



# VTrans On-Road Bicycle Plan

**Public Meeting**  
**December 1, 2015**

# Today's Agenda

- Welcome and Introductions
- Logistics of Tonight's Meeting
  - Check in with sites
- Formal Presentations
  - Kevin Marshia (VTrans Chief Engineer)
  - Erica Wygonik (RSG Consultant Team Project Manager)
- Receive Public Comments on VTrans Bicycle Corridor Priority Map
- Discuss Project Next Steps
  - Kevin Marshia (VTrans Chief Engineer)
  - Receive Public Comments on Next Steps
- 7:50 P.M. Wrap Up



# Participating at Home

- Go to the project website:  
<http://vtransplanning.vermont.gov/bikeplan>
- Download the Slides
- Download the Map

you are at: [Home](#) → [Bike Plan](#)

## VTrans On-Road Bicycle Plan



### LATEST NEWS

#### Statewide Public Meeting #3

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# Steering Committee

This project relies on input from a diverse group of stakeholders. To ensure we are planning around the needs of ALL cyclists, our steering committee represents many interests and has reviewed the work we are about to share.

## EXTERNAL

- Rutland Regional Planning Commission
- Northeastern Vermont Development Association
- Tourism & Marketing
- Agency of Commerce & Community Development
- VT Bike & Ped Coalition / Local Motion
- VBT Bicycling & Walking Vacations
- Green Mountain Bicycle Club
- American Council of Engineering Consultants

## VTrans

- Planning & Policy
- Bicycle and Pedestrian
- Operations & Maintenance
- Paving & Roadway
- Asset Management

# Reminder of Project Purpose

## Overall Project Goal:

Develop a plan that identifies opportunities to enhance bicycle conditions on state roads designated as high-use priority bicycle corridors.

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→ We are nearing the end of Phase 1

# Phase 1 Purpose

## **Phase 1 (current phase):**

Categorize state roads into high-, moderate- and low-use corridors based on current and potential bicycle use.



12.1.2015

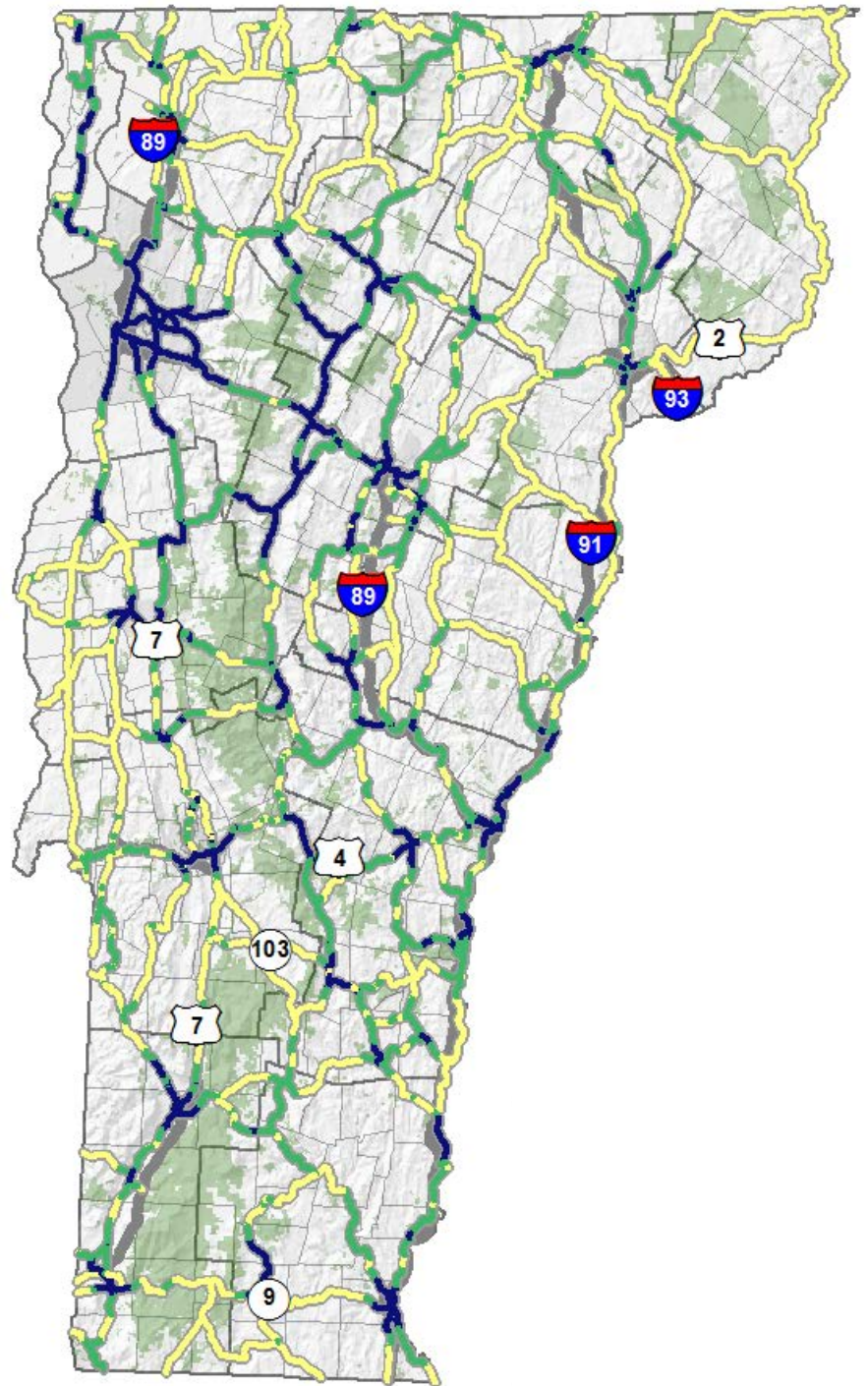
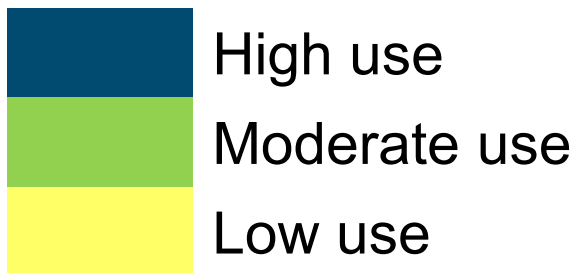
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# Phase 1 Purpose

