

I-89 Exit 21 NB / VT 78

PROJECT REFINEMENTS - IM 089-3(82)

September 19th, 2023

Meeting Agenda

- Project Refinement Process & VPSP2
- Study Area & Project Background
- Existing Conditions
- Draft Purpose & Need
- Discussion & Local Concerns
- Next Steps

Project Team



Northwest Regional
Planning Commission
SERVING THE MUNICIPALITIES OF
FRANKLIN & GRAND ISLE COUNTIES



Regional Priority Project Refinement Process

- VTrans is evaluating **regionally identified projects** for consideration in the Capital Program
 - May not have been identified prior to the VPSP2 process
 - May not have all the supporting documentation in place
- Collaborative process (VTrans + RPC + Community) to refine projects and fill any gaps in project development to date



VPSP2 Vermont Project Selection and Project Prioritization Process



VPSP2 is a mechanism to identify, prioritize, and select state transportation capital improvement projects on the federal aid system.

VPSP2's Vision: Develop a performance-based, data driven project selection & prioritization framework that maximizes the "transportation value" delivered to Vermont taxpayers. This will be done through:

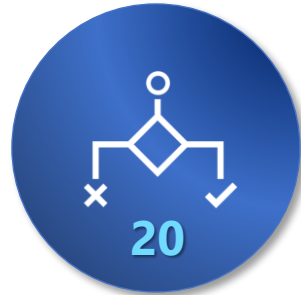
- Providing a defined, consistent, and transparent process for selecting and prioritizing projects that make up VTrans' Capital Program,
- Providing a mechanism for input from the RPCs and communities in the selection and prioritization of transportation projects,
- Utilizing criteria that delineate the "transportation value" that potential and planned VTrans' projects will provide to the statewide transportation network.

VPSP2 Vermont Project Selection and Project Prioritization Process



20

SAFETY



20

**ASSET
CONDITION**



15

**MOBILITY AND
CONNECTIVITY**



10

**ECONOMIC
ACCESS**



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RESILIENCY



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REGIONAL



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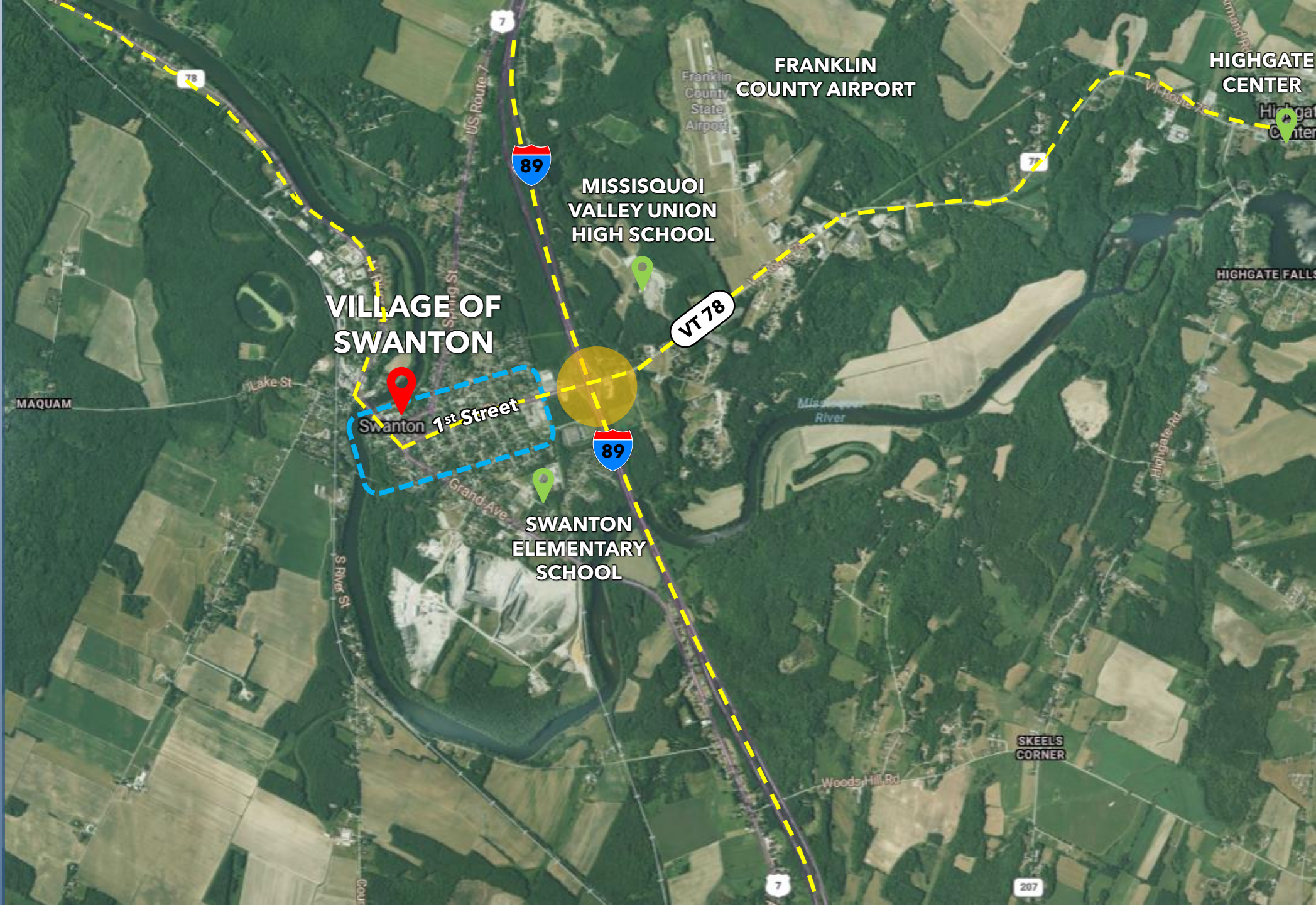
ENVIRONMENT

