



Chittenden County
I-89 2050 Study

Senate Transportation Committee

February 19th, 2021



Presentation Overview

1. Project Background & Overview
2. Review Interchange Concept Plans
3. Review Interchange Evaluation
 - *seeking input on metrics and scoring*
 - *leading to direction on Interchange Investments*
4. Introduce beginning concepts for Bundles
 - *seeking initial input on the bundles*
5. Next Steps



Demographic Forecasts

	2015	2050	2015 to 2050 % increase
Population	161,382	183,172	14%
Employment	135,511	182,688	35%
Household	63,498	79,151	25%

CCRPC Board Approved, March 2017

2018 ECOS Plan Metropolitan Transportation Plan Priorities

- 70% of Funding goes to System Preservation
- Concentrate growth in our Villages and Downtowns
 - 90% of HH growth in areas planned for growth
- Safety (HCL) Improvements
- ITS Investments
- TDM Programs
- Increases in walking/biking
- Capacity expansion only when needed

The strategies strike a balance between:

-  Reducing congestion
-  Fixing high-crash locations
-  Enhancing walking, biking & transit
-  Increasing livability by investing in areas planned for growth

MTP Priorities (Cont'd)

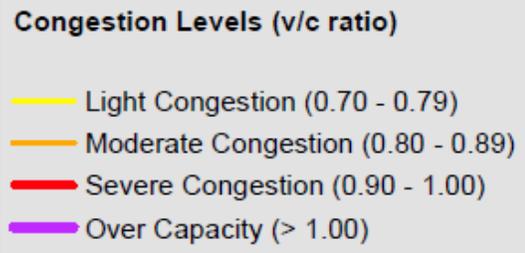
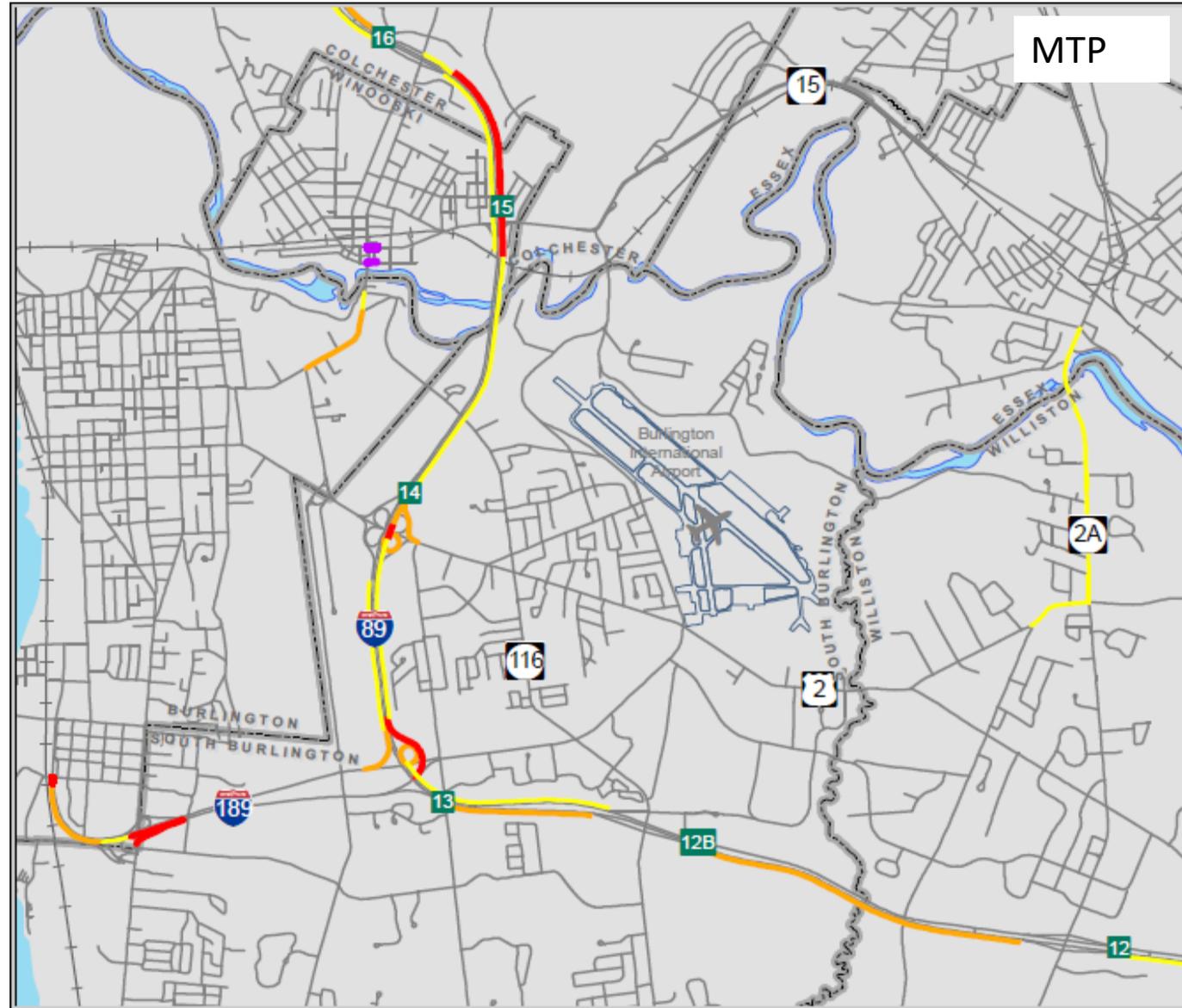
- Transit enhancements
 - 15 minute headways on all trunk routes (US2, US7, VT15 & North Ave)
 - 20 – 30 min headways on all other routes and improved weekend service
 - New Colchester loop
- Identified Need for I-89 2050 Study (Exits 12 to 16)
 - I-89 Third Lane between Exits 14 and 15?
 - Interchange Improvements: Exit 12B (placeholder) **or** Exit 14 reconstruction **or** Exit 14N **or** Exit 13 **or** other?

