Chittenden County
I-89 2050 Study

Advisory Committee Meeting #2

December 16th, 2019

Agenda

1. Introductions & Welcome to New Members
   - Curt Carter – Greater Burlington Industrial Corporation
   - Evan Langfeldt – O'Brien Brothers Realty
   - Kelly Stoddard Poor – AARP-VT
   - Preservation Trust of Vermont – TBD
2. Public Comment
3. Project Updates
4. Review and comment on Draft Vision, Goals, and Objectives
5. Preparations for First Round of Public Engagement
6. Next Steps

Chittenden County
I-89 2050 Study

Project Updates

Chittenden County
I-89 2050 Study

Project Overview

Our schedule for successfully moving from project kick-off through stakeholder engagement and technical evaluations to develop a comprehensive, forward-looking plan for the I-89 corridor.

DISCOVERY

EVALUATION

DECISION MAKING

REPORTING

TASK 1 Project Initiation & Kick-Off

May – June 2019

- Project initiation and kick-off meetings with Technical and Advisory Committees.
- Study area map, Committee meeting materials.
- TC 1 Meeting
- AC 1 Meeting

TASK 2 Analyze Current Conditions & Future Base

May – December 2019

- Existing conditions data collection, coordinate with resource agencies, and develop integrated modeling suite.
- Existing conditions summary, calibrated 2035 and 2050 No build models, Committee meeting materials.
- TC 2 Meetings
- AC 1 Meeting

TASK 3 Corridor Vision & Goals

October 2019 – June 2020

- Articulate Vision and Goals for the corridor through input from Committees, Focus Groups, and the public. Develop 2035 and 2050 Build models.
- Corridor Vision & Goals, Vision & Goals graphic, meeting materials.
- TC 1 Meeting
- AC 1 Meeting
- FG Up to 4
- PM Up to 3

TASK 4 Interchange Evaluation

March – September 2020

- Evaluate transportation and land use implications of new and/or improved interchanges.
- Interchanges evaluation results, selection of interchange improvements to carry forward, Committee meeting materials.
- TC 1 Meeting
- AC 1 Meeting

TASK 5 Alternatives Identification & Evaluation

September – April 2021

- Identify preliminary strategies for the corridor and evaluate three 2050 Build alternatives. Present results to Committees, Focus Groups, and the public.
- Three alternatives, evaluation matrix, meeting materials
- TC 2 Meetings
- AC 2 Meetings
- FG Up to 4
- PM Up to 3

TASK 6 Implementation Plan

March – June 2021

- Identify preferred alternative with phasing recommended for 2035 and 2050.
- Preferred alternative, evaluation matrix, implementation plan, meeting materials.
- TC 1 Meeting
- AC 1 Meeting

TASK 7 Final Report

February – November 2021

- Develop draft and final report.
- Dynamic, action-oriented, future-looking I-89 Corridor Plan
- TC 1 Meeting
- AC 1 Meeting
- PM Up to 3

Activities *Deliverables* *Meetings*

TC *Technical Committee* AC *Advisory Committee* FG *Focus Groups* PM *Public Meeting/ Workshop*

www.envision89.com

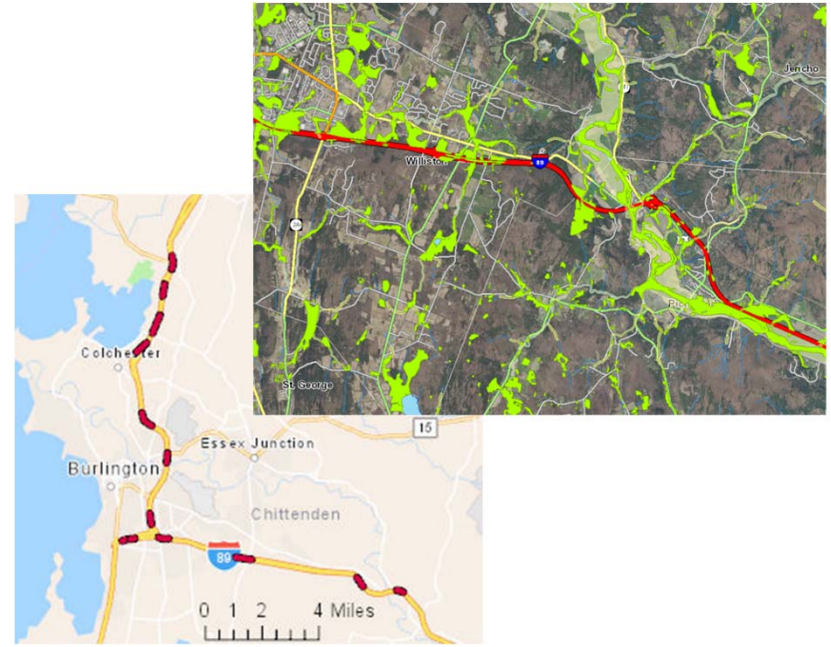
Project Updates (since last meeting)