**Phase 1 (current phase):**  
Categorize state roads into high-, moderate- and low-use corridors based on current and potential bicycle use.

**Result:**  
VTrans Bicycle Corridor Priority Map

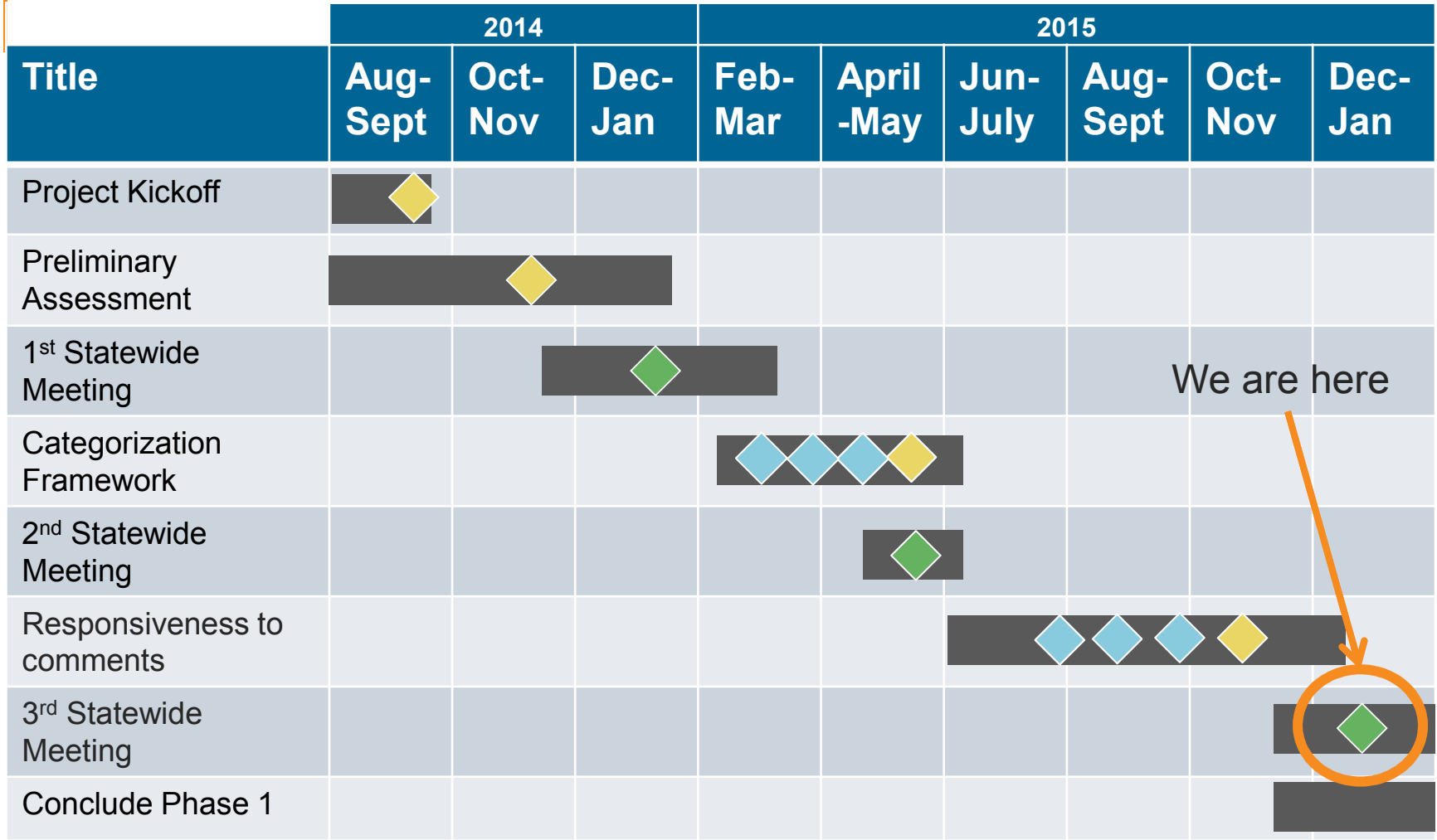


# Project Purpose

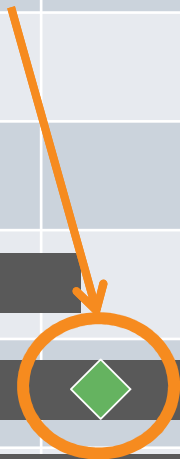
## THREE KEY OUTCOMES

- This project helps prioritize investment decisions
- It identified important state roadways for bicycling
- Public input was a big part of how these are chosen

# Phase 1 Project Schedule



We are here



- ◆ Public Meeting
- ◆ Steering Committee Meeting
- ◆ Internal Working Group

# Extensive Public Input

- 2 statewide meetings
  - 118 total real-time participants (26 via web)
  - 193 watched recorded videos
- 147 email comments
- 2,123 participated in the Crowdsourced Map
- 10,459 StravaMetro users



# Updates in Response to Public Input

# What's changed as a result of your input?

- Completed a responsiveness summary
- Developed FAQ webpage  
<http://vtransplanning.vermont.gov/bikeplan/faq>
- Tweaked Methodology
- Revised Terms
- Smoothed Map

The screenshot shows the Vermont Agency of Transportation website. The header includes the Vermont logo and the text "Policy, Planning & Intermodal Development Agency of Transportation". Below the header is a navigation menu with links for Home, Policy & Planning, Research, Mapping, Permitting Services, and Publications & Reports. The main content area is titled "VTrans On-Road Bicycle Plan F.A.Q." and includes a "Project Background" section with six numbered questions and a "Project Methodology" section with three numbered questions. A sidebar on the left lists "On-Road Bicycle Plan" with sub-links for FAQs, Documents, Map, and Public Participation.



