

Asset Management Bureau Overview

“Right asset, Right treatment, Right time”

2025

PRESENTED BY KEN VALENTINE, BUREAU DIRECTOR

VERMONT AGENCY OF TRANSPORTATION

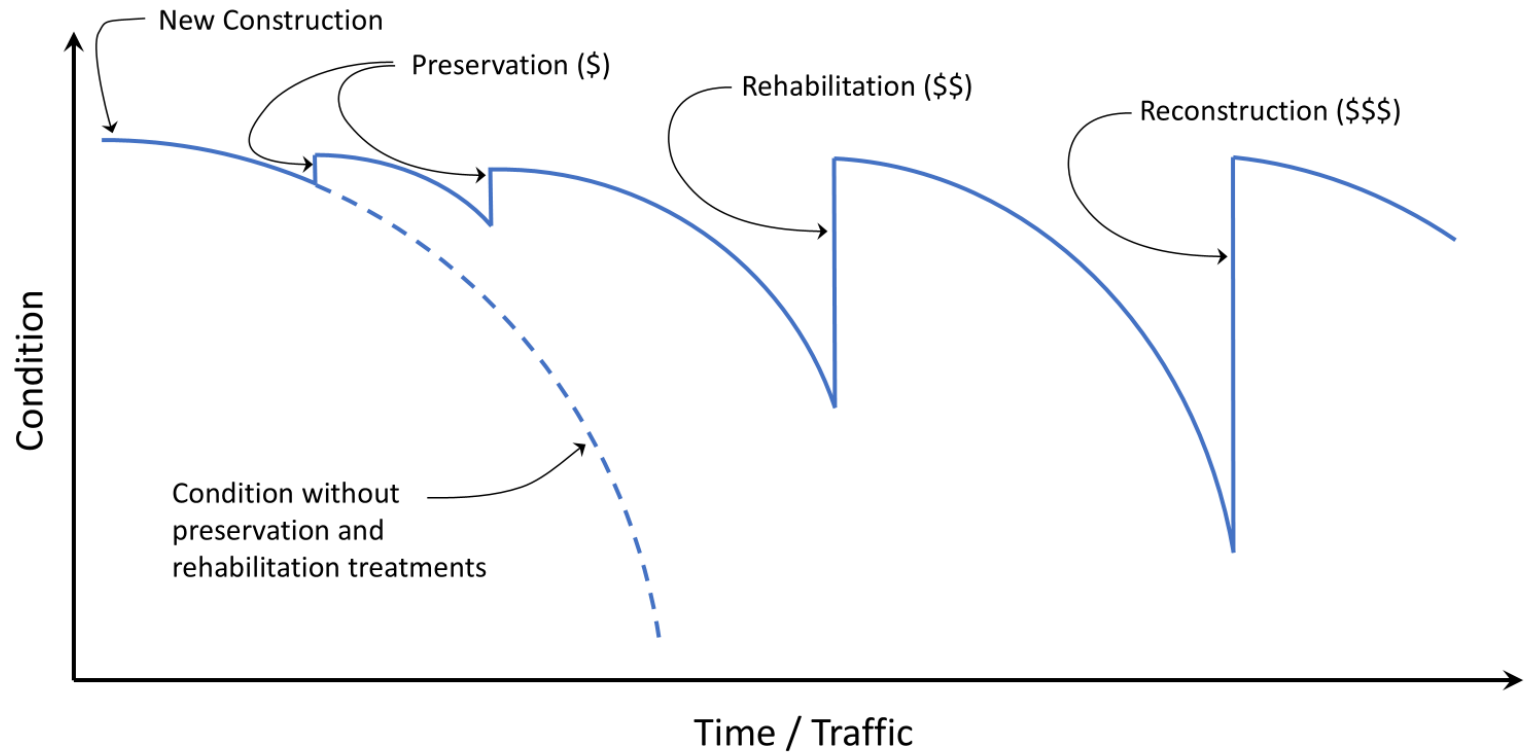
What does Asset Management mean at VTrans?