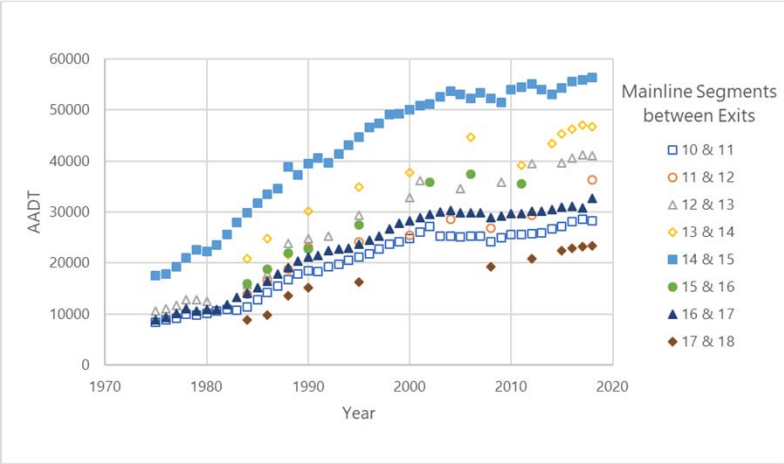
- **Scope Updates**
  - Respond to AC comments
  - Reinforce evaluations of bike/ped considerations at interchanges
  - Consideration of potential Bolton interchange (high-level review)
- **Stakeholder Group Meetings**
  - Asset Management (7/9/19)
    - *VTrans, CCRPC*
  - Emergency Management (9/4/19)
    - *VT Emergency Management, Milton, Richmond & Williston Fire, VTrans, CCRPC*
  - Environmental (9/5/19)
    - *US ACOE, EPA, AACD Historic Preservation, DEC Rivers, DEC Wetlands, Fish & Wildlife, DEC Stormwater, VTrans, CCRPC*
  - TSMO/ITS (9/10/19)
    - *VTrans, CCRPC*
- **Technical Committee Meetings**
  - TC Meeting #2 (10/8/19)
  - TC Meeting #3 (11/22/19)

Chittenden County
I-89 2050 Study

Project Updates (since last meeting)

- **Existing Conditions Assessment**
  - Reviewed and summarized eleven previous studies of the I-89 corridor (1958-2018)
  - Compiling asset information (e.g. pavement condition, lane widths, signage, guardrail) for the corridor
  - Reviewed bicycle and pedestrian infrastructure at interchanges
  - Developed narrative of current land use/zoning conditions
  - Summarized historic and current traffic volume trends and commuting patterns along the corridor.
  - Evaluated recent crash data and designated High Crash Locations
  - Prepared maps and descriptions of natural and cultural resources