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# Public Comment Themes

Theme		Type of response: Information/Action
Confusion with Wikimap being closed		Directed to project map for comment
Confusion About term “Desirability”		Clarified intent with new terms and renamed Map
Methodology Questions/ Concerns	Strava validity	Data is GPS based not cellular based
	Changes in use along a corridor	Smoothed map to develop consistency along corridor segments
	Missed roads people want to ride on that feel less safe	Included additional crowdsourced map data in methodology
	Dense areas favored in the methodology	Increased max Recreation Score to equal max Transportation Score
Specific Map comments to change ‘use’ category along a segment of road		Use was quantified on statewide basis then smoothed by individual corridor
General Feedback		Responded and included in responsiveness summary

# Defining Terms

## Bicycle Use (formerly desirability)

- Current Use
  - where cyclists are riding now
- Potential Use
  - where cyclists would ride if conditions were improved
  - where cyclists have greatest potential to ride given land use access

## Defining bicycle trip purpose

- **Transportation** bicycle trip
  - dominant purpose is utilitarian
    - doing errands, commuting to work or school, or visiting a friend
- **Recreation** bicycle trip
  - dominant purpose is
    - for exercise or enjoyment of the outdoors.

# Defining Priority

High use → High priority

Moderate Use → Moderate priority

Low use → Low priority

High use is given higher priority and defines where VTrans will focus efforts.