Getting the best long-term performance from our highway assets at the least cost

How?

Typically, by taking advantage of lower-cost treatments that extend service lives

It rarely means “worst first”



Asset Management Bureau

- 33 Staff: Engineers, Technicians, Analysts, and GIS specialists
- Sections include:
 - Corridor Management
 - Including Bridge Inspectors
 - Budgeting and Programming
 - Data Management
- More importantly,
 - What we do, and how we do it

Our mission is to provide quality, data-driven recommendations to guide actions and investments in the highway network

1. We monitor and report on the condition of our highway assets
2. We predict future conditions and create investment strategies to get the most out of our resources
3. We turn these strategies into coordinated projects that improve our highway network
4. We align these projects with available funding to annually create a proposed Capital Program

Throughout this process, we emphasize transparency, accurate data, and objectivity

We monitor and report on the condition of our highway assets

Pavement Condition Monitoring

- We quantify cracking, smoothness, and rutting
- Interstates are assessed annually; State highways every two years

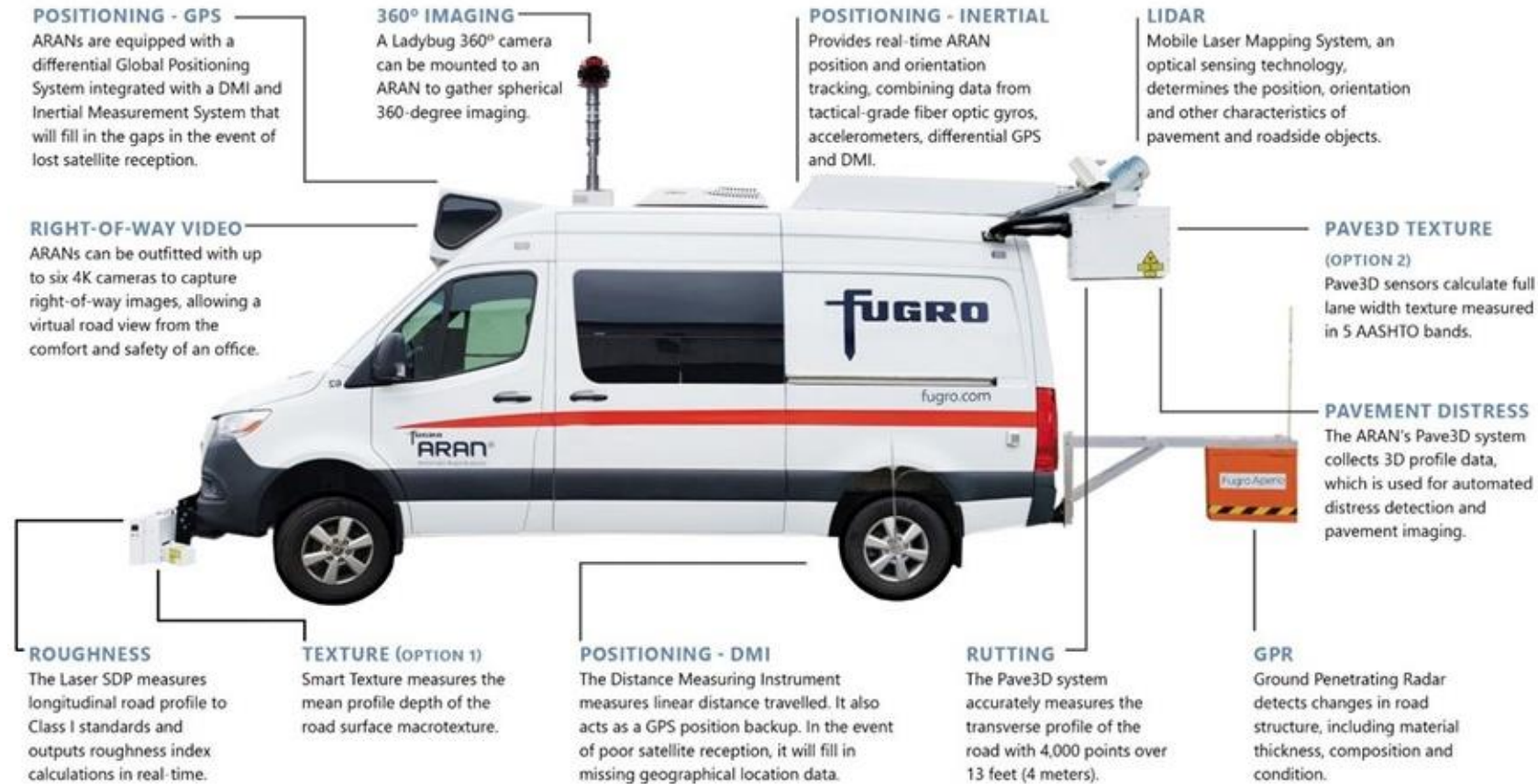


Figure 6 Fugro's ARAN Systems Overview

We monitor and report on the condition of our highway assets

Bridge Inspection

- For safety *and* cost-effective management
- We inspect “long structures” every 2 years; “short structures” every 5 years
- We inspect Interstate, State Highway, Town Highway, and Rail bridges
- We use federally mandated standards and reporting formats



We monitor and report on the condition of our highway assets

Ancillary Assets

- Small culverts
- Signs and sign structures
- Signals
- Pavement markings (lines)
- Slopes and ledge cuts
- And others!



We predict future conditions and create investment strategies to get the most out of our resources

Data, Analysis, and Modelling

- VAMIS is our comprehensive system (more than just bridges and pavements)
 - Authoritative inventory and condition tracking
 - Sophisticated benefit-cost analysis and optimization of all viable treatments
 - We run multiple budget scenarios to understand the impact of our choices



We turn these strategies into coordinated projects that improve our highway network

Corridor Management

