

Vermont Agency of Transportation Annual Accomplishments and Overview

SENATE TRANSPORTATION COMMITTEE

JANUARY 4, 2024

SECRETARY JOE FLYNN

VERMONT AGENCY OF TRANSPORTATION

Highway Division

Highway Division



The Highway Division oversees prioritization, programming, design, engineering and construction projects on the interstate and highway systems; supports municipal projects; manages the safety and needs of the Agency’s highway assets – bridges, culverts, signals, signs, pavement, and more – from budgeting and conceptualization through construction and operation.

SFY 2024 Staff: 333

SFY 2024 Funding:

Total Appropriation \$443.6M

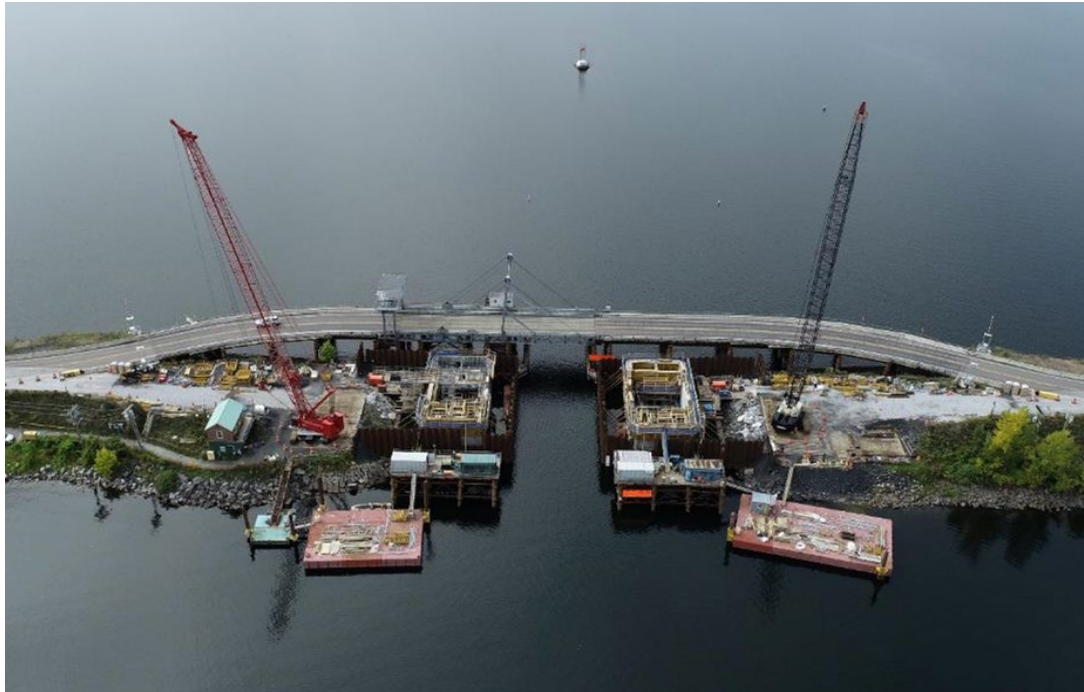
Construction & Materials Bureau	Operations & Safety Bureau	Project Delivery Bureau	Asset Management Bureau
<ul style="list-style-type: none"> • Construction • Materials • Geo-Technical • E-Construction 	<ul style="list-style-type: none"> • Traffic Signal Operations and Intelligent Transportation Systems • Transportation Management Center • Traffic Operations/Mobility • Data Management • Office of Highway Safety 	<ul style="list-style-type: none"> • Structures and Hydraulics • Highway Safety and Design • Right of Way, Utilities, and Environmental • Municipal Assistance 	<ul style="list-style-type: none"> • Budget and Programming • Data Management • Bridge Inspection • Active Transportation • Corridor Management

North Hero – Grand Isle Bridge

U.S. Route 2 Bridge #8 over Lake Champlain

(\$97.1 million drawbridge replacement)

Traffic has been moved to the new structure, and the structure is now fully operational on the roadway and for boating traffic. Work was completed in fall 2023.



Burlington and Winooski Paving Project

U.S. Route 2, U.S. Route 7, and Vermont Route 15

(\$21.4 million estimated project)

This project begins on Shelburne Road in Burlington over the Winooski bridge, extending to East Allen Street. Sidewalk ramps and pedestrian crossing infrastructure will be replaced and upgraded to meet current ADA standards, as necessary.



Lyndon – Barton Paving Project

Interstate 91 Southbound, Exits 23, 24, and 25

(\$18.6 million estimated project)

The paving project will include the associated exit ramps, resulting in a total project length of 40.1 miles. Additionally, some guardrail work will be performed to repair and replace damage sections. Lastly, shoulder berms that have built up will be removed to facilitate better drainage from the road surface.



Brattleboro – Newfane Resurfacing

Vermont Route 30 and U.S. Route 5 Intersection

(\$28.6 million estimated project)

Improvement project consisting of pavement, guardrail runs, culvert, and ditching. The corridor will be evaluated for the installation of Centerline Rumble Strips (CLRS).





Culverts & Signs – AOT maintains 48,975 culverts and 66,879 signs.



