

VTrans On-Road Bicycle Plan, Summary and Status

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House Transportation Committee
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Phase I Summary

Purpose of Phase I - Complete

Categorize state roads:

- Into high-, moderate-, and low use/priority
- Based on current and potential bicycle use
- Accounts for transportation and recreational use

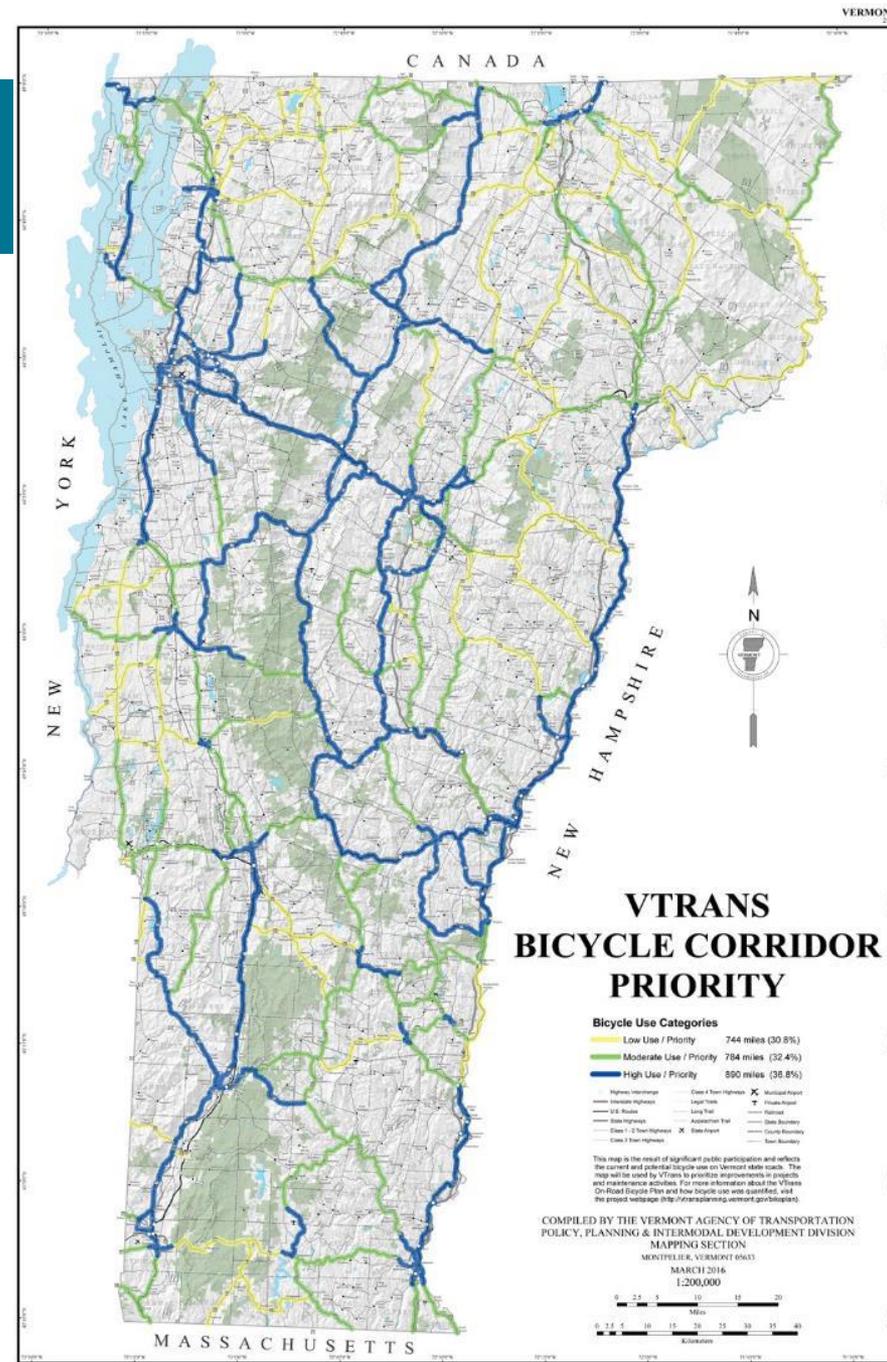
Result:



High use

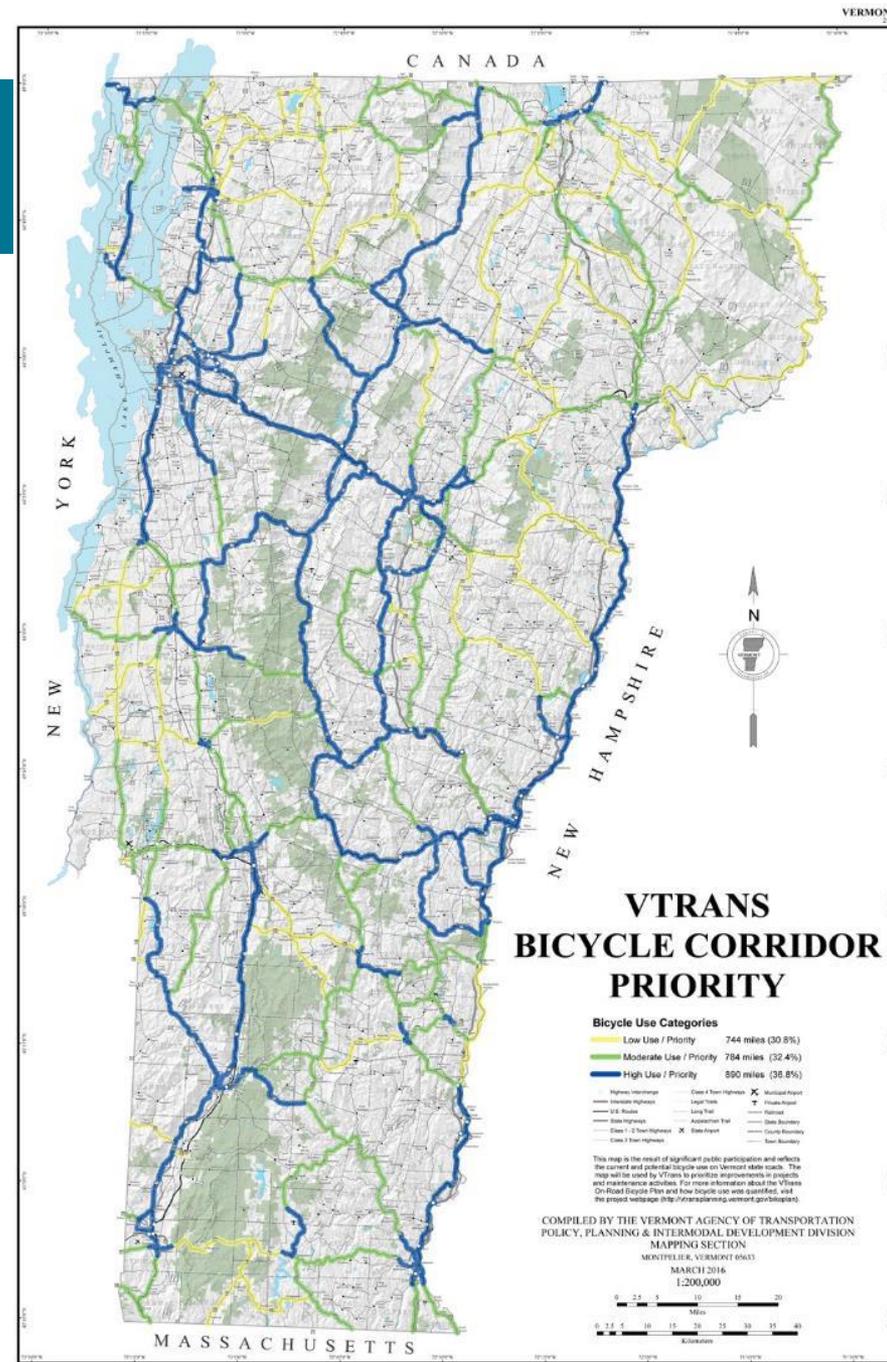
Moderate use

Low use



Purpose of Phase III

- Using Phase II gap analysis to identify opportunities for bicycle improvements along the **high** priority bicycle corridors



VTrans Current Initiatives

- Design Considerations
 - 11 ft Lanes
 - Adding shoulder widths
- Maintenance Activities
 - Shoulder sweeping
 - Pot holes
 - Minor pavement Maintenance
- Incorporating Bicycle Facilities
 - Road Diets
 - Bicycle Pavement Markings