- We look for opportunities to coordinate work to save money and make improvements
- We incorporate features or address issues as part of projects (while staying true to the project's scope and goals)
- We work with Maintenance teams to use what we know about our assets to help their activities

To: Brandon Kipp, Project Manager
From: Nathan Phillips, Asset Management Bureau
Date: [October 22, 2021](#)
Subject: Montpelier STP PC24(3), Class 1 Paving Project - US2 Portion, PIN 19V428

1 New Project Summary Purpose:

The purpose of this New Project Summary is to create awareness of the transportation issues and concerns that may exist in this corridor. This document is not intended to define or scope this project, rather, it is intended to be a high-level review of the asset, maintenance, safety and local concerns along the project area. The Asset Management Bureau has reviewed relevant information along the corridor and contacted our Agency partners in Maintenance, Project Delivery, and Operations and Safety to inform the contents of this document. While other issues may become apparent as the project progresses through the various design phases, the intent is to provide a basic framework for the project as it begins the early design phases.

This New Project Summary is intended to provide background information and recommendations for this project. Treatment recommendations are based on output from the Pavement Management System and are recommended based on the fiscal constraint of the Agency's budget. A detailed onsite field review has not been performed prior to preparing this New Project Summary. Information resources are noted as appropriate in each section. Where Mapillary video images are referenced, they are from July, 2018.

This project is included in the Paving Program of FY 2022 Governor's Recommended Transportation Programming. Funding has been included to begin design in Fiscal Year 2021 with Construction anticipated to occur during the 2023 construction season.

2 Project Location:

This project is located on United States Route 2 (US2) in the city of Montpelier. The project extends from Montpelier mile marker 0.000 to mile marker 1.758 (ETE 74.540 to 76.298). The total project length is approximately 1.758 miles. The project limits begin on US2 at the western town line of Montpelier and end at the intersection of Bailey Avenue with Memorial Drive. See Figure 1 below.