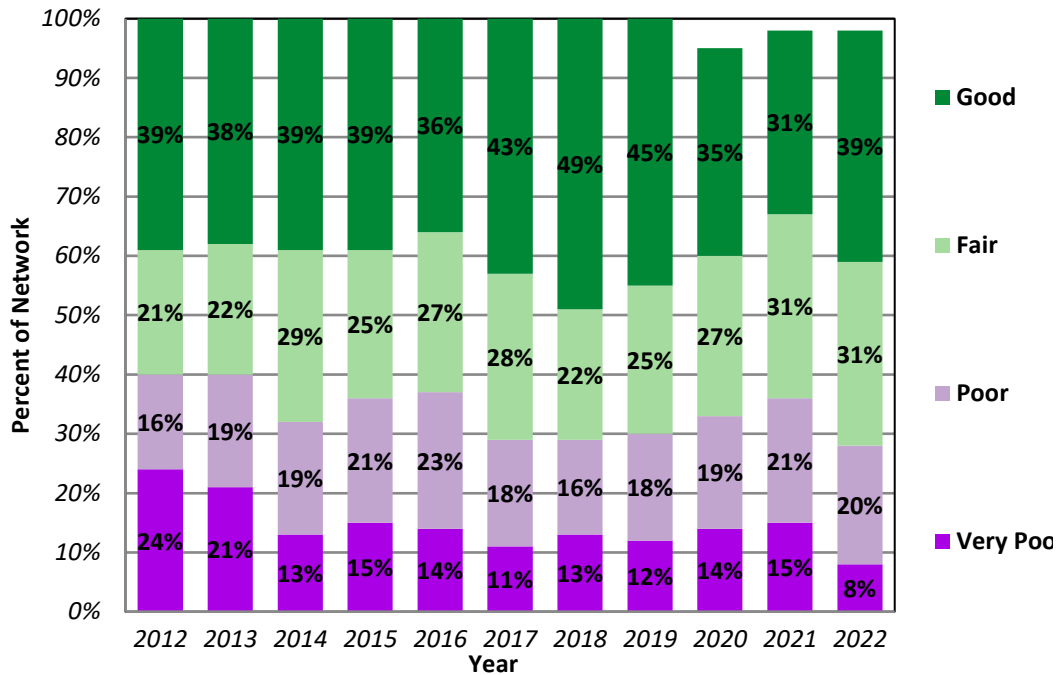
Bridge Conditions – Continue to stay well within acceptable limits.

The Bridge Management System (BMS) is being piloted in production, and initial results are promising, allowing conformity with Transportation Asset Management Plan (TAMP) requirements.



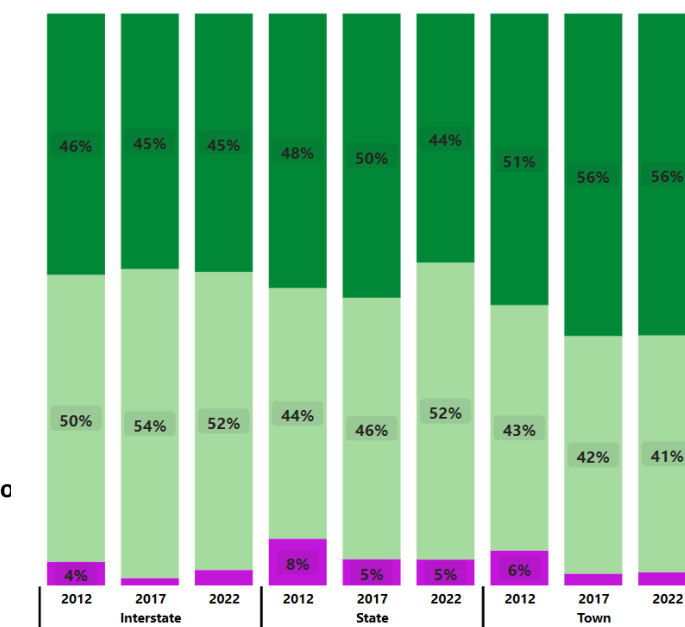
Pavement Conditions – Maintaining five-year average of Very Poor (13%) while achieving/main the amount of pavement in Good/Fair Condition (70%).

Historic Pavement Condition Distribution - Unweighted

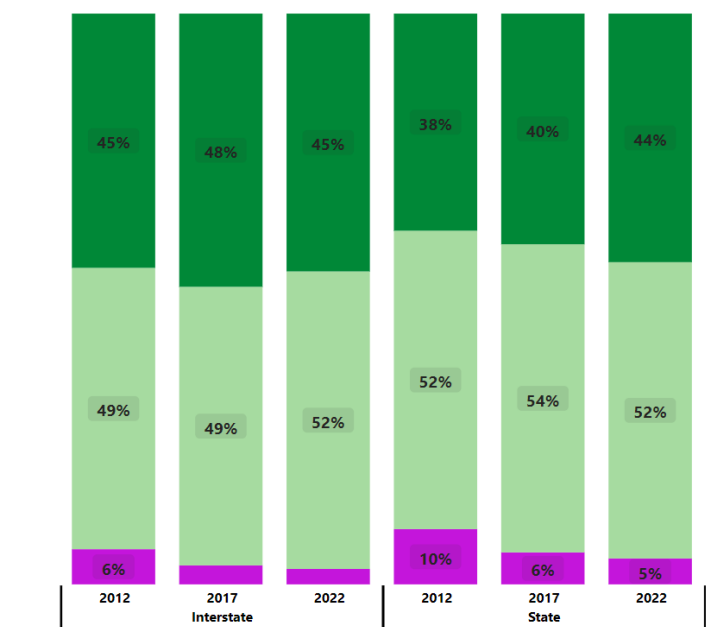


Historic Condition Distribution By Percent

Long structures (span length greater than 20 ft)