Ramp No.	Ramp Description	On-Ramp Features										
		Number of Lanes	Controlling Curve Radius (ft)	Entrance Ramp Type (Tapered, Parallel)	Acceleration Length, La (ft)	AASHTO Minimum Acceleration Length (ft)	Assumed Speed at Controlling Feature, V' (mph)	Profile Grade along La (%)	Profile Grade along Ramp(%)	Merging Taper (ft)	AASHTO Maximum Grade (%) (Table 10-2)	Year of Latest Geometric Changes
11-B	I-89 SB On-Ramp, "Ramp BA"	1	330	Parallel	500	1000	35	-1%	5%	360	4-6	1964
11-C	I-89 NB On-Ramp (from Rte 2 WB), "Ramp BC"	1	320	Parallel	630	1220	25	1%	2%	220	5-7	1964
12-B	I-89 SB On-Ramp	1	2860	Parallel	1870	2497.5	15	6%	6%	330	6-8	1964
12-D	I-89 NB On-Ramp	1	1910	Parallel	1460	1957.5	15	3%	3%	200	6-8	1964
13-A	I-189 N Exit to I-89 South	1	1270	Parallel	880	464	40	3%	4%	190	4-6	1962
13-D	I-189 N to I-89 N	1	590	Parallel	750	320	40	1%	4%		4-6	1962
14-A	I-89 S On-Ramp from US-2 East	1	500	Parallel	630	550	35	1%	-2%	220	4-6	1962
14-D	I-89 S On-Ramp from US-2 West (Cloverleaf)	1	220	Weave	590	1093.5	20	3%	-5%	NA	6-8	1962
14-E	I-89 N On-Ramp from US-2 East (Cloverleaf)	1	300	Weave	700	810	20	-1%	-4%	NA	6-8	1962
14-H	I-89 N On-Ramp from US-2 West	1	500	Parallel	790	550	35	-1%	-4%	230	4-6	1962
15-A	I-89 SB On-Ramp	1	820	Parallel	2800	NONE	50	-4%	-4%	300	3-5	1962
16-B	I-89 NB On-Ramp	1	2050	Parallel	1600	1215	15	7%	7%	240	6-8	1962
16-C	I-89 SB On-Ramp	1	1000	Parallel	1320	900	15	2%	1%	250	6-8	1962
17-AF	I-89 SB On-Ramp	1	716	Parallel	560	600	45	0%	-5%	210	3-5	1964
17-C	I-89 NB On-Ramp	1	572	Parallel	640	600	45	1%	1%	430	3-5	1964
I-189-A	I-189 N On-Ramp	1	380	Parallel	1500	797.5	35	3%	-3%	220		1990

Project Updates (since last meeting)

- **Model Development**
  - Calibrated base microsimulation model – substantially complete
  - Model scenarios:
    - 2020 Base No Build (AM & PM)
    - 2035 Future Committed (TIP) Build (AM & PM) - with TIP/Front of Book projects
    - 2050 Future Committed (TIP) (AM & PM) - with TIP/Front of Book projects
    - 2035 Future MTP Build (AM & PM) - with TIP/Front of Book & MTP projects
    - 2050 Future MTP Build (AM & PM) - with TIP/Front of Book & MTP projects

Chittenden County
I-89 2050 Study

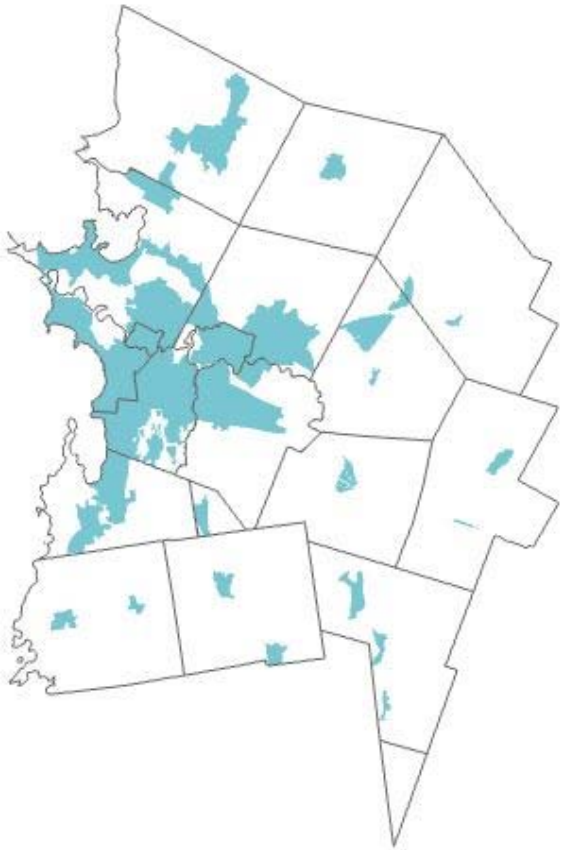
0
.025
.05
.075
Miles

Planning Framework – Summary of Future Conditions (2050)

Adopted ECOS Demographic Forecasts and Land Use

- **Population**: (14% increase)
  - » 161,382 (2015)
  - » 183,172 (2050)
- **Households:** (20% increase)
  - » 63,498 (2015)
  - » 79,151 (2050)
- **Employment**: (35% increase)
  - » 135,511(2015)
  - » 182,688 (2050)
- **Growth in Existing Centers**: **90%** of future household growth in Chittenden County to occur in areas planned for growth