MTP Outcomes – meeting our transportation /climate/energy goals

- The significant MTP investment in bike/ped, transit, and park & ride projects, if fully implemented, is estimated to have the following impacts on regional travel through 2050:
 - **2.4%** decrease in Vehicle Miles Traveled (VMT)
 - **4.6%** decrease in Vehicle Hours of Travel (VHT)
 - Increase in Non-Automobile Mode-Share from about **12% to 16%**
 - **90%** fleet electrification to meet the State's energy goal of having 90% of Vermont's energy needs provided by renewable sources by 2050
 - **77%** Reduction in Fuel Consumption compared to 2015

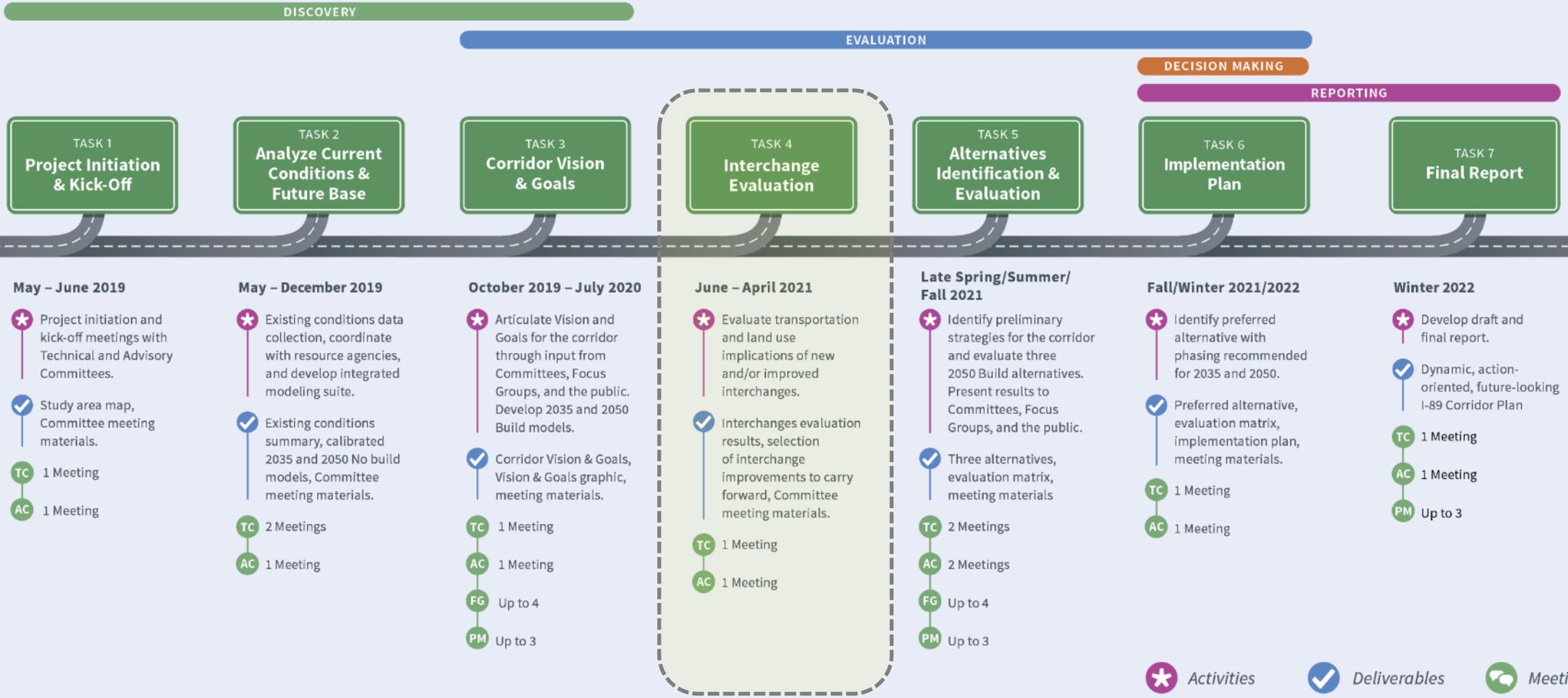
Roadway Capacity

- Balance possible I-89 widening vs. local road improvements
- Pursue alternative ways to reduce congestion
 - Transit, HOV lane, Connected & Autonomous Vehicles
- Increase funding share for alternative modes



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.



Current I-89 Vision & Goals



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

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

There is significant uncertainty about long-lasting changes on where people will live and how they will travel in the future due to the COVID-19 pandemic, technology, demographics, and other dynamics. We recognize that the I-89 Vision, Goals, Objectives and implementation actions that will follow will need to be monitored and reassessed periodically to ensure that they address the evolving situation.

• Two Rounds of Interchange Evaluation

First Round of Interchanges Evaluated

1. Exit 10A – Bolton
2. Exit 12B – South Burlington
3. Exit 13 Full Interchange – South Burlington
4. Exit 13 U-Turn – South Burlington
5. Exit 13 Hybrid – South Burlington
6. Exit 14N – South Burlington
7. Exit 15 Full Interchange – Winooski
8. Exit 17N - Milton