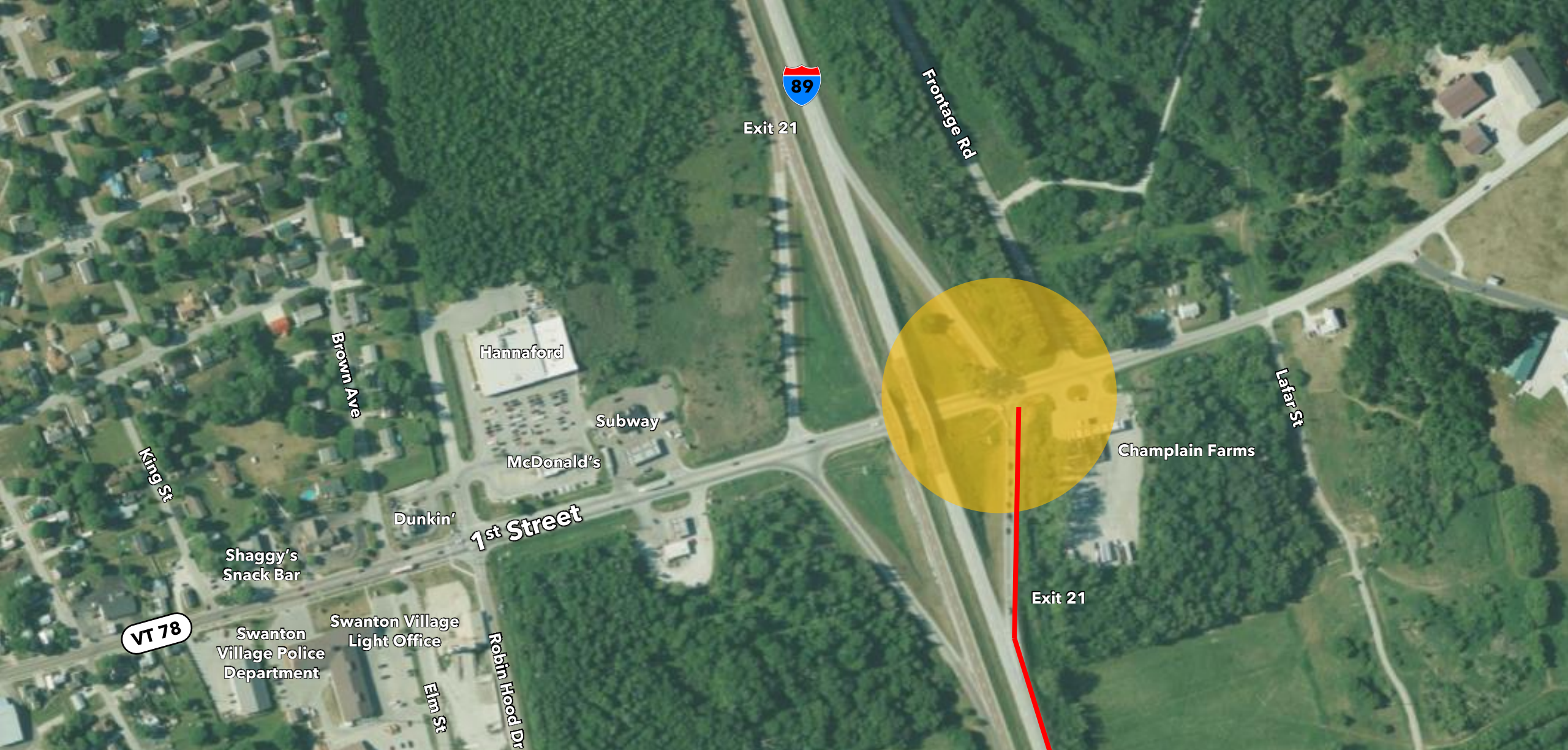


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**HEALTH
ACCESS**

Network Connectivity





Exit 21

Frontage Rd

Brown Ave

Hannaford

Subway

McDonald's

Dunkin'

1st Street

Lafar St

Champlain Farms

King St

Shaggy's
Snack Bar

VT 78

Swanton
Village Police
Department

Swanton Village
Light Office

Elm St

Robin Hood Dr

Exit 21

Study Area

Project Identification

- I-89 Exit 21 NB / VT 78 identified by issues of queuing on I-89
- No Prior Scoping Study
- Pedestrian improvements at Exit 21
 - Explored in the 2017 Swanton Sidewalk Scoping Study
 - Preliminary design plans in 2023 - STP BP 19(5)

Project Background

Traffic Operations Highway Safety Improvement Program

Location: VT-78
 Mile Marker: 7.471-7.771
 Town: Swanton
 HSIP#: 04-045
 By: RKG
 Date Visited: June 17, 2004

Observations

The segment is located in Swanton. This segment has the on-and-off the T-intersection of VT-78 and Frontage Rd. (TH # 9). Speed limit is

Past Projects

A paving project named STP 9554 (1) S was completed on 09/16/2002.

Past Work Orders

Route marker signs were replaced and town signs were retained through 362. Stop signs was replaced on the I-89 ramps through work order parking on Traveled lane" sign was installed through work order # 00- was removed through work order # 93-126. A "Watch for turning installed through work order # 91-175.

Future Projects

None planned.

Crashes

Accident reports were reviewed for the 1998-2002 reporting period. A took place during this period within this segment. Of these, 6 were was a left-turn crash, 3 were right-angle crashes and 3 other were loss. The reason behind the rear-end crashes were i) no appropriate reason closely, iii) the driver was not able to stop, iv) not paying attention vehicle stopping, vi) looked other way, distracted. The reasons behind was i) the driver was looking in his rear view mirror as someone was closely. The reasons behind the right-angle crashes were i) did not see ii) thought the road was clear, iii) sight distance was blocked by a t was parked in the Exxon Gas station. The reasons behind the loss of c