Consistent with complete street principles

VTrans will continue to incorporate bicycle-friendly improvement in all projects and maintenance activities.

# Data to measure bicycle use on state roads

- E911 data to determine land use access
  - describes the type of land use at each point's location
- Interactive crowdsourcing map (aka WikiMap)
  - State roadway I like to bike
  - State roadway I bike, but could be improved
  - State roadway I'd like to use, but needs improvement
- StravaMetro Data
  - on-line application used by bicyclists to track bicycling trips
- Interviews with bicycle touring companies

# Summary of data and terms

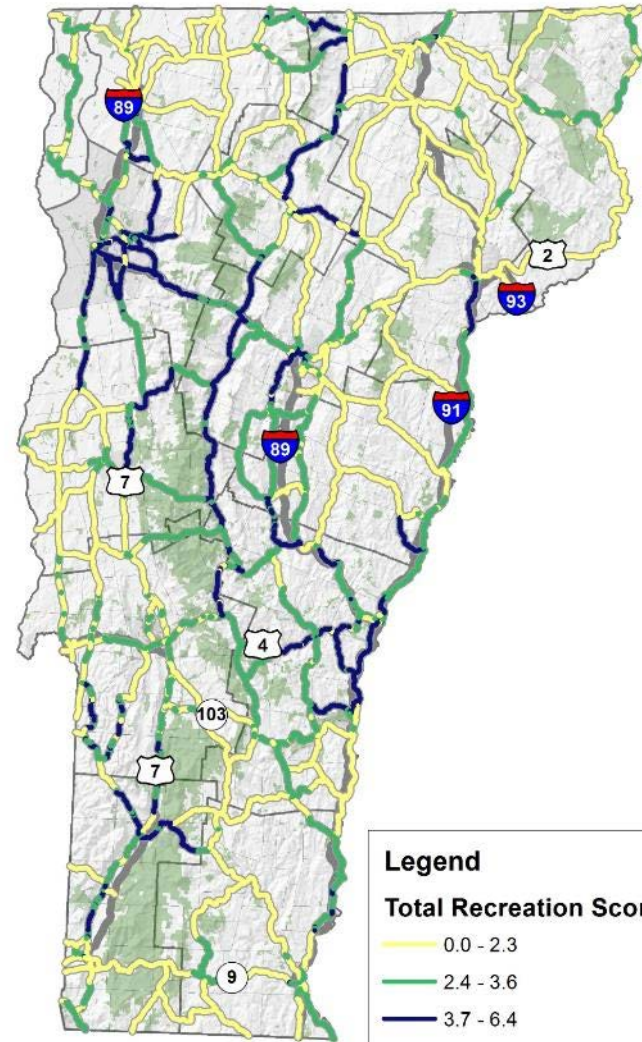
Trip Purpose	Data Sources to measure bicycle use	Current Use	Potential Use
Transportation	WikiMap: State Road I like to Bike	X	
Transportation	WikiMap: State Road I bike but could be improved	X	
Transportation & Recreation	WikiMap: State road I'd like to use, but needs improvement		X
Recreation	StravaMetro data	X	
Recreation	Interviews with bicycle touring companies	X	
Transportation	E911 data to determine land use access		X