Short structures (span length 6 ft to 20ft)



Fatalities by Vehicle Type and Restraint/Safety Equipment Used							
Road User Type	Restraint/Safety Equipment	2023	2022	2021	2020	2019	2018
Motor Vehicle Occupant	Unbelted	22	31	28	24	17	34
	- Driver	16	25	25	19	15	25
	- Passenger	6	6	3	5	2	9
	- UTV Driver	0					0
	Belted	17	18	18	17	18	21
	- Driver	14	17	13	12	14	15
- Passenger	3	1	5	5	4	6	
	Improper Belt Use/Child Restraint	1	1		0	0	0
Motorcyclist/ATV	Wearing Helmet	13	14	13	10	5	5
	Non-DOT Compliant Helmet/Improper	3		2	0	1	1
	No Helmet	1	2	2	2	2	1
Vulnerable Users	Pedestrians	5	6	8	8	3	6
	Bicyclists	1	1		1	0	0
Unknown	Unknown Belt/Helmet Use	7	3	3	0	1	1
% Unbelted*		55%	62%	61%	59%	49%	62%
Total Fatalities		70	76	74	62	47	69

*Of all fatalities: only occupants in vehicles equipped with seatbelts are used in the calculation for unbelted percentage. Excludes: motorcycles, ATVs, pedestrians, bicyclists and unknowns. (Sum of Belted" & "Unbelted", divided into sum of "Unbelted" & "Improper Belt/Restraint")

Fatal Crash Data	2023*	2022	2021	2020	2019	2018
Total Fatal Crashes	64	74	69	58	44	61
Total Fatalities (People)	70	77	74	62	47	69
Double Fatality Crashes	4	3	5	4	3	8
Triple Fatality Crashes	1	0	0	0	0	0
Quadruple Fatality Crashes	0	0	0	0	0	0
Operators Suspected as Driving under the Influence of Alcohol Only	7	11	10	11	5	5
Operators Suspected as Driving under the Influence of Drugs Only	20	20	18	14	15	13
Operators Suspected as Driving under the Influence of both Alcohol & Drugs	5	13	12	6	2	10
Active Cannabis - Delta 9 THC Confirmed**	14	15	25	14	13	19
Operators Suspected of Speeding	18	21	33	15	14	22
Operators with Suspended License/ No License	9	12	7	13	5	7
Junior License Operators involved in fatal crashes	1	2	5	2	1	4
"Older Drivers" involved in fatal Crashes (Older Driver is defined as any person age 65 or older.)	24	25	19	15	16	14
Crashes involving a Large Truck/Bus	5	11	4	3	10	7
Motorcyclist Fatalities	18	14	16	10	8	7

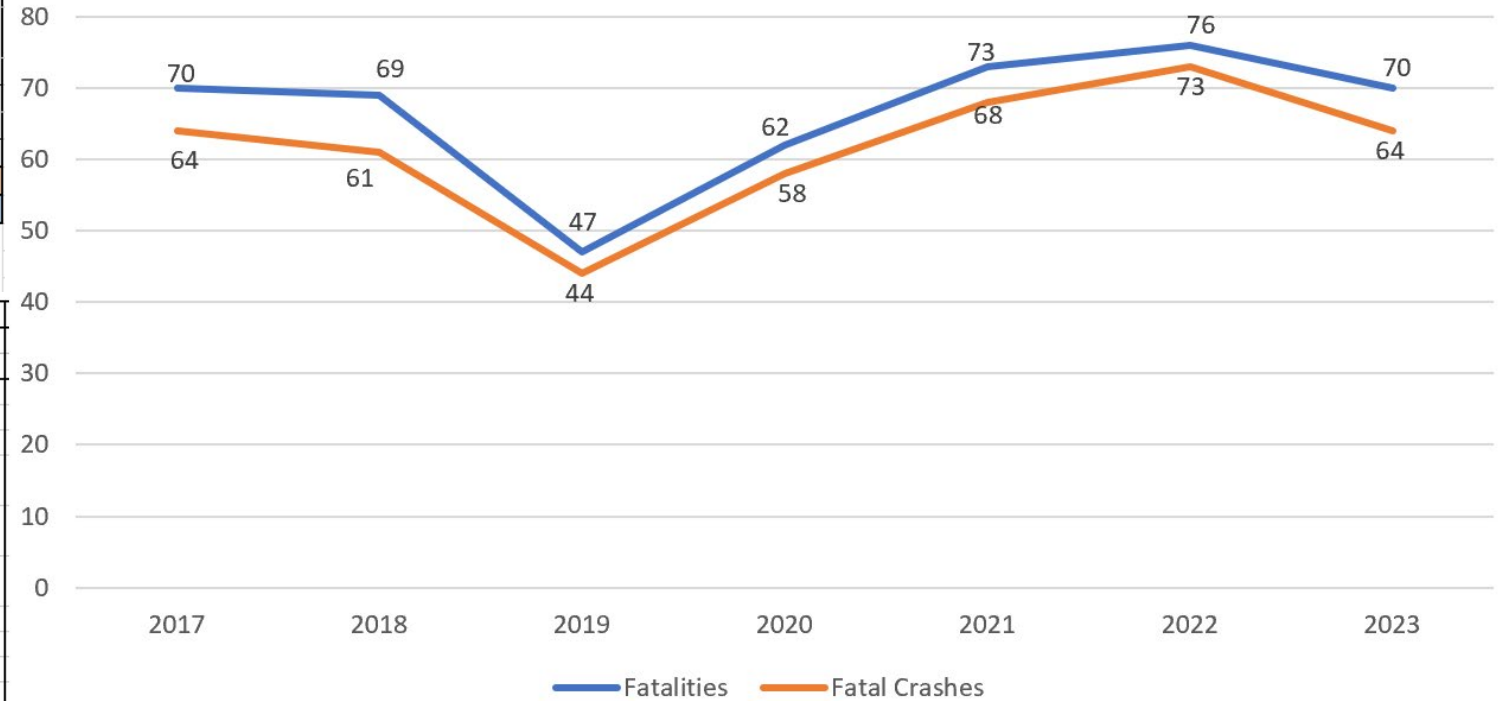
*2023 data is as of the date of this report. These numbers are subject to change.