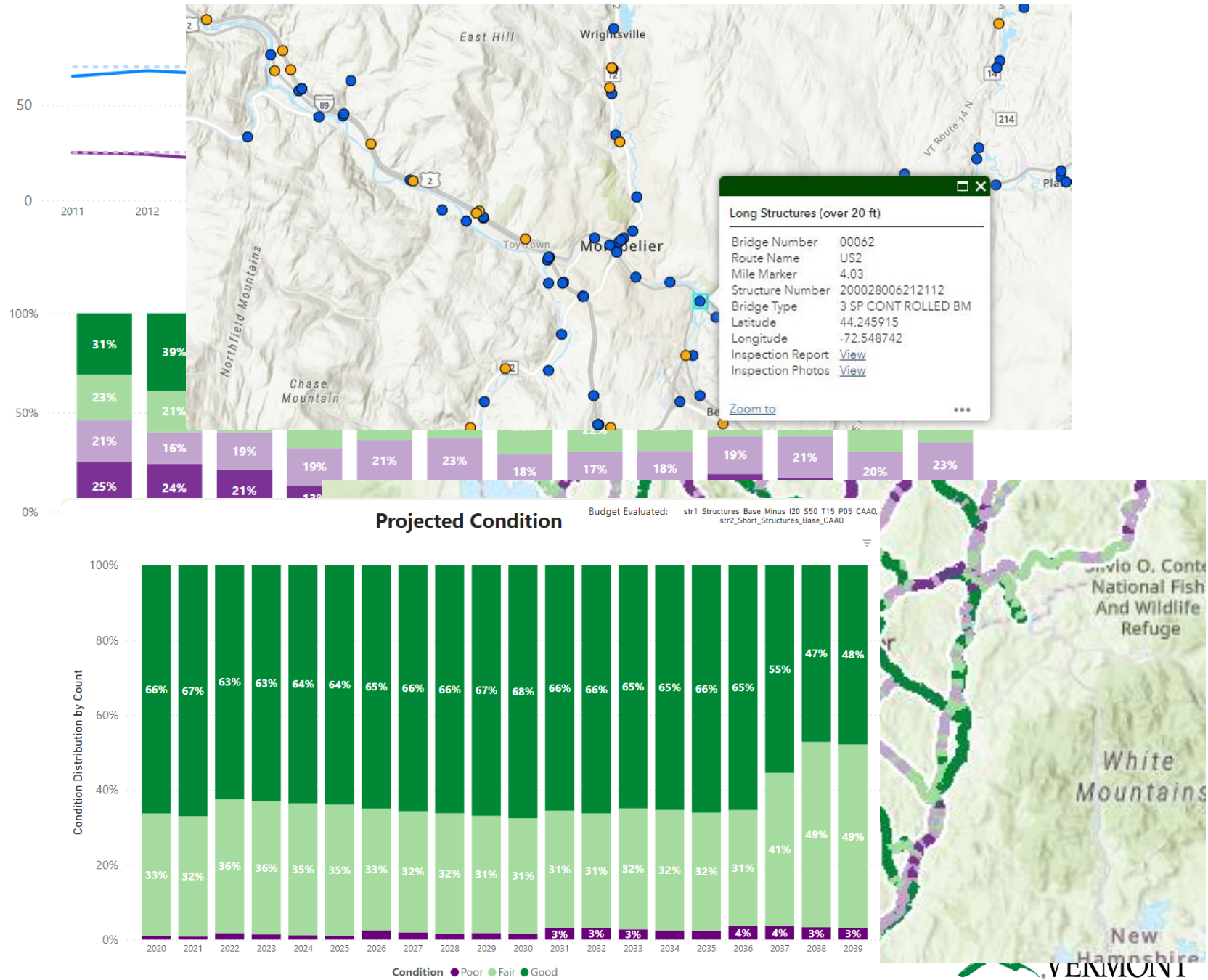
We align these projects with available funding to annually create a proposed Capital Program

