A	Pavement Resurfacing
BURLINGTON STP 2035 (28) & VTRY (50) & STP 2035 (27)	VTRY	Railroad Crossing Improvements
BURLINGTON VTRY(52)		Railroad Track Improvement
CASTLETON STP 0161 (35)	VT 30	Ledge and Slope Stabilization
CHARLOTTE VTRY(15)		Bridge Rehabilitation
CHESTER-SPRINGFIELD STP 2942(1) & STP PS19(4) & STP PS19(5)	VT 10	Pavement Resurfacing
COLCHESTER-ESSEX NH 030-1 (34)	RT 15	Construction of a Shared Use Path
ELMORE ER P20-1(808)	VT 12	Bridge Replacement
FAIR HAVEN-ORWELL STP FPAV(61)	VT 22A	Pavement Resurfacing
FAIR HAVEN-RUTLAND TOWN NHG SIGN(70)	US 4	Sign Replacements
FERRISBURGH NH 019-4 (32)	US 7	Intersection Improvements
HARDWICK STP 037-3(7)	VT 16	Bridge Replacement
HARTFORD STP PC21(4)WOODSTOCK NH PC21(5) STP PC21(3)	VT 14	Pavement Resurfacing
HARTLAND-NORWICH IM 091 (84)	I-91	Pavement Resurfacing
JOHNSON-MORRISTOWN STP 2919(1), STP 2920(1), STP 030-2(35)	VT 100	Roadway Reconstruction
LEICESTER BO 1445(37)		Bridge Replacement
LUDLOW-BRDGWTR STP FPAV(46) & PLYMTH-BRDGWTR STP FPAV(44)	VT 100	Pavement Resurfacing

## Highway Projects Substantially Completed (continued)

Project Name & Number	Route Number	Description of Work
LYNDON STP FPAV(55)	VT 122	Pavement Resurfacing
MIDDLESEX IM 089-2 (50)	I-89	Bridge Rehabilitation
MONTPELIER STP 6400(30)		Railroad Crossing Improvements
MONTPELIER-BERLIN NH DECK(48)	US 2	Bridge Rehabilitation
MORETOWN-MIDDLESEX STP FPAV(57)	US 2	Pavement Resurfacing
PITTSFORD NH 019-3 (491)	US 7	Roadway Reconstruction
PITTSFORD VTRY(12)		Railroad Track Improvement
PITTSFORD-BRANDON NH FPAV(49)	US 7	Pavement Resurfacing
RANDOLPH-NORTHFIELD STP SURF(73)	VT 12A	Pavement Resurfacing
RICHFORD STP CULV(59)	VT 105	Bridge Replacement
RIPTON ER STP 0174 (19)	VT 125	Ledge and Slope Stabilization
RUTLAND-BURLINGTON VTRY(54)		Railroad Track Improvement
RYEGATE-ST. JOHNSBURY IM SURF(70)	I-91	Pavement Resurfacing
SHAFTSBURY STP FPAV(54)	VT 7A	Pavement Resurfacing
SHARON IM 089-1 (64)	I-89	Bridge Rehabilitation
SHELDON SWRT(3)		Bridge Replacement
SOUTH HERO STP HES 028-1(22)	US 2	Bridge Replacement
SPRINGFIELD BF 0134 (43) & SPRINGFIELD BF 0134 (45)	VT 11	Bridge Replacement
ST. JOHNSBURY WCRL(24)		Bridge Rehabilitation
STATEWIDE - NORTHEAST REGION STPG MARK(317)		Pavement Markings
STATEWIDE - NORTHWEST REGION STPG MARK(318)		Pavement Markings
STATEWIDE - SOUTH REGION STPG MARK(319)		Pavement Markings
STOCKBRIDGE-ROCHESTER STP FPAV(42)	VT 100	Pavement Resurfacing
SWANTON-HIGHGATE STP PS22(3)	US 7	Pavement Resurfacing
SWANTON-ST. JOHNSBURY STP LVRT(10)		Construction of a Shared Use Path
SWANTON-ST. JOHNSBURY STP LVRT(13)		Construction of a Shared Use Path
WALDEN STP SCRP(27)	VT 15	Bridge Replacement
WEATHERSFIELD IM 091-1 (69)	I-91	Bridge Rehabilitation
WEATHERSFIELD NH SURF(85) & WEATHERSFIELD STP SURF(80)	VT 131	Pavement Resurfacing
WILLISTON NH 5500(18)	VT 2A	Construction of a Shared Use Path
WILLISTON STP SCRP (17)	VT 2A	Bridge Replacement
WOODSTOCK-HARTLAND NH FPAV(50)	US 4	Pavement Resurfacing