**Active Cannabis - Delta-9 THC Confirmed is counted in the number of operators that had drugs only or alcohol & drugs.

***None of the identified groups above are implicated as being "at fault"

Fatalities and Fatal Crashes by Calendar Year

*Data Current Through 01/03/2024



District Maintenance and Fleet Division

District Maintenance & Fleet Division

SFY 2024 Staff

Total: 519

SFY 2024 Funding

Total Appropriation: \$28.7M

The **Agency of Transportation (AOT)** has a significant public investment in its transportation infrastructure.

The **District Maintenance and Fleet Division** – with more than 500 employees – maintains that infrastructure for the benefit of the traveling public as well as the vehicles and equipment necessary to perform the maintenance. Our workforce is dedicated, hard-working, and proud of what they do.

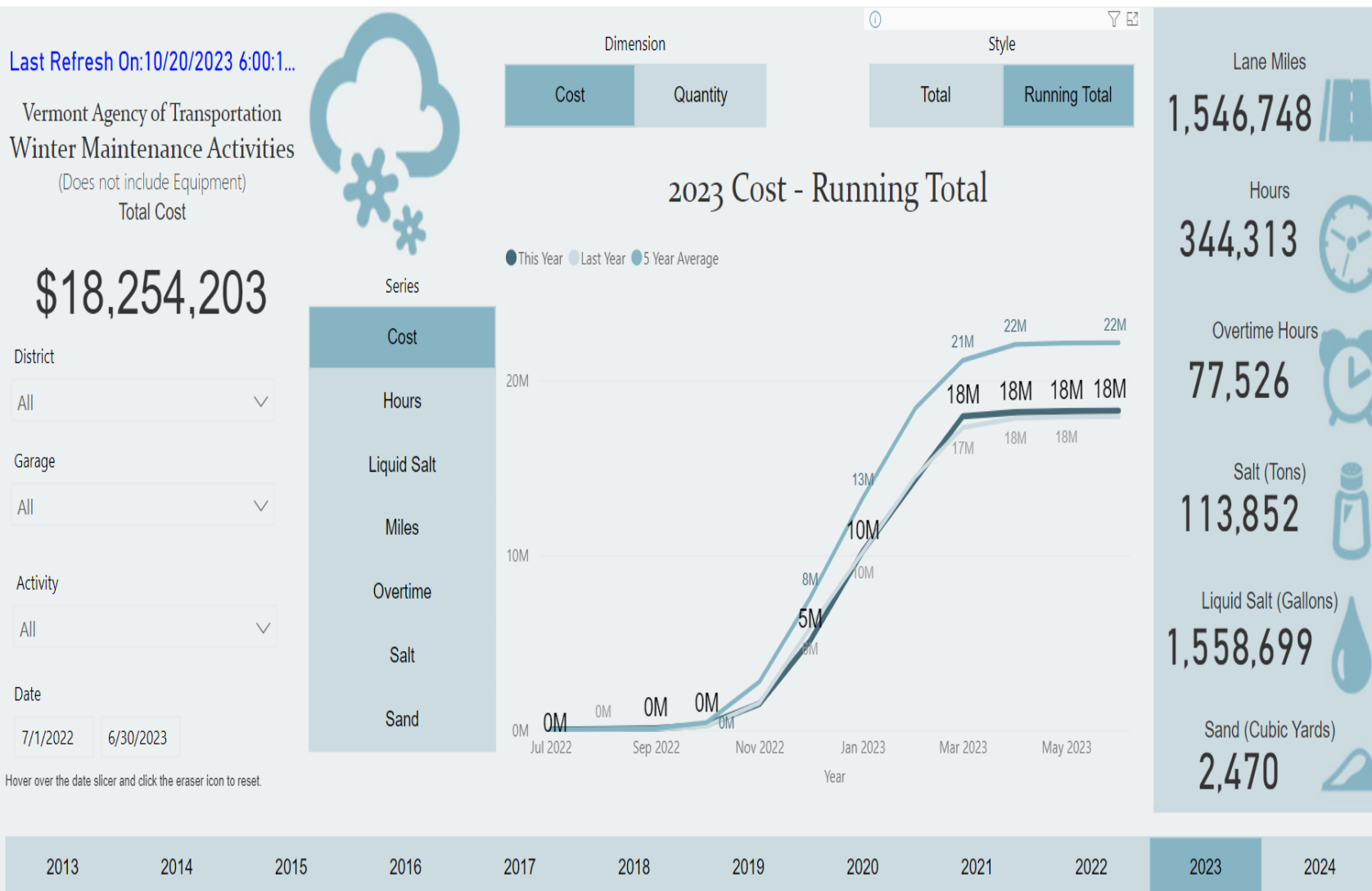


For the first time in many years, the Agency will be using a plow truck that is not an International, as Freightliner has provided pricing on the recent truck bid.