# Bicycle Use Components Have Equal Weight

Transportation Score

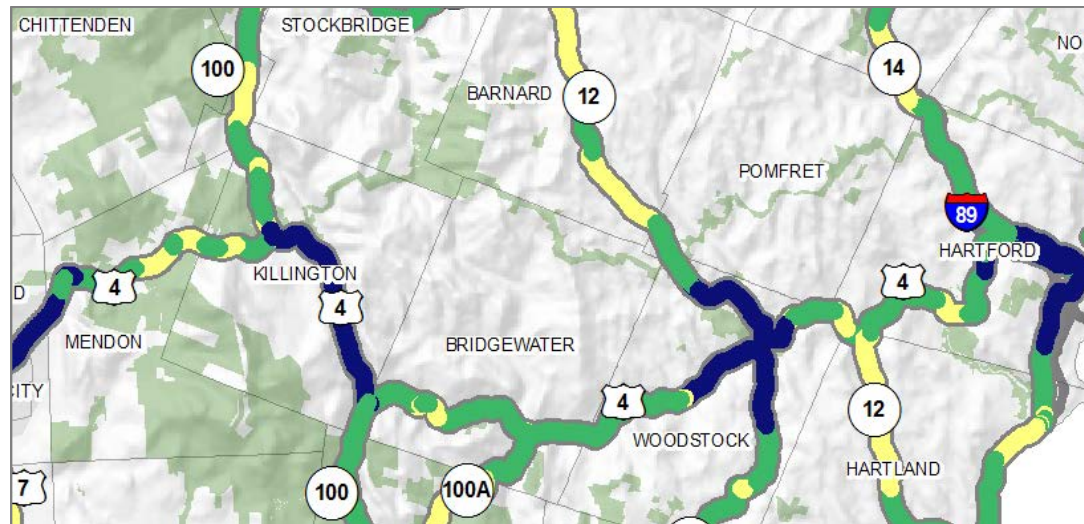