Overview of Safety Analysis

Map Reported
Bicycle Crashes



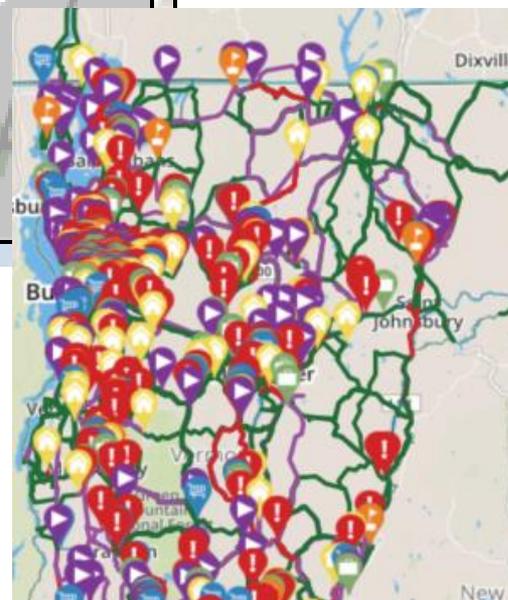
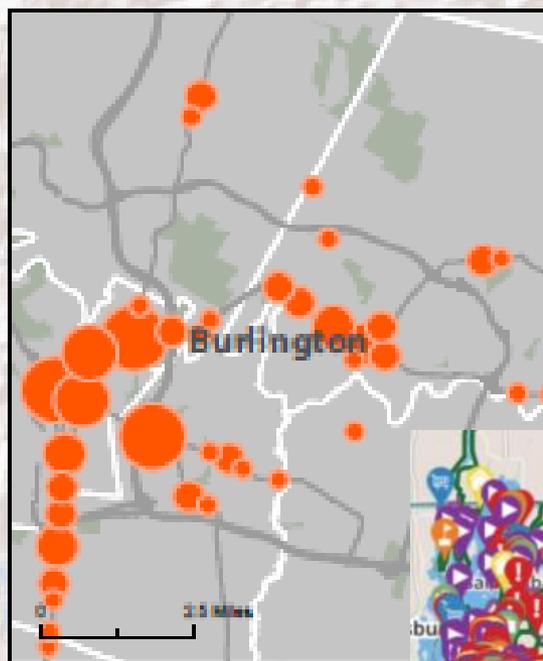
Map Difficult Bicycling
Location Points



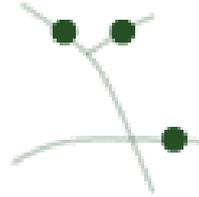
Conduct Analysis of
Overall Crash Trends