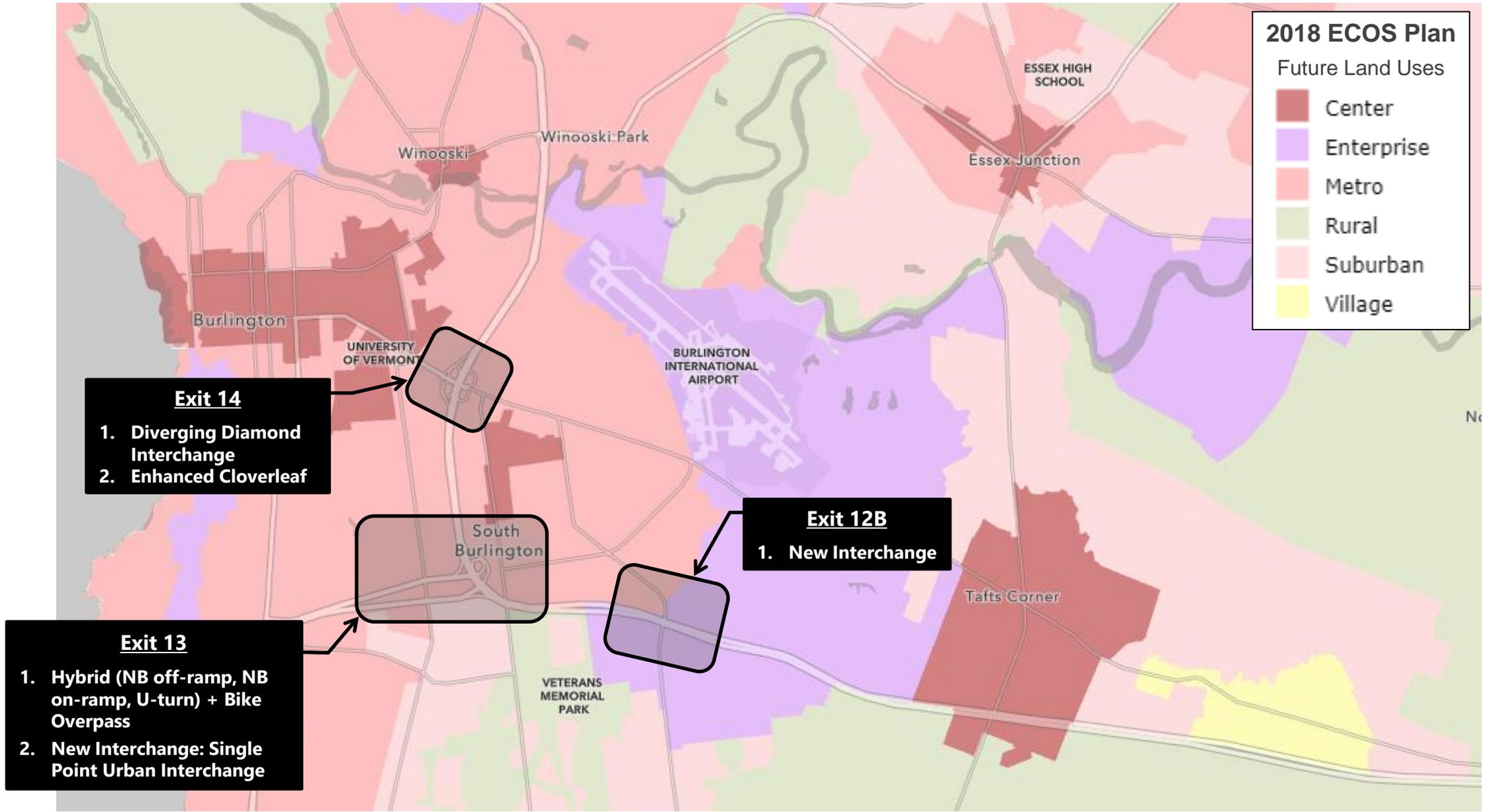


Second Round of Interchanges Evaluated

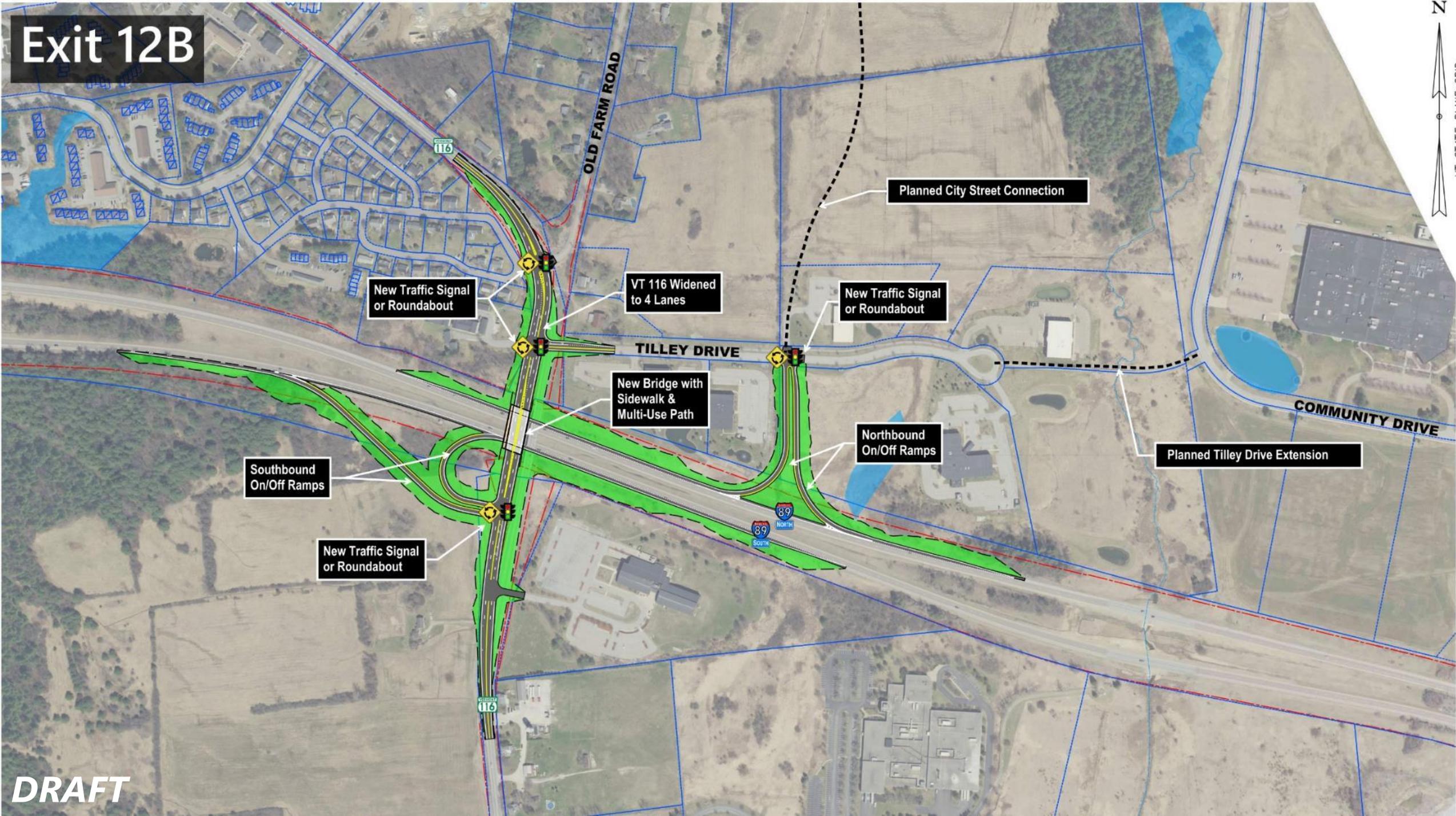
- Exit 12B – South Burlington
- Exit 13 – South Burlington
- Exit 14 – South Burlington

Based on results from the first round of interchange evaluation, the I-89 Advisory Committee voted to advance Exits 12B, 13, and 14 to the second round of evaluation