Road Safety Audit Review

VT Route 78
 Near Missisquoi Valley
 Union High School

Town of Swanton

November 13, 2008

Note: THIS DOCUMENT IS EXEMPT FROM DISCOVERY OR ADMISSION UNDER 23 U.S.C 409

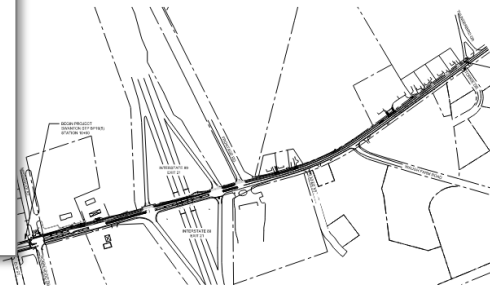
Road Safety Audit 2008

Swanton Town and Village Municipal Plan



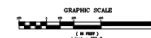
Swanton — "Cradled by the River"

Swanton Town STP BP19(5)
 VT 78 Sidewalk to Missisquoi Valley Union High School
 Town of Swanton
 Principal Arterial (Rural) (west of I-89)
 Major Collector (Rural) (east of I-89)
 County of Franklin



OVERALL PROJECT PLAN

QUALITY ASSURANCE PROGRAM PROJECT NO. 15138	TOWN OF SWANTON
DATE: _____	ACCEPTED: _____ DATE: _____
DESIGNED BY: _____	
APPROVED BY: _____	



NOTES

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PRELIMINARY PLANS
 FEBRUARY 21, 2023



TERRACON CONSULTING ENGINEERS

1000 COLLEGE AVENUE, SUITE 100, SWANTON, VT 05488

PHONE: 802.234.2113 FAX: 802.234.2111

WWW.TCE-ENGINEERS.COM

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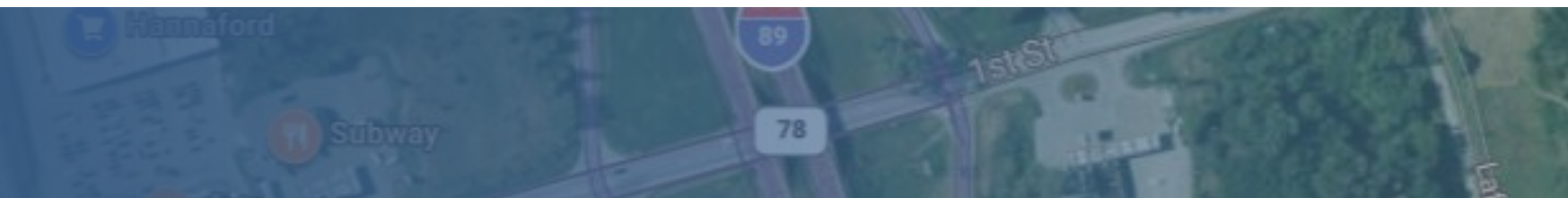
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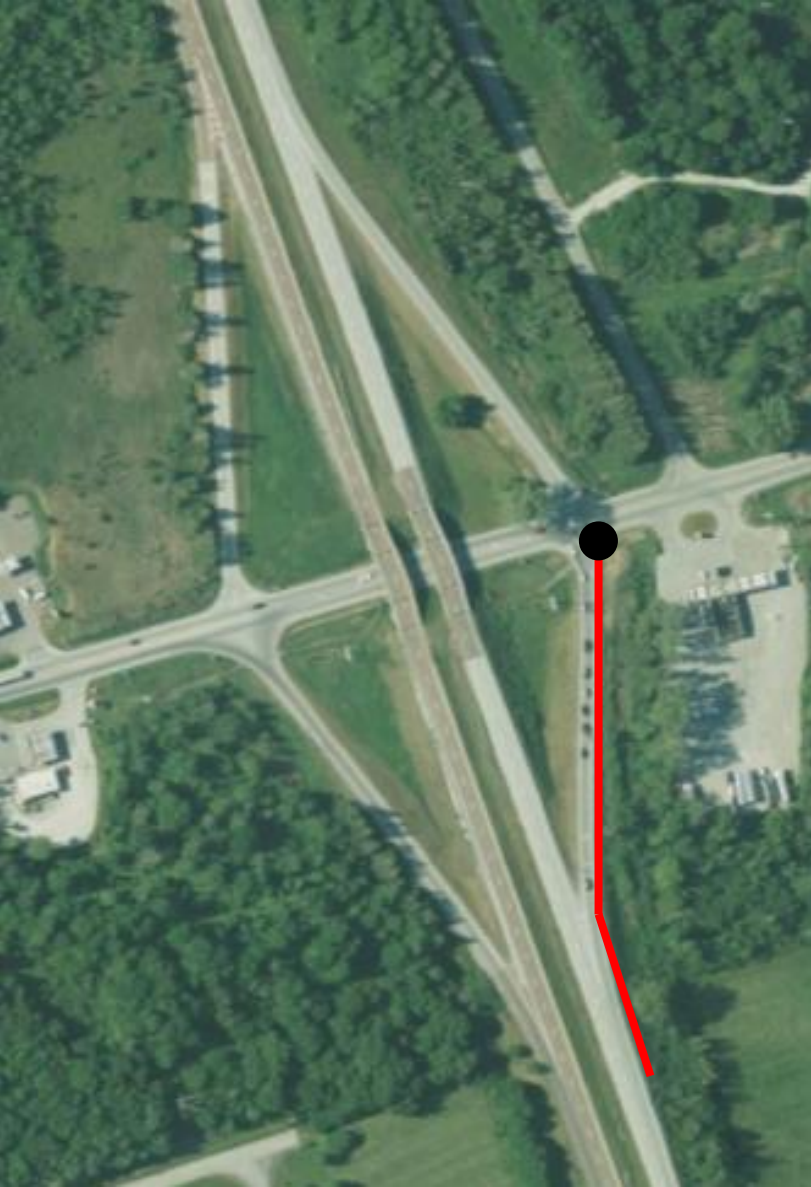
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Existing Conditions