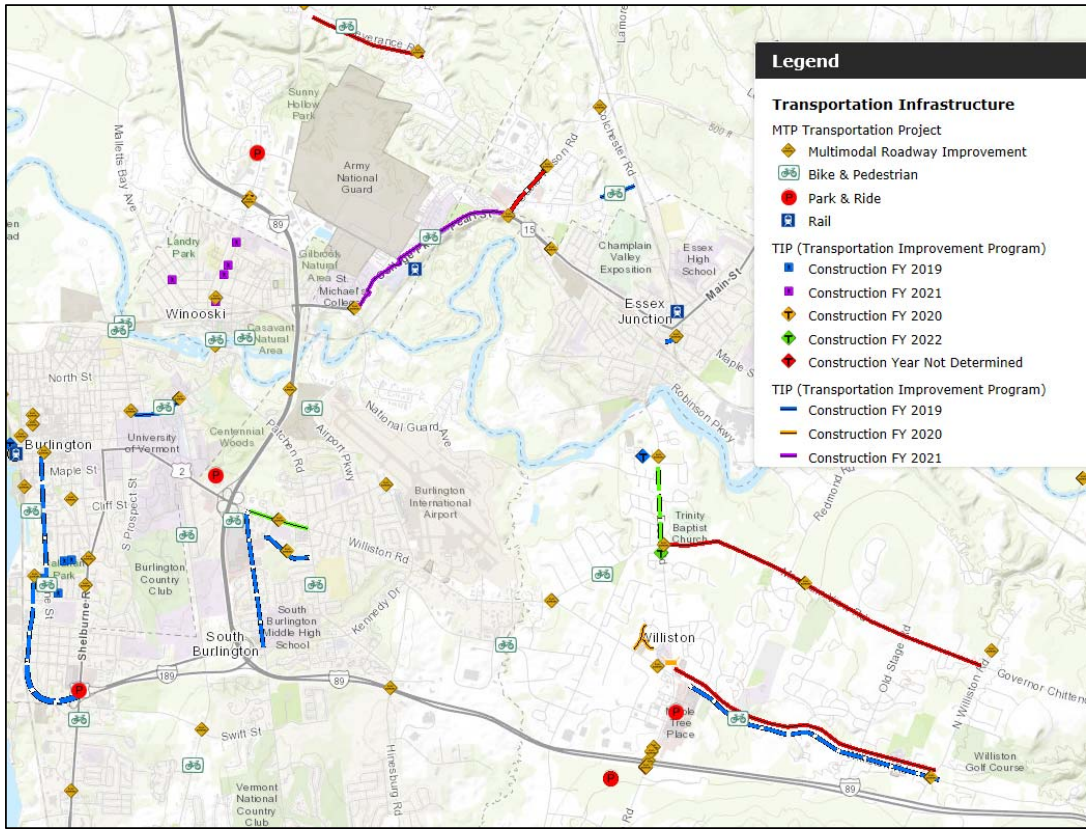
Areas Planned for Growth



Chittenden County
I-89 2050 Study

Planning Framework – Summary of Future Conditions (2050)

- **Transportation System Investments**
  - **<u>Major Transportation Projects</u>**: Champlain Parkway, Exit 12, Exit 16, Exit 17 Improvements.
  - **<u>Enhanced Transit Service</u>**: 15-minute headways for all trunk routes and 20 to 30-minute headways on all other routes.
  - **<u>Other Enhancements</u>**: Major bike/ped system expansion, ITS investments, TDM programs, Safety enhancements, Partial fleet electrification, System maintenance
  - Approximately **$450 million** through 2050