Second Round of Interchange Evaluation - Overview



Exit 12B



New Traffic Signal or Roundabout

VT 116 Widened to 4 Lanes

Planned City Street Connection

New Traffic Signal or Roundabout

New Bridge with Sidewalk & Multi-Use Path

Northbound On/Off Ramps

Planned Tilley Drive Extension

Southbound On/Off Ramps

New Traffic Signal or Roundabout

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Exit 13 - Hybrid



Pedestrian / Bicycle Overpass

New Shared Use Path

SPEAR STREET

New Northbound On-Ramp

DORSET STREET

KENNEDY DRIVE

New U-Turn Ramp

New Northbound Off-Ramp



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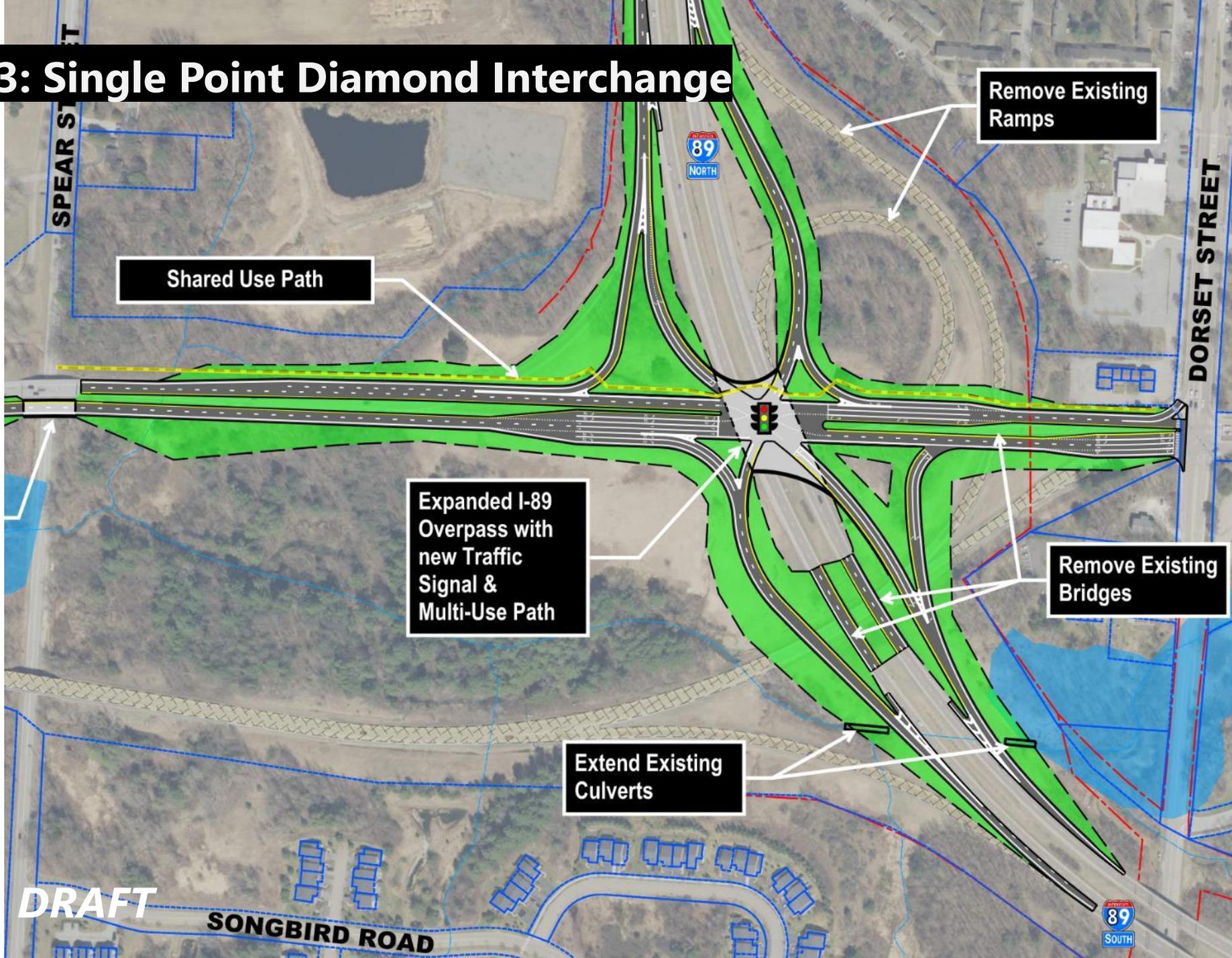


Exit 13 - Single Point Diamond Interchange (SPDI)



