

BICYCLE AND PEDESTRIAN PROGRAM ANNUAL REPORT



SPRING 2016



Introduction

This annual report was created to provide updated information on the status of activities related to bicycling and walking at the Vermont Agency of Transportation. The Agency has sponsored bicycle and pedestrian projects since 1991 (25 years) and has long been at the forefront of promoting bicycling and walking in Vermont. Now, with the incorporation of the Agency's vision of "A safe, reliable and **multimodal** transportation system that promotes Vermont's quality of life and economic wellbeing" the program is more active than ever!

Current Activities

During this past year there were a variety of activities that were undertaken to address bicycle and pedestrian issues. Below is a brief summary of those activities.

Design Guidance Update

The current VTrans Bike/Ped Design Manual was adopted in 2002. Since that time there have been a number of innovative bicycle treatments which are not covered in the Design Manual. The Bike/Ped program is working to develop supplemental guidance to cover these innovative features, especially buffered bike lanes and the use of green pavement markings to highlight potential conflict areas. The development of VTrans "Engineering Instructions" and "Standard Details" for the recent Bike/Ped innovations will provide up-to-date design guidance for use both within and outside the Agency until such time as the Design Manual is revised (anticipated to be done within the next two years).

ADA Technical Assistance

Bike/Ped program staff provides in-house expertise on designing for accessibility and has incorporated accessibility considerations into design guidance, construction specs and other areas. At the end of 2015, a series of one-day Accessible Sidewalk Design workshops was held via VT Local Roads for municipalities around the state. Similar training will be provided to VTrans engineers/technicians and design consultants in the summer of 2016. An ongoing Agency initiative is to develop standard drawings depicting pedestrian work zone designs and also to develop construction bid items specific to accessible pedestrian work zones.

VT Highway Safety Alliance

The Bike/Ped program provides ongoing coordination and participation in the Vermont Highway Safety Alliance, especially in the area of vulnerable users and how their safety can be increased. Current efforts include participation in the infrastructure and education/outreach/marketing groups.

Paving and Levelling Projects

The Bicycle and Pedestrian Program has been working closely with the Pavement Management and Operations sections over the past several years regarding shoulder improvements that benefit bicyclists. The majority of paving projects are designed with 11-foot travel lanes instead of the formerly ubiquitous 12-foot lane. This simple change provides an extra foot of paved shoulder for on-road bicyclists. In 2015, staff worked with the Highway, Safety and Design section to issue an “Engineering Instruction” that institutionalizes this practice. Many paving projects are now achieving a 3-11-11-3 typical, subject to prevailing shoulder and roadside conditions. It has also been decided that on levelling projects, vehicular lanes will be striped at 11 feet, to provide an additional foot of pavement for bicyclists. Additional design guidance was provided on several Class I paving projects where the community desired bicycle lanes, including Essex, Williston, South Burlington, Lyndon, Swanton and St. Albans City.

Project Scoping and Plans Review

The Bike/Ped program provides input into the full range of Highway Division projects such as bridge scoping reports and Roadway and Intersection improvement projects. Input is also provided on Highway Access (1111) permits and Act 250 permits.

Non-motorized Count Program

VTrans has been conducting bicycle and pedestrian counts at multiple locations in Vermont since 2005. During the last four years the Traffic Research section has conducted manual counts in cooperation with the Regional Planning Commissions (RPC’s). We have 4 automatic counters, two of which are permanently installed (one on a sidewalk in Montpelier and one on a path in So. Burlington). We have recently entered into a contract with the UVM Transportation Research Center to analyze all of the data we have, identify where there are gaps and determine a method to warehouse the data and to make it readily accessible. Additionally, funds were allocated to purchase two tube counters for use in bicycle traffic monitoring. It is anticipated these can be deployed to help evaluate the impact of new bicycle facilities as the need arises.

Crash Data Analysis

We are working closely with the Agency’s Highway Research section to analyze crashes involving bicyclists and pedestrians. A report looking at 7 years’ worth of data from 2003-2009 was previously published. A project is planned to review the most current 5 years of data and use a crash analysis tool to closely review all major crashes (incapacitating injury and fatalities) for that time period to see if there are any particular trends that would lead to targeted counter measures in terms of behavior or infrastructure.