SOUTHWEST		SOUTHEAST		CAPITAL	NORTHWEST		NORTHEAST	
District 1	District 3	District 2	District 4	District 6	District 5	District 8	District 7	District 9
Bennington East Dorset Marlboro Readsboro Wilmington	Brandon Castleton Clarendon Ludlow Mendon Middlebury Rutland Sudbury	Ascutney Chester Dummerston Jamaica Londonderry Rockingham Springfield	Randolph Reading Rochester Royalton Thetford Tunbridge White River Jct Windsor Woodstock	Middlesex Morristown N. Montpelier Orange Waitsfield Williamstown	Chimney Corners Colchester New Haven	Cambridge Eden Enosburg Georgia Highgate Montgomery N. Hero St. Albans	Bradford Lunenburg Lyndon Newbury St. Johnsbury W. Danville	Barton Bloomfield Canaan Derby Irasburg Island Pond Westfield Westmore

Program Highlights: Maintenance



FY 23 Salt Tons: 113,852, Ave \$84/ton
FY 22 Salt Tons: 125,354, Ave \$61/ton
FY 21 Salt Tons: 105,343, Ave \$53/ton
FY24- Ave \$86/ton

Maintenance by the Numbers- FY23

- Total acres of mowing: 18,455
- Total lane miles plowed: 1,546,748
- Total linear feet of guardrails repair: 29,716
- Total tons of litter picked up: 601.2
- Total miles of ditching: 31.91
- Total bridges washed: 674

CENTRAL GARAGE

Central Garage in Berlin was inundated by the flooding in July 2023. This caused significant damage to the main Central Garage fleet maintenance facility, where vehicles and equipment are received and repaired, and the headquarters of Fleet Maintenance/ Management.

With the extent of damage, the main facility will not be repaired, and the former storage building and traffic shop have been temporarily upfitted to allow for maintenance to occur. We are actively searching for a location out of the flood zone for a replacement facility.



CENTRAL GARAGE

Central Garage is responsible for the fleet management for the Agency of Transportation. Central Garage is AOT's advocate, caretaker and technical resource for mid-size and heavy-duty highway and bridge maintenance vehicles and equipment, including multi-use plow and dump trucks and specialized heavy and construction equipment. Among these assets are: 259 active dump trucks, 111 pickups with plows, 55 loaders, and 5 graders. The division also supports Highway Maintenance, DMV Commercial Vehicle Enforcement Section, Aviation, and Bridge Inspection equipment through intra-agency service agreements.



Central Garage Fleet Electrification

Central Garage will continue to purchase, when possible, battery electric vehicles and equipment to work toward reducing our carbon footprint.

We have received four of six Ford F150 lightnings that were ordered and are still waiting for General Motors to release the Sierra EV, which is slated to go on sale in early 2024.

We have also purchased a compact, battery electric wheel loader and excavator, for the maintenance districts to use in their daily activities.

We will continue to look for opportunities to order BEVs and Hybrid vehicles as we replace our vehicles and equipment.

Policy, Planning, and Intermodal Development Division (PPAID)

Policy, Planning, and Research



Program Manager: Amy Bell

SFY 2024 Staff: 22 FTE and 1 Temporary

State Funds: \$3,351,197

Federal Funds: \$10,797,449

Interdepartmental Transfer: \$116,503

- 230 municipalities actively engaged in regional and statewide Transportation Planning
- 142 municipalities assisted with transportation related grants
- Completed Smart Growth Study
- Completed three Better Connections municipal studies and initiated three new projects
- Completed Transportation Equity Framework Report and began implementation
- Completed “Big” Transportation Data acquisition
- Concluded Traffic Safety Toolbox: Speed Countermeasures Research Project
- Completed Legislative Studies: Highway Weight Limits & US Route 5 Bike Corridor Survey
- Processed 551 permits for driveways, utilities, and other work in the state highway ROW
- Reviewed 251 Act 250 applications; 40 comment letters; 18 Act 145 Fees assessed
- Processed the 2023 mileage certificates and published 61 updated town highway maps
- Created Local Road Closure Reviewer and Dashboard apps to assist municipalities with mapping and display of storm-related road closures
- Initiated development of Highway Access Permit (Sec 1111) Automation Software
- Initiated development of Multi-Modal Highway Design Guidance in partnership with Highways Division
- Continued managing the Vergennes Planning and Environmental Linkages Study to identify alternate routes for trucks on VT 22A in Vergennes
- Facilitated Champlain Region International Border Project Group

Environmental Policy and Sustainability



SFY 2023 Staff: 2 FTE

SFY 2024 Staff: 5 FTE

SFY 2023 Budget: no standalone program budget; included in PPR budget (SFY 24 Budget: \$27.9M)