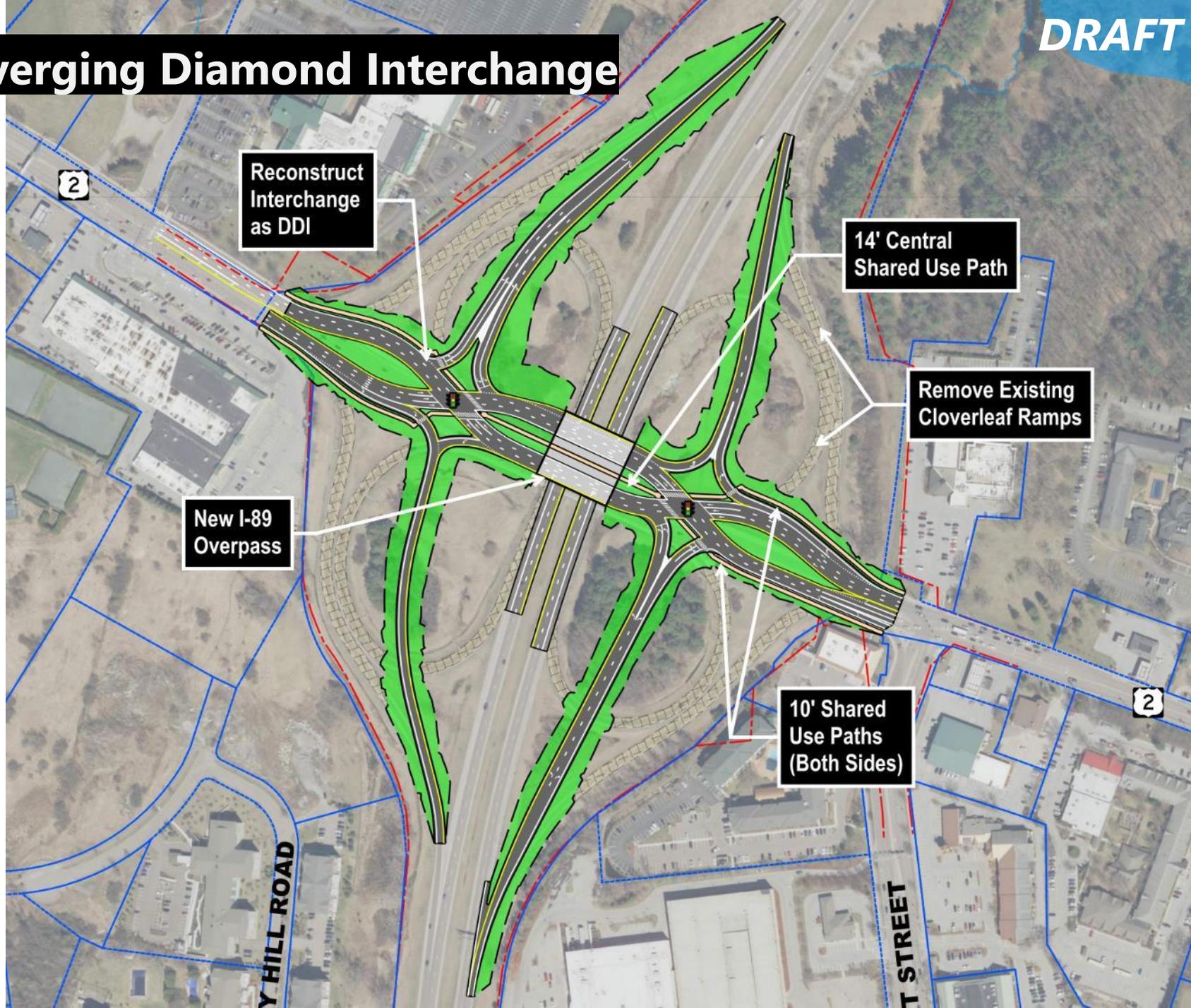
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Exit 13: Single Point Diamond Interchange