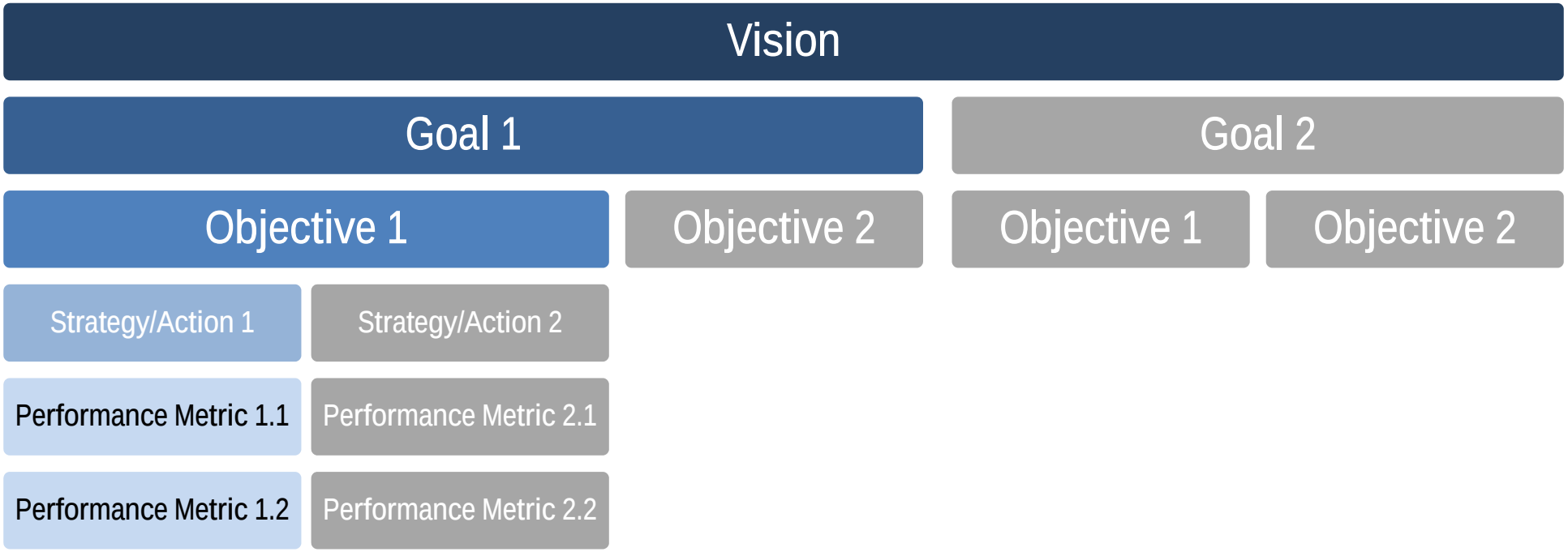


Chittenden County
I-89 2050 Study

Developing the Corridor Vision, Goals & Objectives

Developing the Corridor Vision, Goals, Objectives

- **Vision:** The *vision* is a concise statement that paints a picture of the desired future for the corridor – from both a land use and a transportation perspective.
- **Goals:** The *goals* support the vision and lay out desired long-range outcomes to be achieved by the plan.
- **Objective:** The *objectives* are defined outcomes that support their respective goal.



Developing the Corridor Vision, Goals, Objectives

Vision: The 2050 Vision for the I-89 Corridor through Chittenden County is an interstate system (mainline and interchanges) that is safe and resilient and provides for reliable and efficient movement of people and goods in alignment with municipal and regional plans.

Goal: Improve safety along the I-89 Corridor for all users

Goal 2

Objective: Reduce the number and severity of crashes on I-89

Objective 2

Objective 1

Objective 2

Strategy: Install Median Barriers

Strategy/Action 2

Performance Metric: Reduced crash frequency

Performance Metric 2.1

Performance Metric: Benefit/Cost ratio

Performance Metric 2.2

Developing the Corridor Vision, Goals, Objectives

- Development of the **Vision, Goals, and Objectives for the I-89 Corridor** is one of the *most important* elements of this study as it will guide decisions related to screening of alternatives
- Process Overview:
  - ✓ **TC Meeting#2 (October 8):** Develop Draft Vision, Goals, and Objectives
  - ✓ **TC Meeting #3 (November 22):** Refine Vision, Goals and Objectives and refine Evaluation Metrics
  - – **AC Meeting #2 (Today):** Review Draft Vision, Goals, Objectives
  - – **Public Meetings & Focus Groups (January – April):** Review and refine Vision, Goals & Objectives
  - – **TC Meeting #4 (April/May):** Revise Vision, Goals, Objectives as necessary and Refine Metrics
  - – **AC Meeting #3 (June):** Finalize Vision, Goals, Objectives and Review Metrics

Developing the Corridor Vision, Goals, Objectives

DRAFT Vision Statement

The 2050 Vision for the I-89 Corridor through Chittenden County is an interstate system (mainline and interchanges) that is safe and resilient and provides for reliable and efficient movement of people and goods in alignment with municipal and regional plans.