Budget and Programming

- We help guide the general allocation of available funding among highway programs, cognizant of our performance goals
- We lead the development of the highway program portion of the budget, by aligning available funding with projects as they near readiness for construction
- The output of this is the Capital Program

	AGENCY OF TRANSPORTATION						
	FY2025 As Passed						
	TOTAL	As Passed STATE	As Passed FEDERAL	As Passed Local/Other	As Passed IDT	TIB FUNDS	As Passed ISF
DEPT. OF MOTOR VEHICLES	47,262,896	44,454,119	2,687,081		121,696		
FINANCE & ADMINISTRATION	24,558,595	23,202,105	1,356,490				
PROGRAM DEVELOPMENT							
Paving	130,141,087	23,235,723	106,905,364	0	0	0	0
Interstate Bridge	55,524,967	0	51,272,470	0	0	4,252,497	
State Highway Bridge	64,915,709	2,295,360	51,689,724	456,403	0	10,474,222	
Roadway	67,048,158	10,044,843	56,057,435	945,880	0	0	
Traffic & Safety	50,710,934	382,621	50,328,313	0	0	0	
Park & Ride	1,464,833	150,000	1,314,833	0	0	0	
Bike & Pedestrian Facilities	11,648,752	2,288,020	7,622,024	1,738,708	0	0	
Transportation Alternatives	5,416,614		4,333,291	1,083,323			
Multi-Modal Facilities	0						
Program Development Administration	33,733,793	27,448,580	4,873,695		1,411,518		
Total Program Development	420,604,847	65,845,147	334,397,149	4,224,344	1,411,518	14,726,719	0
AOT ONE-TIME	0	0		0			
REST AREAS	1,485,601	148,560	1,337,041				
POLICY & PLANNING	14,051,853	3,137,901	10,797,449		116,503		
ENVIRONMENTAL POLICY & SUSTAINABILITY	9,609,773	531,909	7,900,327	1,177,537			
MAINTENANCE	106,438,497	105,406,483	932,014		100,000		
PUBLIC TRANSIT PROGRAM	55,540,225	9,807,525	45,592,700	0	140,000	0	
AVIATION	21,839,511	5,786,122	16,073,389				
RAIL	48,746,831	15,690,849	30,641,237	218,745	2,196,000		
CENTRAL GARAGE	23,551,235						23,551,235
TRANSPORTATION BUILDINGS	2,825,000	2,825,000					
Total "VTrans" Programs	776,514,865	276,815,721	451,714,877	5,620,596	4,085,717	14,726,719	23,551,235
TOWN HIGHWAY BRIDGES	45,334,278	0	39,264,097	2,096,900		3,973,281	
TH STRUCTURES	8,016,000	8,016,000					
TH CLASS 2 ROADWAY PROGRAM	8,858,000	8,858,000					
TH - NONFEDERAL DISASTERS	1,150,000	1,150,000					
TH - FEDERAL DISASTERS	180,000	20,000	160,000				
TH AID PROGRAM	29,532,753	29,532,753					
TH CLASS 1 SUPPLEMENTAL GRANTS	128,750	128,750					
TH VERMONT LOCAL ROADS	481,452	121,452	360,000				
MUNICIPAL MITIGATION ASSISTANCE PROGRAM	7,143,000	715,000	1,428,000	5,000,000			
TH PUBLIC ASSISTANCE GRANTS	1,250,000	0	1,000,000	50,000	200,000		
Total "Town Highway" Programs	102,074,233	48,541,955	42,212,097	7,148,900	200,000	3,973,281	0
TRANSPORTATION BOARD	200,097	200,097					
TOTAL PROGRAMS	878,789,195	325,557,773	493,926,974	12,767,496	4,285,717	18,700,000	23,551,235

When you see things like these, they likely came from the Asset Management Bureau!



VTrans Asset Management

Questions?

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