## Municipally Managed Construction Projects Substantially Completed

Project Location	Project Number	Description of Work
Bennington	STP BIKE(26)S	Construction of a bicycle/pedestrian path and new railroad siding track beginning at River Street and extending north to Emma Street
Bradford	ST BP22(1)	Sidewalk replacement on South Main Street (VT 25B), between Cobblestone Alley and South Pleasant Street
Brandon	STP MM18(5)	Construction of 8 bio-swales and upgrade of associated storm piping & catch basins on Park Street (VT-73) in Brandon; also includes resurfacing Park St.
Brownington	STP MM19(16)	River Slope Stabilization along Brownington Branch and Willoughby River on Center Road.
Chester	TAP TA17(9) & STP MM21(2)	Culvert replacement on TH10 Popple Dungeon Road over the South Branch of the Williams River
Colchester	ST BP22(3)	Resurfacing of the Colchester Causeway Path between Airport Park and Mills Point Road
Craftsbury	ER E20-1(909)	Road and slope repairs on Wild Branch Road, between MM 0.98 to MM 1.02
Lyndon	ST BP21(4)	Sidewalk reconstruction on the east side of Elm Street, from Center Street to 34 Elm Street
Milton	ST BP19(23)	Installation of crosswalk signage and ADA warning pads on Herrick Avenue, Middle Road, Bombardier Road, Center Drive.
Milton	ST BP22(5)	600 feet of new sidewalk on Bombardier Road extending to Middle Road.
Norwich	TAP TA19(12)	Replacement of two undersized culverts on Tigertown Road
Pittsfield	STP MM19(14)	New salt shed at the Town Garage on Route 100
Plainfield	STP BP14(3) & STP BP17(7)	Bridge modification to add a sidewalk on Main Street over the Winooski River
Poultney	ST BP19(27)	Upgrade asphalt sidewalk to concrete sidewalk along Furnace Street near Poultney High School.
Rupert	ST BP22(6)	Sidewalk replacement on Rupert Road in the village center.
Shoreham	STP MM18(16)	Culvert replacement at Buttolph Road and Bascom Brook
South Burlington	ST BP18(27)	Bike racks and sign panels installation as part of the Greenride Bikeshare system
South Burlington	ST BP21(7)	RRFB protected crosswalk at intersection of Kennedy Drive and Twin Oaks Terrace
South Burlington	TAP TA20(7)	Replacement of culvert and temporary bridge, and installation of shared use path at Kimball Avenue
St. Albans	TAP TA15(3)	Reconstruction of highway and sidewalks with utility improvements and streetscape on Kingman Street
Statewide Better Roads - Construction		100 Municipal Mitigation projects at various locations statewide
Statewide Grants in Aid		72 Municipalities completed projects to bring their road segments into compliance with the Municipal Roads General Permit.
Stowe	ST BP21(8)	Installation of crosswalk with RRFBs on VT 108 at Barnes Camp Visitor Center
Thetford	ST BP21(9)	Installation of signage and shared lane road markings for cyclists on Route 132, Tucker Hill Road and Academy Road
Warren	ER E20-1(519)	Road repairs and bank reinforcement on Roxbury Mountain Road, between MM 8.20 and 8.30
Wolcott	ER E20-1(844)	Slope repair on North Wolcott Road, between MM 2.80 and MM 3.60

## Municipally Managed Scoping Projects Substantially Completed

Project Name	Project Number	Description of Work
Barnard	STP BP19(8)	Scoping study to identify alternatives to improve connectivity throughout the village center to improve safety and mobility for all users, focusing on the intersection of VT 12, Stage Road and North Road
Bridport	STP MM21(4)	Scoping study for culvert replacement on Middle Road over East Branch Dead Creek
Castleton	TAP TA19(3)	Scoping study to address stormwater from the road as well as the adjacent transfer station and proposed sand/salt shed on Staso Road
Guilford	STP BP20(9)	Scoping study for pedestrian and safety improvements in Guilford Center Village
Middlesex	STP BP20(10)	Scoping study for a walkable Village Center
Pawlet	STP BP20(12)	Scoping study for pedestrian improvements at VT 30 and VT 133 in the Village Center
Pittsford	TAP TA20(9)	Scoping study for sidewalks on Plains Road, Terounzo Road, Pinewoods Road, Arch Street and Mechanic Street
Roxbury	STP BP20(13)	Scoping study to evaluate sidewalk alternatives on VT 12A in the Village
Rutland City	STP BP20(14)	Scoping study for pedestrian & bicycle improvements along Center Steet between Merchants Row & Wales Street
Rutland Town	TAP TA20(10)	Scoping study to analyze pedestrian connectivity possibilites along US Route 7 from 293 North Main Street to intersection of Post Road
St Johnsbury	STP BP18(7)	Study to evaluate alternatives for pedestrian and bicycle travel along Portland Street
Statewide Better Roads - Road Erosion Inventories		22 Road Erosion Inventory projects at various locations statewide
Weston	STP BP18(8)	Scoping study of pedestrian and bicyclist connectivity and safety in Weston Village along VT 100 between Mill Lane and Chester Mountain Road
Whitingham	STP MM20(3)	Scoping study of potential stormwater improvements, along VT100 in the Village of Jacksonville



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