- Issued 41% more transportation incentives and 21% more funding than in SFY22 with 77% of funds going to Vermonters with lower incomes
- Gained FHWA approval for second annual National Electric Vehicle Infrastructure (NEVI) Plan and new contracting method for fast-charging deployment
- Submitted nominations for EV freight corridor designations
- Supported development of Community Charging Grant Program with ACCD, PSD, and ANR
- Applied for competitive IJA grant funds to supplement state and federal formula funds
- Obtained legislative approval for further research and federal IJA grant application to implement a mileage-based user fee for electric vehicles and road usage charge for plug-in hybrids
- Held two dozen stakeholder, public engagement, and Advisory and Technical Committee meetings to develop a Carbon Reduction Strategy
- Developed a Resilience Improvement Plan with a prioritized list of high-risk resilience locations for IJA PROTECT formula funds
- Provided 17 Transportation Resilience Planning Tool training sessions to more than 170 AOT and other state agency staff, RPCs, and municipalities.

Public Transit Program



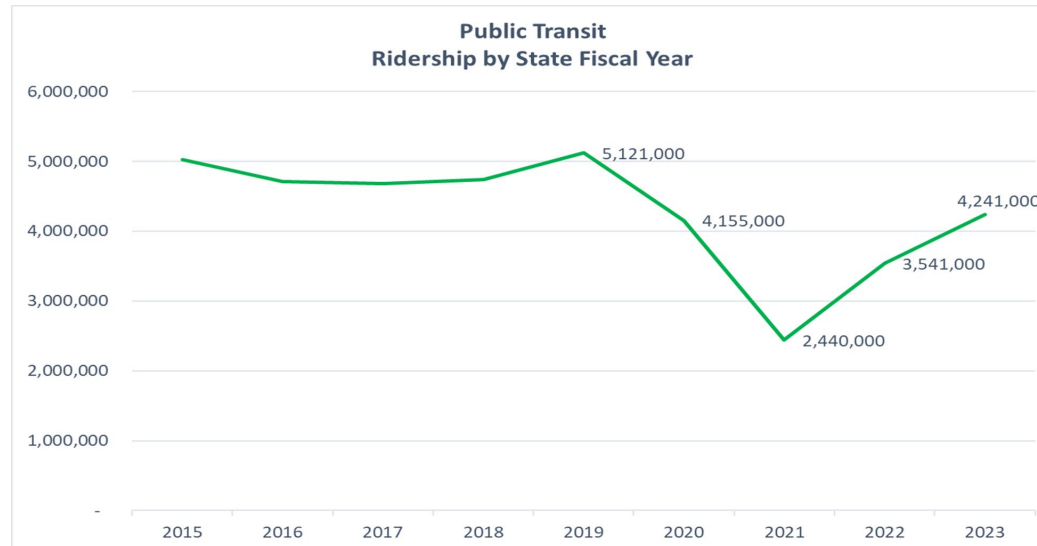
SFY 2024 Staff: 5 FTE and 1 PT

State Funds: \$9,050,142

Federal FTA: \$18,792,700

Federal FHWA: \$23,000,000

- Operation costs increased due to fuel, wages, inflation, and zero-fare service.
- Microtransit:
 - Pilot in Montpelier was successful
 - 4 new starts have begun.
 - 14 feasibility studies completed.
- Transit app: Open data, route planning and analysis modules. Free version released to the public. More than 8,000 weekly users.
- EV Buses:
 - Federal Low and No Emissions grant funding: \$38,647,857
 - State and Local funding: \$4,869,791
 - VW funds: \$4,259,798
 - Funding for a total of 44 vehicles



Rail Program



21 FTE Staff

SFY 24 State Funds: \$15,608,462

SFY 24 Federal: \$26,596,858

- **Rail Program Projects**

- Rail Bridge BUILD Projects -18 of 29 under construction, 3 complete. 8 projects will be built in years 2024-2025

- **Rail Bridge Program**

- In 2010, 35 of 174 bridges met 286,000 lbs loading rating capacity, the industry standard. Today, 153 meet this standard.
- Annual Rail Bridge Inspections of the 174 rail bridges are complete.

- **Rail Crossing Program**

- Inspect 420 Public, At-Grade Rail-Highway Crossings each year
- Crossing Safety Improvement Projects: 20 complete.

- **Amtrak Ridership**

- Amtrak Ridership from FFY 2022 to 2023 has increased by 16% for the Vermonter and 43% for the Ethan Allen Express.

- **July Storm Event Response:**

- 160 sites were damaged during the July Storm Event.
- 15 sites from this event are ongoing projects.
- Restored Amtrak Service in 10 days. Service restored to all State-Owned Rail Lines in 5 weeks.

Aviation Program



18 FTE Staff

SFY 24 State Funds: \$5,693,133

SFY 24 Federal: \$15,190,861

- **Project Highlight: Franklin County State Airport – Highgate**
 - Runway Reconstruction and Widening to 3000' x 75'
 - LED Lighting Upgrades
 - Drainage Improvements
 - Avigation Easements and Obstruction Removal
- **Program Projects**
 - Airport Improvement Projects Completed: 4
 - Airport Improvement Project Ongoing: 12
- **Maintenance Activities**
 - Runway miles plowed: 9.73
- **Statewide Airport Master Permitting**
 - Act 250 partial findings permits issued for 3 airports, in review for 2, with 4 more progressing towards Act 250 submission.
- **UAS Program**
 - The program had 75+ UAS missions in response to July 10th flooding. The program has approximately 50 missions each year.