Existing Conditions



6 crashes with 2 injury crashes associated with the I-89 Exit 21 NB Ramp / VT 78 intersection - greater than similar Exits on I-89



Categorized as Primary Risk for left turn crashes at minor stop-controlled intersection

Sources:

VTrans Crash Data Query Tool 2018 – 2023

VTrans Intersection Risk Mapping

Preliminary Level of Service & Queue

	Intersection LOS / Queue Length			
	AM Peak		PM Peak	
	LOS	Queue Length	LOS	Queue Length
A. 2016 Observed Traffic	C	50 ft	F	323 ft
B. 2023 Traffic Adjustment *	B	43 ft	E	253 ft
C. 2043 Traffic Projection *	C	53 ft	F	358 ft

* Adjusted to 2023 and projected to 2043 using VTrans Continuous Traffic Counter Report (Redbook)

DRAFT Purpose and Need



PURPOSE

The purpose of the project at the intersection of the I-89 Exit 21 NB ramps and VT-78 is to improve **traffic operations** and **safety** by reducing queuing and spillback onto I-89 in current and future traffic scenarios.



NEED

The needs for the improvements at this location are identified by the higher-than-average **crashes** relative to similar Exits on I-89 and observed queuing on the interstate off-ramp.



Queuing



Spillback

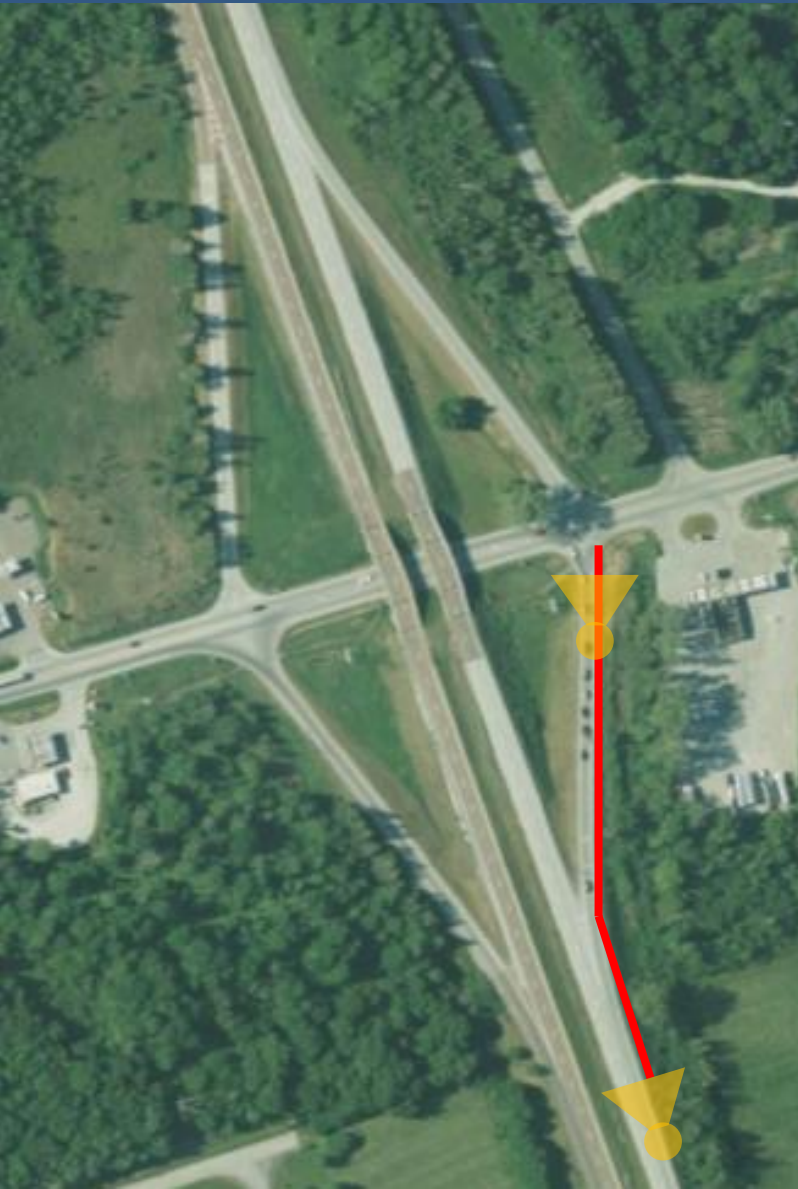
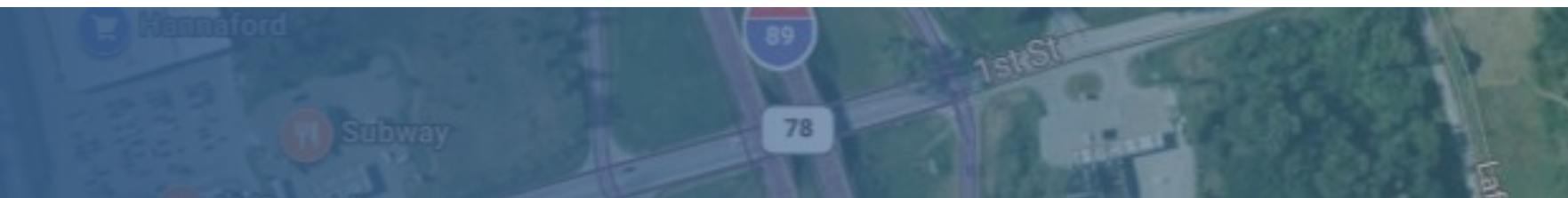


Safety Issues

Open Discussion



Discussion



Next Steps



Next Steps

- Discuss Local Concerns | **Today**
- Refine Draft Purpose and Need | **Today**
- Public Meeting #2
 - Confirm Purpose and Need
 - Envision Potential Improvements / Alternatives for Evaluation
 - Identify Project Constraints / Challenges
 - Endorse Advancement of Project to Scoping / Alternatives Evaluation
- Draft Refinement Report
- Program Project through VPSP2 Process

Thank you!

Questions or Comments?



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