Developing the I-89 Corridor Vision, Goals, Objectives

DRAFT Goals

1. **Safety**: Enhance safety along the I-89 Study Corridor and Adjacent Interchanges for all users.
2. **Mobility & Efficiency**: Improve the efficiency and reliability of the I-89 Corridor for all users.
3. **Environmental Stewardship & Resilience:** Establish a resilient I-89 Corridor that minimizes environmental impacts associated with the transportation system.
4. **Economic Access & Vitality**: Improve economic access and vitality in Chittenden County.
5. **Livable, Sustainable and Healthy Communities**: Promote livable, vibrant, and healthy communities.
6. **System Preservation**: Preserve and improve the condition and performance of the I-89 Corridor.

Developing the I-89 Corridor Vision, Goals, Objectives

1. **Safety**: **Enhance safety along the I-89 Study Corridor and Adjacent Interchanges for all users.**
   - Reduce the number, frequency, and severity of crashes along the I-89 Corridor and adjacent interchanges.
   - Enhance safety of bicyclists and pedestrians at interchanges.
   - Improve incident response.

2. **Mobility & Efficiency: Improve the efficiency and reliability of the I-89 Corridor for all users.**
   - Accommodate current and anticipated future traffic demand.
   - Maintain reliable travel times for passengers and freight along the corridor.
   - Improve network connectivity to enhance walking and bicycling through the study area interchanges.
   - Accommodate current and future public transportation services.

3. **Environmental Stewardship & Resilience: Establish a resilient I-89 Corridor that minimizes environmental impacts associated with the transportation system.**
   - Improve water quality and stormwater treatments.
   - Improve the resilience of the I-89 Corridor.
   - Reduce greenhouse gas emissions associated with fossil fuels used in transportation.
   - Improve wildlife and habitat connectivity.

Developing the Study Vision, Goals, Objectives

4. **Economic Access & Vitality: Improve economic access and vitality in Chittenden County.**
   - Support anticipated economic growth in the region.
   - Accommodate freight and goods movement served by the I-89 Corridor.

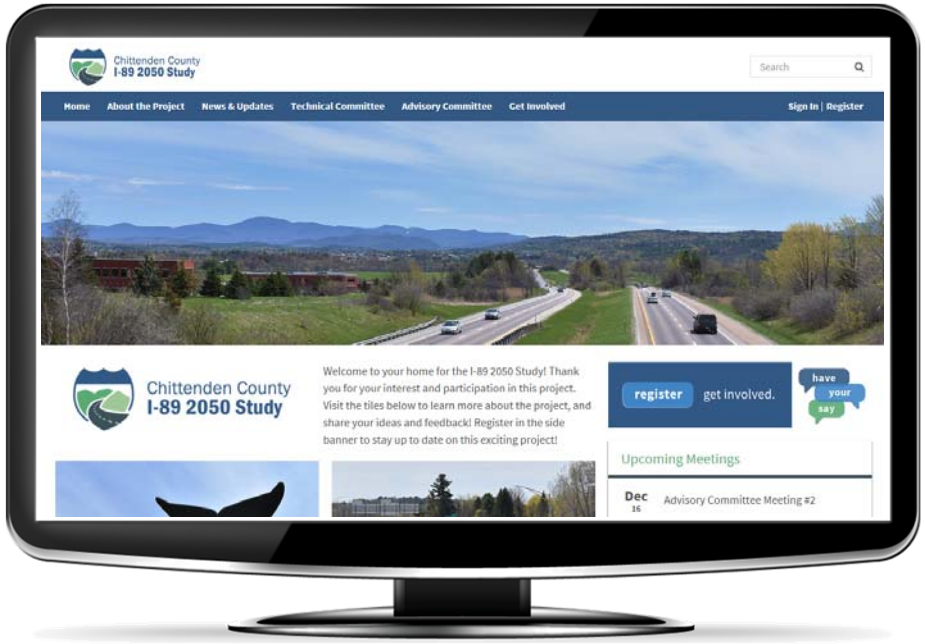
5. **Livable, Sustainable and Healthy Communities: Promote livable, vibrant, and healthy communities.**
   - Discourage transportation investments that result in land use patterns that are not consistent with state, regional and local goals and plans.
   - Ensure that transportation improvements do not disproportionately impact underserved populations.