Recreation Score





# Need for smoothing

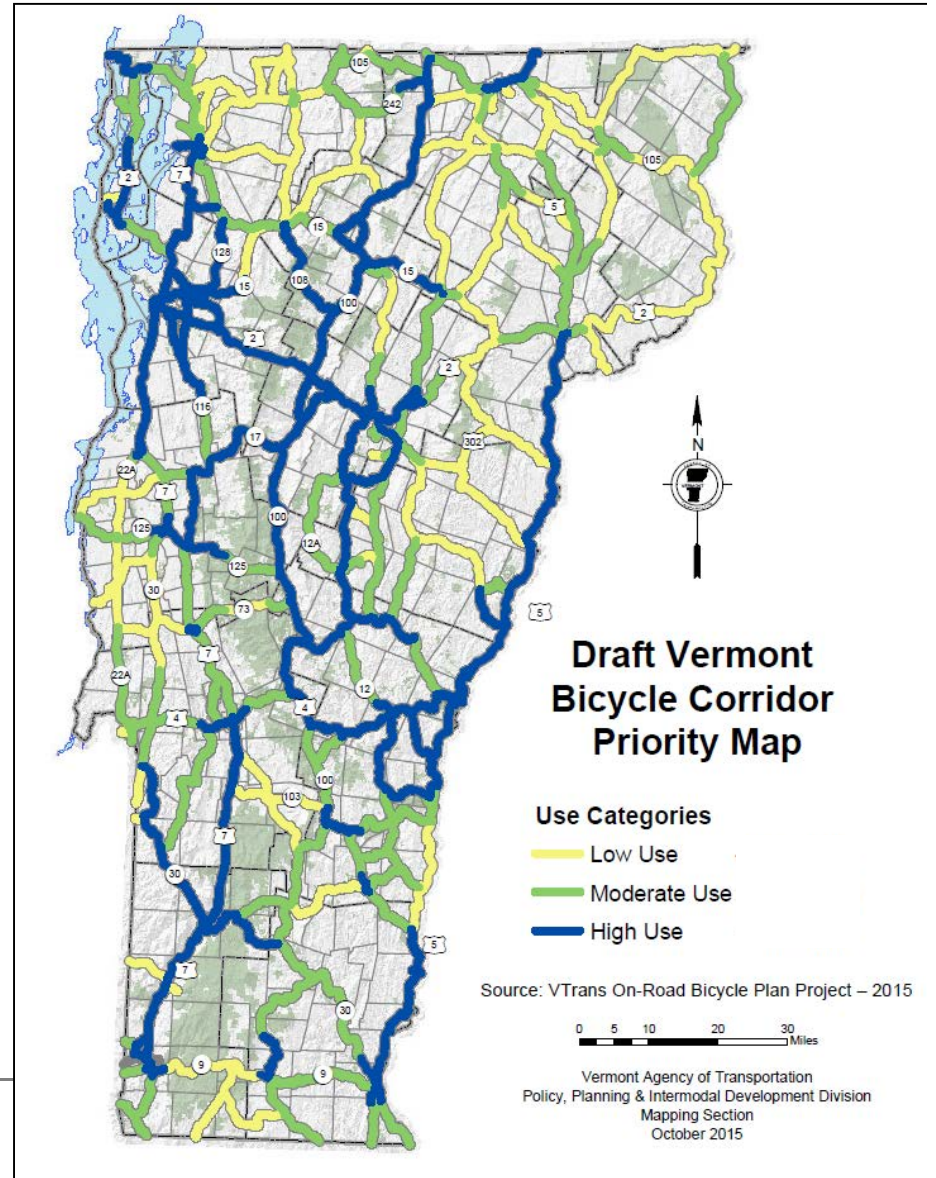
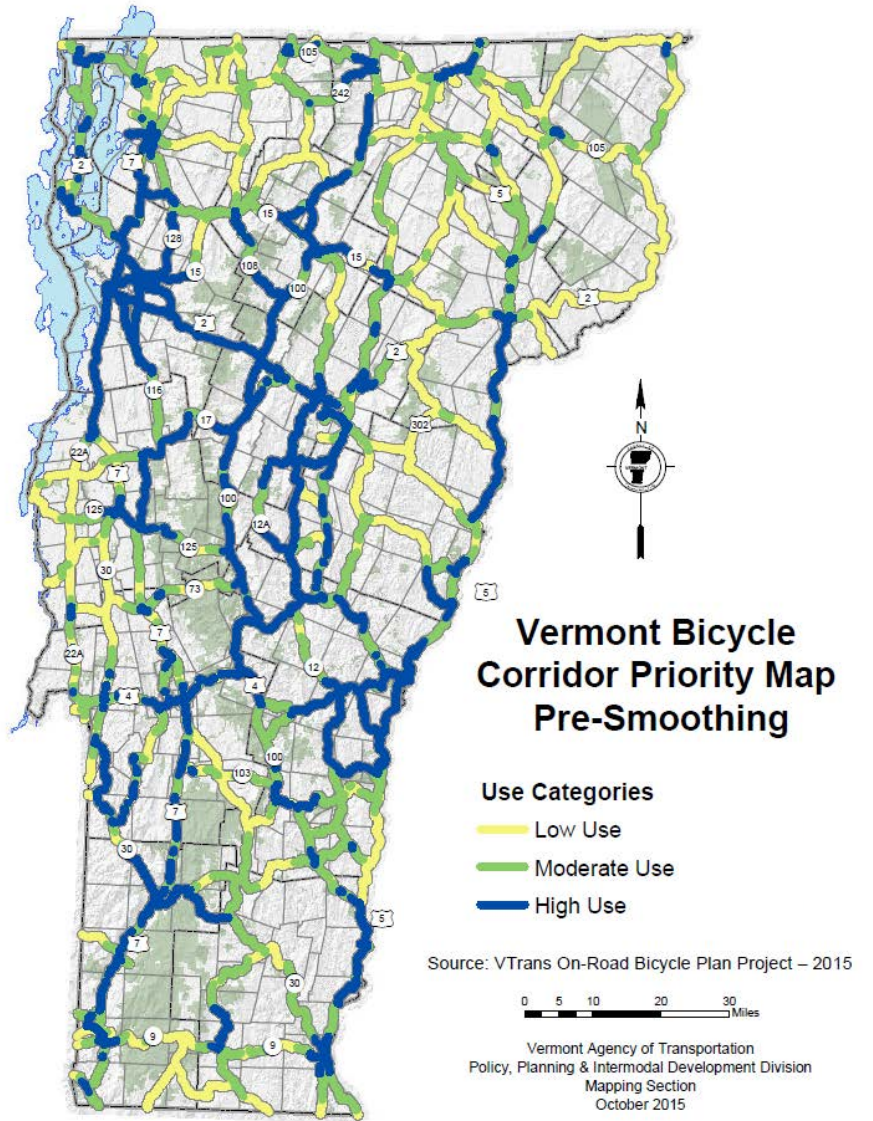