Finance and Administration Division

Finance & Administration Division

SFY 2024 Staff: 138

SFY 2024 Funding

Total Appropriation: \$28.7M

The Division works to maximize financial and human resources, while improving business practices to meet the needs of internal and external customers. Functional areas of the division include:

Innovation	Emergency Management Response	Contract Administration
Audit	Budget Operations	Financial Operations
Civil Rights & Labor Compliance	Learning, & Development	Occupational Safety
Hearings	Vermont Local Roads	Facilities Management



The Bureau of Civil Rights is responsible for internal and external oversight and compliance with USDOT regulations. AOT strives to go above and beyond compliance by promoting a culture of workplace respect, civility & and inclusion through interactive training, interdisciplinary strategies, and best practices to support its employees, supervisors, managers, and program partners.

Overview of resources and learning opportunities:

- Developed & implemented enhanced [Translation Services & Resources](#)
- Language Assistance Plan, dynamic [Vermont Equity Map](#)
- Launched enhanced [ADA resources](#), including [ADA Compliance training](#) for Vermont municipalities and digital accessibility guides
- Developed & and delivered [Contractor Training and enhanced resources](#) on construction workforce equity
- Launch of the [Transportation Equity Framework](#) Developed to serve as a guide and pathway to inform actions that can achieve transportation equity in future investments

Civil Rights

Performance Section: Cyclical Bridge Maintenance Dashboard and Weekly Report Automation

INCREASED EFFICIENCY

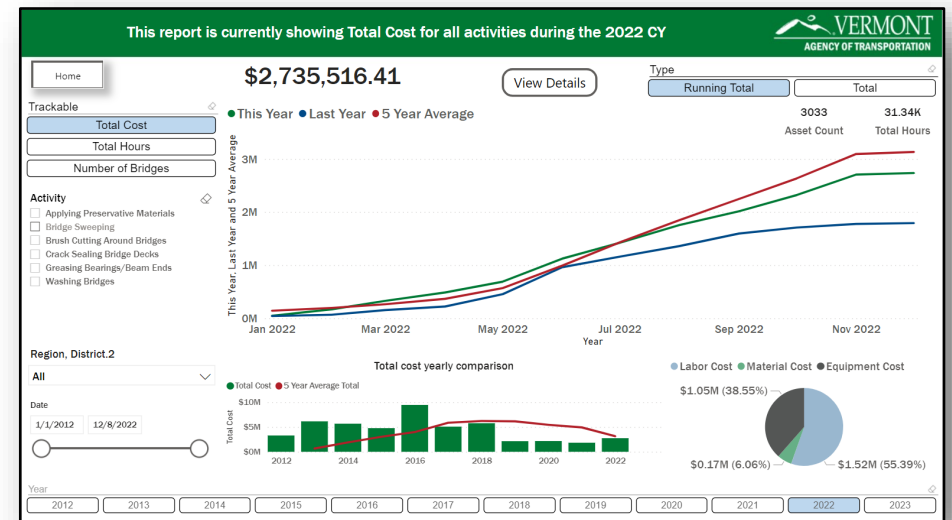
These tools make the bridge maintenance goals easily accessible, which has saved personnel time equivalent to 15,000 hours per year.

Cyclical Bridge Maintenance Weekly Report																			
Activity	Applying Preservative Materials			Bridge Sweeping			Brush Cutting Around Bridges			Crack Sealing Bridge Decks			Greasing Bearings/Beam Ends			Washing Bridges			
	Region	Percent Complete	Complete	Goal	Percent Complete	Complete	Goal	Percent Complete	Complete	Goal	Percent Complete	Complete	Goal	Percent Complete	Complete	Goal	Percent Complete	Complete	Goal
Capitol	0%		46	2%	3	191	107%	32	30	0%	35	0%	2	1%	1	96			
Northeast	160%	72	45	112%	183	163	251%	75	30	148%	46	31	142%	9	6	132%	108	82	
Northeast	0%		27	56%	75	87	151%	32	24	36%	8	22	0%	2	59%	26	44		
Northeast	0%		32	13%	15	119	77%	17	22	0%	9	0%	3	43%	26	60			
Northeast	16%	5	32	72%	88	122	353%	78	22	0%	24	0%	3	119%	73	61			
Southeast	28%	11	39	0%		139	160%	40	25	96%	24	25	0%	4	61%	57	70		
Southeast	0%		58	0%		241	89%	27	39	0%	32	0%	6	76%	92	121			
Southeast	3%	1	37	58%	89	153	363%	87	24	3%	1	29	0%	3	78%	60	77		
Southeast	0%		35	0%		148	274%	63	23	0%	29	0%	3	49%	36	73			
Total			558,039			5129,032			5246,727			597,206			56,779			5723,368	

DATA INFORMED DECISION MAKING

The dashboard informs operational decisions around staff time and cost for each activity.

Tracks costs for maintaining 2,350 bridges for future budget and resource planning purposes.



Emergency Management & Employee Safety

In August 2011, Tropical Storm Irene devastated Vermont, damaging 200 bridges, 1,000 culverts, and 2,400 road segments totaling over 500 miles.

Nearly 12 years later, AOT reconciled the final project and FEMA officially closed out the disaster in March 2023. AOT Emergency Management and Employee Safety managed over 350 sub-applicants, including 25 other State agencies, and was able to obtain nearly \$209 million in FEMA public assistance for Vermont.