6. **System Preservation: Preserve and improve the condition and performance of the I-89 Corridor.**
   - Provide for sound and effective maintenance and preservation activities to achieve a State of Good Repair of the I-89 Corridor.

First Round of Public Outreach

Public Outreach – First Round (January – April 2020)

- **Public Meetings**
  - January 30th – South Burlington City Hall
  - February 13th – Williston Town Office
  - March 11th – Winooski City Hall
- **Focus Groups**
  - Municipal Staff (CCRPC TAC and PAC Presentations)
  - Federal, State, and Local Elected Officials
  - Freight and Logistics Providers
  - Major Employers
- **Website**
  - Survey, Discussion Forum, Interactive Feedback Map
- **Television / Internet**
  - Channel 17 "What's Up Williston" (1/9)
  - Channel 17 "World of Winooski" (2/25)
  - Channel 17 Taped Program on I-89 Study

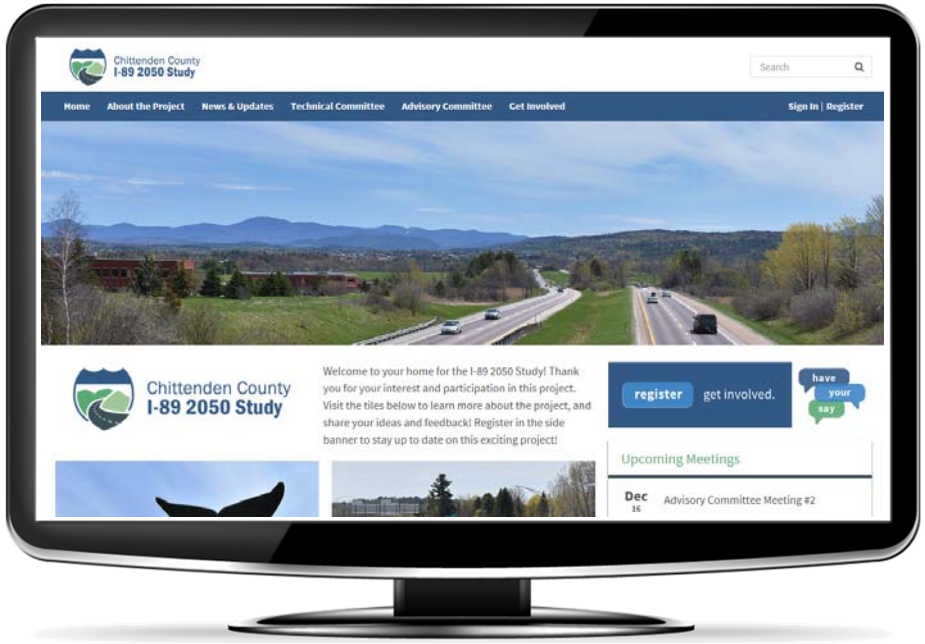


www.envision89.com

Chittenden County
I-89 2050 Study

Public Outreach – First Round (January – April 2020)

- **Public Meeting Activities**
  - Presentation
    - Project Overview
    - Planning Framework / Link to ECOS MTP
    - Overview of Existing Conditions & Future Issues
    - Solicit Input on Issues and Opportunities
    - Preliminary Vision, Goals, Objectives
  - Live Polling
  - Graphic Artist (Vision, Issues & Opportunities)
- **Public Notification Outlets**
  - CCRPC & Envision89 websites
  - Front Porch Forum
  - Press Releases
  - Notifications to Envision89 members
  - Advisory Committee Networks



www.envision89.com

Chittenden County
I-89 2050 Study

Next Steps

Next Steps

- Complete Modeling of 2035 & 2050 Scenarios - December
- First Round of Public Meetings & Focus Groups
  - January 30th – South Burlington City Hall
  - February 13th – Williston Town Office
  - March 11th – Winooski City Hall
- Begin Interchange Evaluation – Early Spring 2020
- Technical Committee Meeting #4 – April/May 2020
  - Review public input; revise Vision and Goals as needed; finalize evaluation metrics; review preliminary results from interchange evaluations
- Advisory Committee Meeting #3 – June 2020
  - Review public input; finalize Vision and Goals; review results from interchange evaluations