- Some areas have variation across small segments
- Some locations have similar scores
- Practically, segments need to be treated consistently within a corridor

# Smoothing Considerations

- Blend very small segments with adjacent segments
- Use logical connections or terminus
- Significant land use changes
- Resort or significant trip generators
- International or State border crossings
- Designated Scenic Byway, Rail Trail or existing signed bicycle route

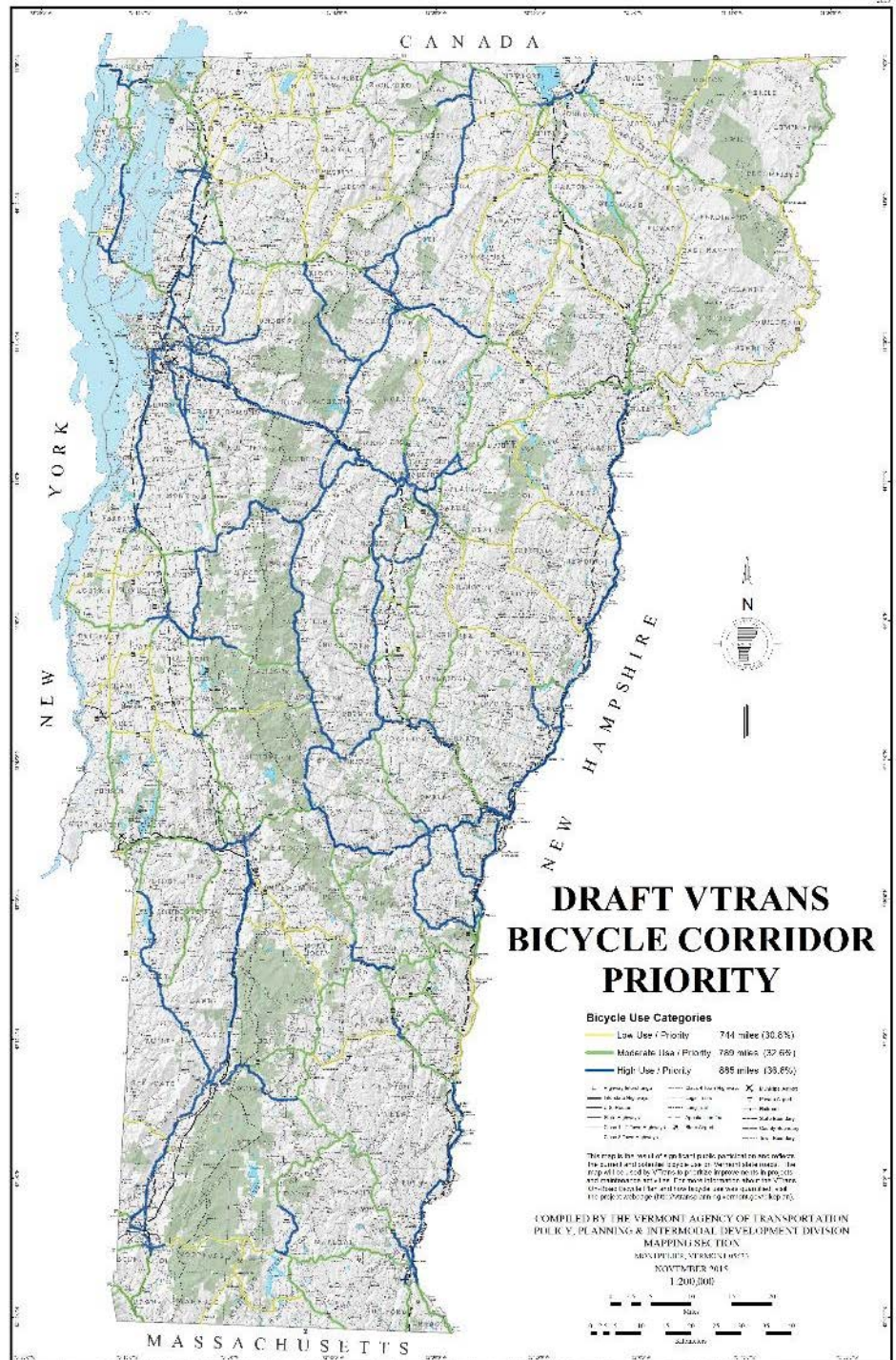
# Pre- and Post-Smoothing Maps





# Draft Final Map

Use categories	Pre - Smooth % of miles	Post - Smooth % of miles
High use	33%	36%
Moderate use	33%	32%
Low use	33%	30%