AOT Strategic Workforce Plan FY2024 – FY2025



Development and implementation of a refreshed Strategic Workforce Plan through:

- Alignment with AOT mission, vision, and strategic plan
- Organizational assessment of employee engagement survey results and culture
- Reviewed current/future workforce analytics and Manager selected top five workforce pressures
- Identified FY24 Goals:
 - Effective 1/1/24, AOT will require all Supervisors/Managers to conduct, at a minimum, a monthly individual check in with employees
 - Effective 1/1/24, AOT will require completion of annual mandatory Supervisor/Manager training. For FY24, 4 hours in person training on individual check in best practices and resiliency, and 4 hours of self-selected leadership learning curated by VTTC

Outcome = improved employee engagement, retention, and productivity

Department of Motor Vehicles

DMV Operations

171 Employees

The Operations division is comprised of four sections:

Branch Operations – Operate branch locations across the state providing in-person services including vehicle registration and titling, issuance of credentials, administration of examinations

Information Processing – Responsible for processing all mail and online transactions, verifying and retrieving documentation required to support all business functions

Commercial Vehicle Operations – Administer the International Registration Plan and International Fuel Tax Agreements, maintain motor carrier records, collection of gas, diesel and rental taxes, and issue oversize and overweight vehicle permits

Driver Improvement and Information – Issue driver license suspensions and reinstatements, process accident reports, and manage Ignition Interlock program.

- Implemented the use of new imaging system in Commercial Vehicle Operations
- Served approximately 170,000 scheduled appointments and 84,560 walk-ins
- Completed approximately 17,264 road exams
- Implemented new process for out-of-state registrations to reduce fraud by updating the forms to include an out-of-state registration form



Core Modernization Project

10 full-time DMV employees

4 DMV testers

Partnering with FAST Enterprises to implement a commercial off-the-shelf solution in a two-phase project to replace existing, disparate systems with a single online system

Phase 1: Vehicle Services – June 13, 2022, to November 13, 2023

Replacing many aging systems in vehicle registration and titling, revenue collection and categorization, image scanning and retrieval, and dealerships

Phase 2: Driver Services – Planned to go live in 2025

- Vehicle Services went live November 13, 2023
- Purchased and installed all required equipment for the system upgrade
- Completed training for staff
- Reassigned staff according to the needs of the new system and its workflow enhancements
- Developed a communication campaign (Don't Wait in Line; Start Online) that features digital ads, social media ads, and radio ads



Enforcement and Safety

44 Employees

Commercial Vehicle Enforcement – Sworn uniformed officers whose primary mission is the enforcement of laws and regulations pertaining to commercial vehicle safety

Investigative unit – Sworn and non-sworn investigators, and the Education and Safety Office. Primary mission is regulation of motor vehicle dealers, inspection stations, and investigation of fraudulent or illegal activities involving the department

Education and Safety Office – Provide oversight of training schools and programs, motorcycle and school bus driver training, and third-party testing

Administrative unit – Support all units in the division and its programs, including dealer and inspection station licensing, inspection mechanic certification, rider education program information requests, abandoned vehicles and vessels, and reporting to Federal Motor Carrier Safety Administration

- DMV Inspectors actively participated in the Chittenden County Gun Violence Taskforce
- Provided in-person written Commercial Driver License General Knowledge, Air Brake, Passenger, and School Bus written permit testing to school districts
- An Orange County dealership was investigated for submitting 89 fraudulent motor vehicle MCO's to DMV to receive title
- Provided an online version of the Type II Multi-Function School Activity Bus Written Test



DMV Finance

19 Employees

Finance unit – Comprised of the Accounts Payable, Accounts Receivable, and Contract Management units. Responsible for the protection of the financial resources of the Department, including development and management of departmental budget, categorization of revenues, payroll administration, grants and contract management, and purchasing and payment activities

Facilities Management and Logistics unit – Responsible for management of real estate, Continuity of Ongoing Operations plan, security functions, and the stockroom and mailroom

Audit unit – Perform investigative and audit work related to state and federal fuel tax regulations, primarily covering International Registration Plan, Purchase & Use tax, and International Fuel Tax Agreements

- Vermont Strong Plate Distribution – Management of plate distribution, accounting for sales providing weekly updates of funds received, and distribution to intended recipients.
- Audit Team recruitment after retirements. Audit is fully staffed as of April 2023; the team has been reestablished. Also, we were successful with a class review for this team in September 2023.
- Finance and Logistics Team is engaged in transition of financial point of sale system from US eDirect POS to Fast VT TRIPS as well as alignment of supporting contracts such as VINTelligence, JD Powers (valuation services), bank courier service, etc.

Special Programs

3 Employees

Special Programs unit - Responsibilities include coordination of legislative activities, compiling legislative reports, implementation of statutory changes, coordination of modification of administrative rules, management of the Department's social media pages and internal and public websites, collaboration with senior management to identify and implement enhancements to business practices and improve customer experiences, and strategic planning

Lead on the DMV Core Modernization Project

- Added Russian, Mandarin, and Ukrainian to the list of translated documents, bringing the total to 15 languages
- Guided DMV through a successful legislative session
- Updated and modernized forms and documents, for example, the Registration Application
- Increased the number of social media followers on Facebook, Twitter, and Instagram