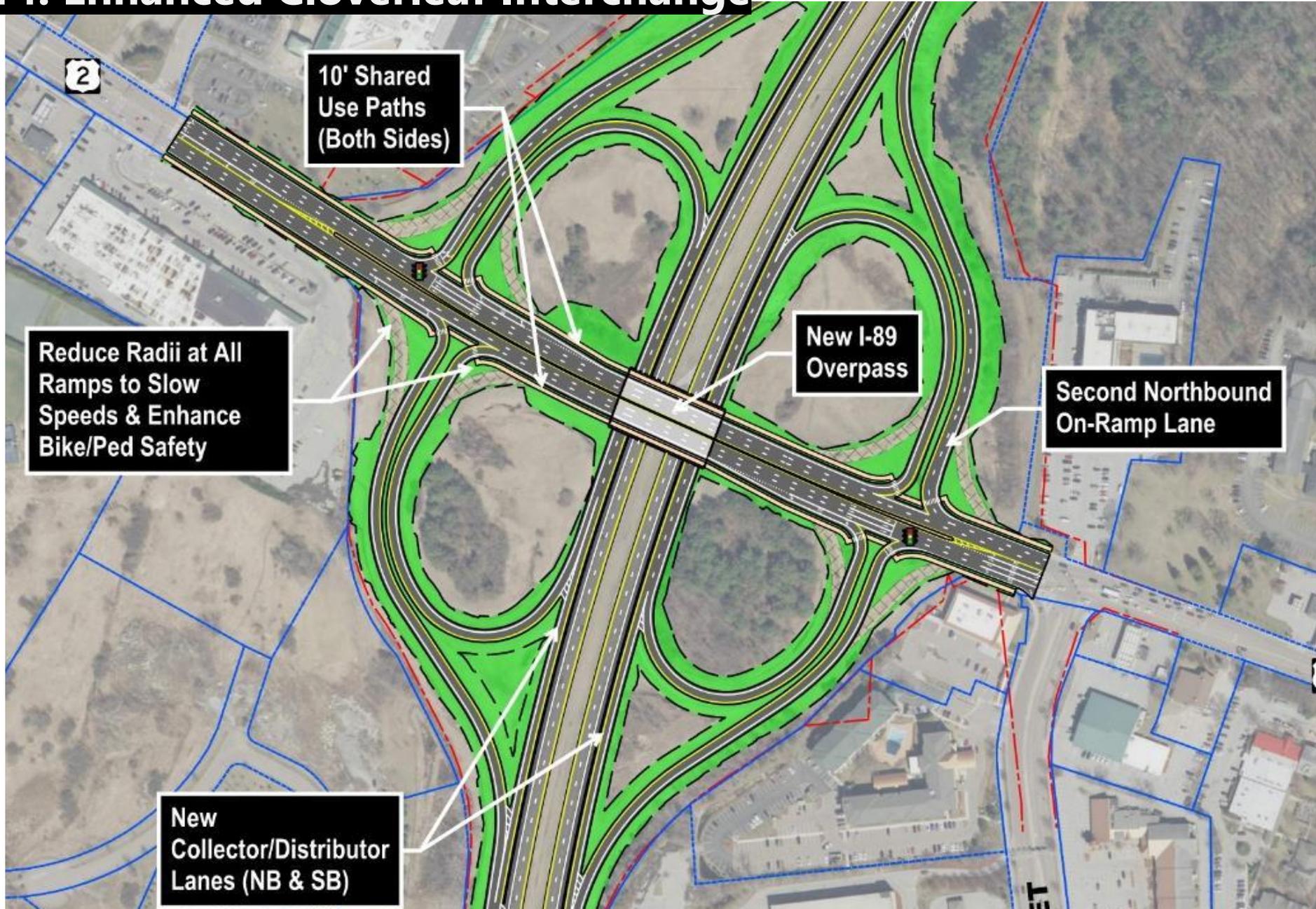


Exit 14: Diverging Diamond Interchange

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Exit 14: Enhanced Cloverleaf Interchange



Second Round Interchange Evaluation Metrics – 1 of 2

SAFETY GOAL: Enhance safety along the I-89 Study Corridor and Adjacent Interchanges for all users

- Ramp Spacing
- Safety Impact
- Bike/Ped Safety

LIVABLE, SUSTAINABLE, & HEALTHY COMMUNITIES GOAL: Promote compact growth that supports livable, affordable, vibrant, and healthy communities.

- Consistent with Regional Plan
- ROW Impacts
- Environmental Justice / Underserved Populations

MOBILITY & EFFICIENCY GOAL: Improve the efficiency and reliability of the I-89 Corridor and Adjacent Interchanges for all users.

- Interchange Trips
- VMT
- VHT
- I-89 Corridor V/C
- Average Delay
- Bike/Ped Connectivity

Second Round Interchange Evaluation Metrics – 2 of 2

ENVIRONMENTAL STEWARDSHIP GOAL: *Establish a resilient I-89 Corridor that minimizes environmental impacts associated with the transportation system.*

- Wetland Impacts
- River Corridors
- Natural Habitats
- Fuel Consumption

ECONOMIC ACCESS GOAL: *Improve economic access and vitality in Chittenden County.*

- Connectivity to Areas Planned for Growth
- Job Access

SYSTEM PRESERVATION GOAL: *Preserve and improve the condition and performance of the I-89 corridor.*

- Asset Maintenance Cost
- Construction Cost
- Maintenance & Construction Cost

Seeking Input

Metrics and Scoring, February-March:

- Are there any additional metrics that should be evaluated at this stage?
- Should some of the metrics be scored on a different basis?

Next Steps, April:

- Which of Enhanced Cloverleaf or Diverging Diamond Interchange at Exit 14 should be included?
- Which of Exit 12B, Exit 13 Hybrid, or Exit 13 Single Point Diamond Interchange should be included?
- Any other specific suggestions as to what should be included in bundles?