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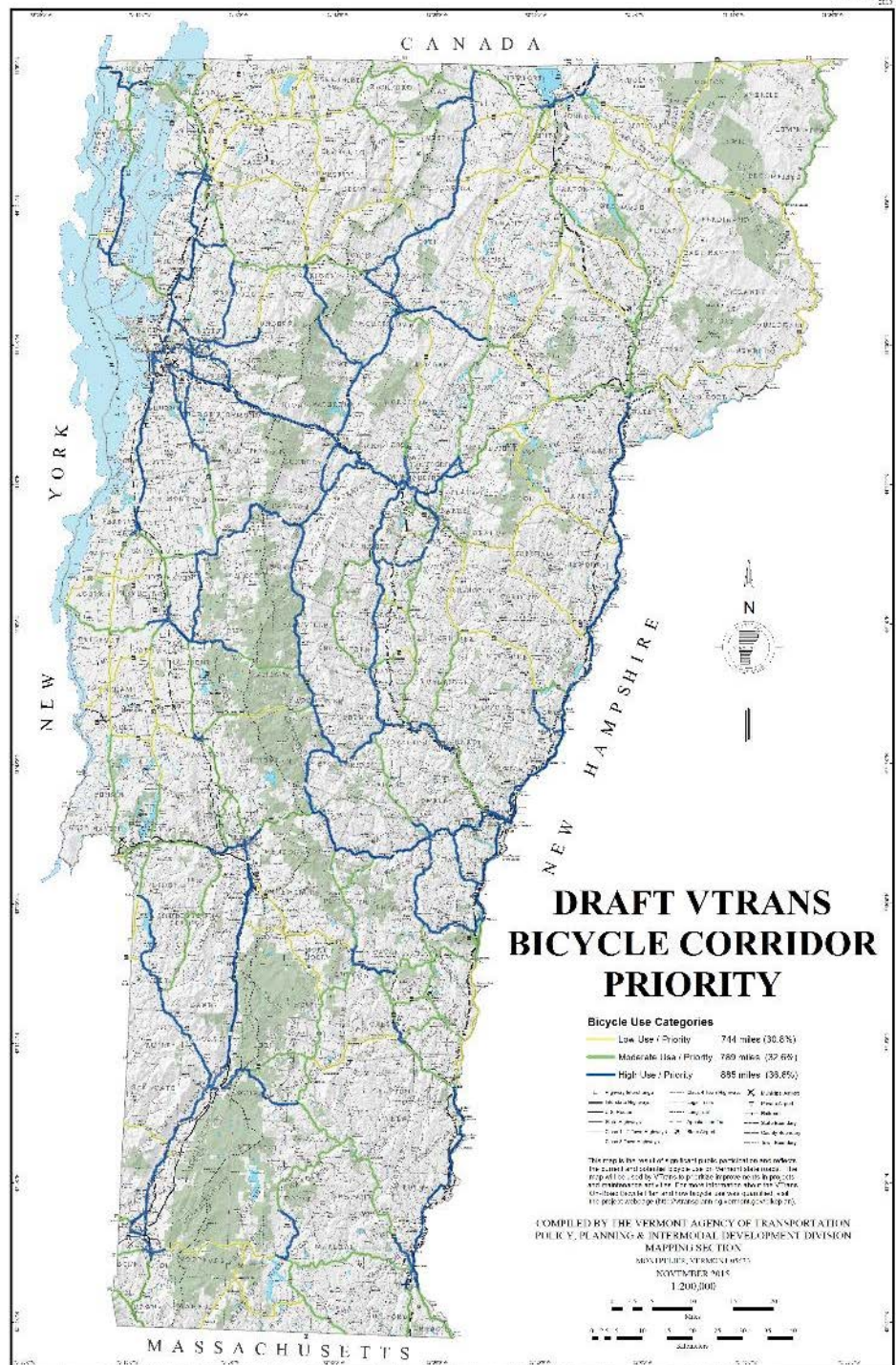
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# Draft Final Map

→ Does this look reasonable to you?

- Discuss & report back
- Comment in chat window
- Or email:  
[vermontbike@gmail.com](mailto:vermontbike@gmail.com)



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# Accessing the Map at Home

- Go to the project website:  
<http://vtransplanning.vermont.gov/bikeplan>
- Download the Draft map:  
[http://www.aot.state.vt.us/documents/bikeplan/VTrans\\_Bicycle\\_Corridor\\_Priority\\_LargeMap\\_Draft.pdf](http://www.aot.state.vt.us/documents/bikeplan/VTrans_Bicycle_Corridor_Priority_LargeMap_Draft.pdf)
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Draft Map

Policy, Planning & Intermodal Development  
Agency of Transportation

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## Comments on Draft Priority Map



## Next Steps

# Phase 1

- Phase 1 is focused on current and potential bicycle use
- A high-use corridor is a higher priority corridor for improvements
  - However, VTrans will continue to incorporate bicycle-friendly improvements in all projects and maintenance activities
- Public involvement was a key component to this phase
  - Input into the methodology
  - Selection of high-use corridors

# Reminder of Project Purpose

## Overall Project Goal:

Develop a plan that identifies opportunities to enhance bicycle conditions on state roads designated as high-use/priority bicycle corridors.

# Anticipated Next Phases

- **PHASE 2: EVALUATE NEEDS**

- Identify bicycle safety constraints
- Is the roadway design along high-use bicycle corridors adequate for on-road bicycling?

- **PHASE 3: IDENTIFY IMPROVEMENT STRATEGIES**

- Opportunities to incorporate improvements into existing projects and activities
- Identify stand alone projects such as safety or spot improvements
- Incorporate into planning and design of future projects





## Comments on Next Steps

# VT State Highway On-Road Bicycle Facilities Plan



**Erica Wygonik**  
Project Manager, RSG

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**Amy Bell**  
Co-Project Managers

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