Identify
Top 10 Hotspots



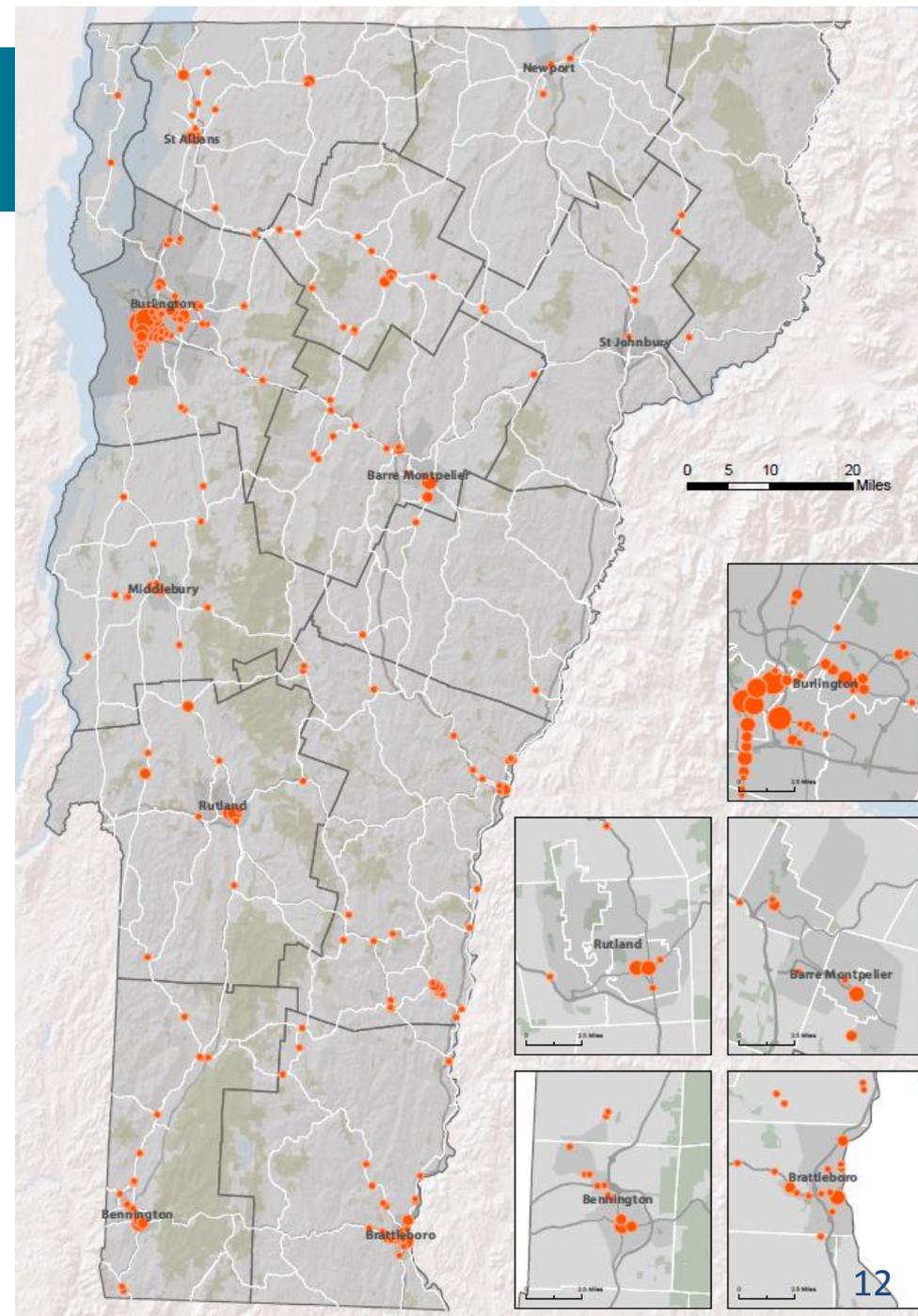
Map Reported Bicycle Crashes



Bicycle Crash Data

Summary

- State Roads only
- 10 years total (2006 – 2015)
- 419 *reported* crash records analyzed



Overall Crash Trends (2006-2015)

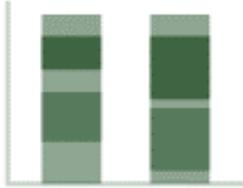
419 Crashes included:

2	0.5%	FATAL
56	13.4%	INCAPACITATING
263	62.8%	MINOR INJURY/ DAMAGE
80	19.1%	NO INJURY
18	4.3%	UNKOWN

TOTAL

% OF
REPORTED
BIKE
CRASHES

Conduct Analysis of Contributing Factors



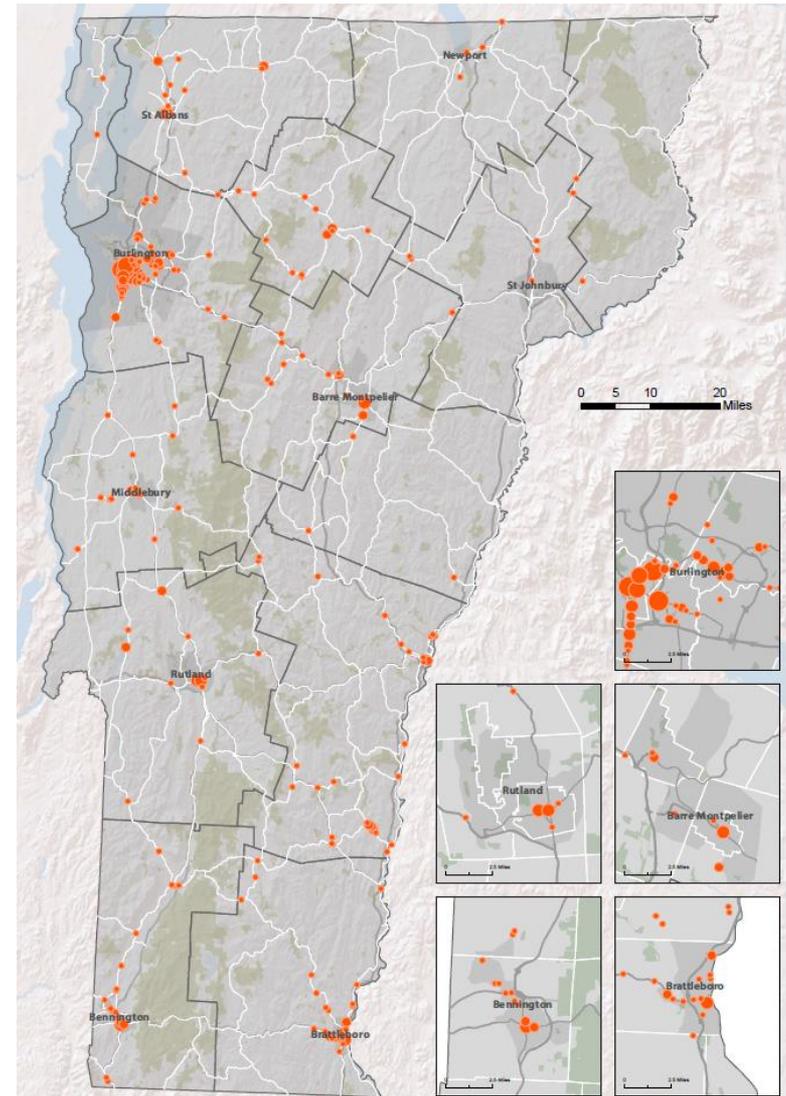
Roadway Design Factor Findings

- Density and AADT have the highest overrepresentations
- Shoulders appear to significantly reduce crashes
- Trends related to bicycle crashes are noticeable in all design factors

Design Factor	Overrepresented in...
Density	Urban areas
Annualized Average Daily Traffic (AADT)	Higher volumes (5,000 vehicles or more per day)
Number of lanes	More than two lanes
Lane width	12 feet wide or more
Shoulder width	No shoulder present
Typical speed	Slower roads (35 mph or less)
Turn lane present	Presence of a turn lane
Median type	Presence of a median

Overall Findings from Crash Analysis

- The data shows bicycle crashes are greatest in downtown/village centers
- 9 out of 10 hotspots on Class 1 Town Highways
- Crashes concentrated on roads with higher traffic volumes and no roadway shoulders



Develop Hot Spot Scoring Methodology



Detailed Review of Hotspots

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- Reviewed detailed crash narratives for all 10 hotspots
 - 67 of 72 crashes had narratives available
 - Crash narratives were reviewed for themes and correctable conditions

Hot Spot General Themes

FOUR MAIN THEMES WERE IDENTIFIED:

1. Vehicle driver inattention when turning
2. Parking related
3. Bicycle riding on sidewalks
4. Bicycle equipment related



Next Steps



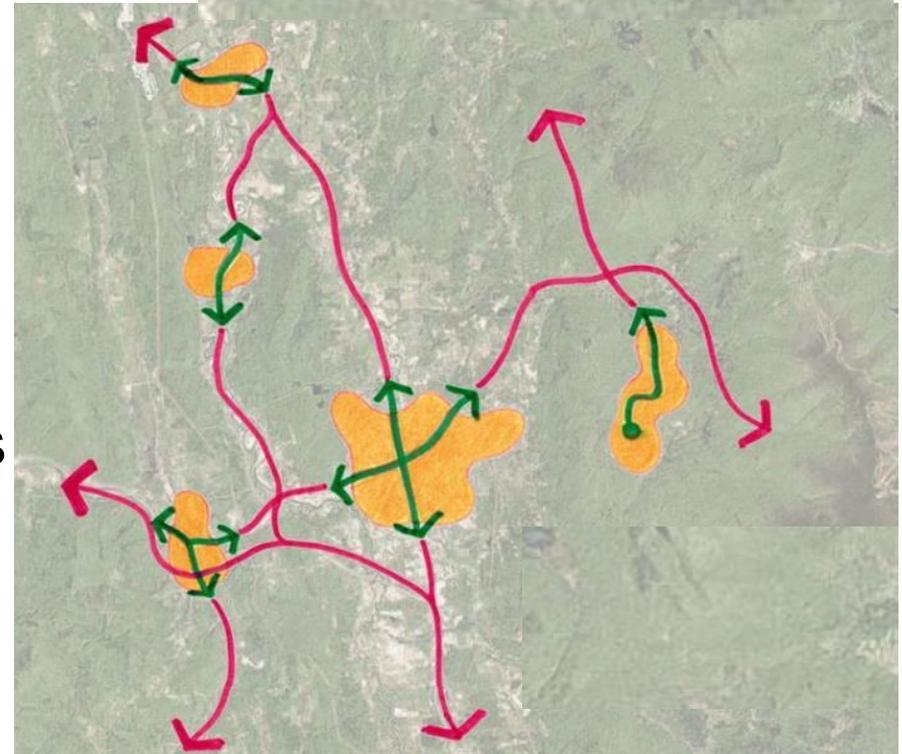
Complete Phase II and Phase III

Phase II

- Determine the roadway criteria
- Conduct on-line Survey
- Score high use corridors
- Conduct Gap Analysis Map

Phase III

- Identify bicycle improvements along **high** priority bicycle corridors



VTrans On-Road Bicycle Plan

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