Initial Draft I-89 Corridor Bundles

Investments	Bundle 1	Bundle 2	Bundle 3
Transit (new service, increased frequency, etc.)	✓	✓	✓
Biking (lanes, paths, signals, etc.)	✓	✓	✓
Walking (sidewalks, paths, crosswalks, signals, etc.)	✓	✓	✓
Transportation Demand Management (park and ride lots, ridesharing, telecommuting, TMA, etc.)	✓	✓	✓
Intelligent Transportation Systems (signage, signals, etc.)	✓	✓	✓
Ramp improvements at Exit 14 - Route 2 WB to 89 NB	✓	✓	✓?
Reduce ramp terminal radii along US 2 to slow speeds	✓	✓	✓?
Either Exit 12B, Exit 13 Hybrid, or Exit 13 Single Point Diamond Interchange		✓	✓
Either Enhanced Cloverleaf or Diverging Diamond Interchange at Exit 14			✓

Next Steps

- Second Round Interchange Evaluation
 - Outreach to Underrepresented Populations: **February - March**
 - Other interested committees/groups: **February - March**
 - South Burlington City Council: **February 16th and March 15th**
 - Online Public Meeting: **March 18th**
 - South Burlington City Council: **April 19th**
- Advisory Committee Meeting #5: **April/May**
- Corridor Evaluation & Public/Stakeholder Involvement: **Spring/Summer/Fall 2021**
 - Includes identifying the need for I-89 widening in Bundles 2 and/or 3
- Draft & Final Report: **Winter 2022**



Thank you!

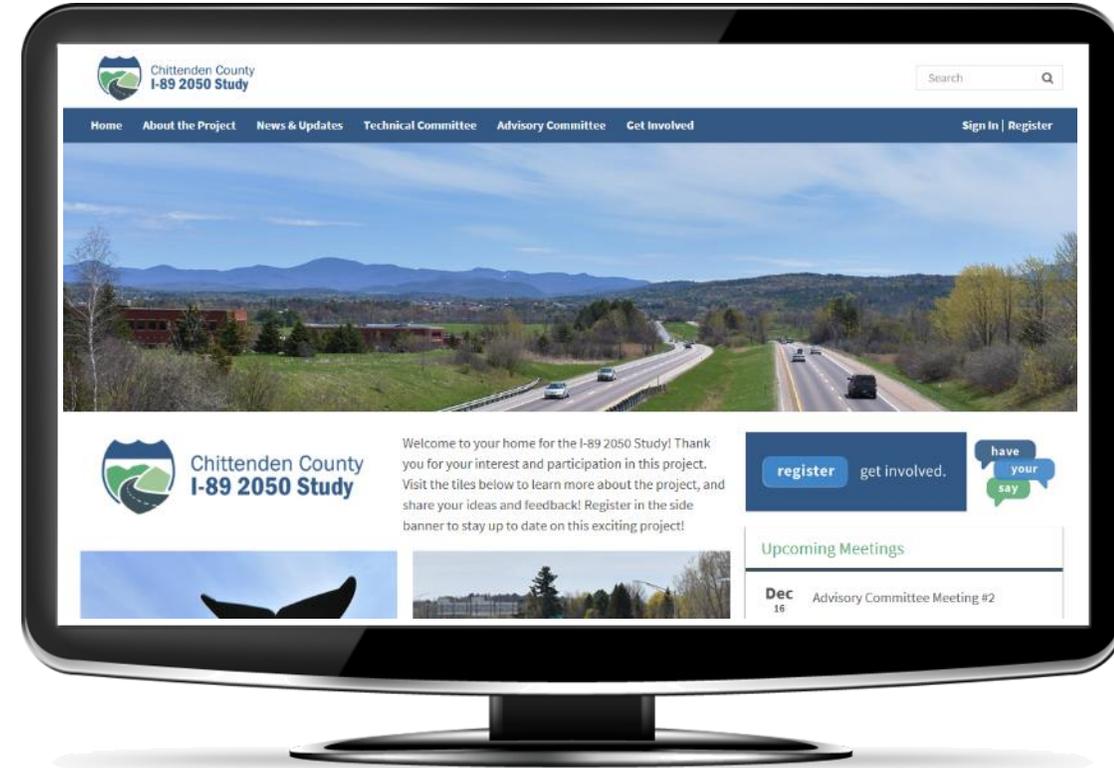
Stay Connected!



Please reach out to us if you would like to request a similar presentation for a City Committee, Neighborhood Group, etc.

- **Charlie Baker** cbaker@ccrpcvt.org
- **Eleni Churchill** echurchill@ccrpcvt.org

This presentation as well as Interchange Evaluation Matrices and Modelling Results and a separate pdf with Technical Memos for review can be found on this project webpage under Task 4: <https://envision89.com/project-overview2>



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