Identification of Priority Bicycle Corridors

VTrans has concluded the first phase of a project through the Policy, Planning and Intermodal Development Division to look at land use data and to get input from cyclists about which state roads are the highest priority for bicycling. The result is a categorization of the entire state highway system into three levels of priority for bicycling. The next two phases of this project will analyze the highest priority set of roads for their existing conditions and then will estimate what is needed to make these roads more bicycle-friendly. This information will be used by the Project Delivery Bureau to prioritize where on-road improvements, especially paved shoulders, are most critical.

Advocacy and Information sharing

VTrans was the major sponsor of the 2014 Bicycle and Pedestrian Summit that was held in Burlington and attracted more than 250 people from all over the state. The 2016 statewide walk/bike summit was just held in Rutland in April. Nearly 200 people attended to hear sessions under four tracks: Built Environment, Advocacy and Education, Economic Development and Public Safety and Enforcement.

State owned Rail Trails

A state project in 2014 completed construction of improved signage, pavement markings and intersection improvements on the three state owned rail trails – the Missisquoi Valley Rail Trail (St. Albans to Richford); the Beebe Spur (Newport to Derby); and the Delaware and Hudson (D&H) Rail Trail that is managed by Forests, Parks and Rec (D&H has two segments – Castleton to Poultney and Pawlet to Rupert). We have programmed a project to provide a new trail surface on the D&H Rail Trail and the engineering work commenced in spring 2016.

The 98 mile Lamoille Valley Rail Trail is leased to VAST and they are working on the permitting, design and construction to bring this whole corridor into operation. In 2015, 36 miles of the trail were completed.

Bicycle Expenditures

Outside of the Bike/Ped and Transportation Alternatives programs, VTrans spent considerable resources on Bike/Ped improvements as part of paving, roadway, intersection and bridge projects. We have quantified this in the past and recently completed this analysis and that information is now available for 2007, 2008, 2013 and 2014.

Bicycle Tourism

Bike/Ped staff worked with the Vermont delegates of the Western New England Greenway organization to secure designation of the VT portion of the greenway as US Bicycle Route #7. The VT Bicycle and Pedestrian Coalition (statewide advocacy organization), in cooperation with the VT Department of Tourism and Marketing has produced the Vermont Bikeways map (3rd edition) that shows popular rides around the state. We are also working on an Agency web page to better promote the state-owned rail trails.

Bicycle and Pedestrian Safety Education

The Agency has entered into a three-year contract with Local Motion for a statewide bicycle and pedestrian safety education program. This includes providing support to community safety programs (Brattleboro, Lyndon, Swanton, Morristown and St. Johnsbury) distributing bicycle safety publications, developing an online clearinghouse and 800 number for information, and developing curriculum for law enforcement professionals and driver educators.

Road Diets

At the request of several communities, VTrans has incorporated trial “road diets” into paving projects on urban/developed corridors. The typical road diet is to take a 4-lane typical section (two lanes in each direction) and re-stripe it as 3 lanes – one travel lane in each direction with a two-way center left turn lane. This frees up space to add bicycle lanes in each direction. This is a safety improvement that is being promoted by the Federal Highway Administration as one of their “nine proven safety countermeasures” and is also part of their Every Day Counts (EDC) III initiative. We are heading a VTrans Task Force that is developing project selection and evaluation guidance for similar treatments in the future.

Safe Routes to School

This popular program continues to thrive in Vermont with a current enrollment of 100 partner schools. Education about safe walking and bicycling is a big part of the program and there are resources to help schools with that effort. Ongoing efforts are to work with schools to create School Travel Plans and provide support for events like Winter Walk Day and Walk to School Day. The funding for an on the ground support person will be used up at the end of the 2015/2016 school year, but the web site will continue to provide resources to schools that are interested in the program.

VTrans Bike/Ped Program

In 2015 the VTrans standalone Bike/Ped program selected a new round of local projects with a total value of approximately \$4M. This is the third year in a row that new projects have been selected (total - \$10M over the last 3 years.) It should be noted that the majority of projects in the program are sidewalks. We are also excited about a new element of the program which is for state-only funding of small scale projects. It is expected that these new projects should move very quickly and have lower overall costs because they do not need to meet all the “red tape” requirements that come with federal funds. Below is a listing of the Bike/Ped projects selected in 2015.

2015 AWARDS

| 2015 Bike/Ped Program - Design/Construction Projects | | | | |
|---|--|-----------------------|--|-----------------------------|
| Applicant | Project Title | Project Number | Description | Total Project Amount |
| Town of West Rutland | Safe Routes to School Sidewalks | STP BP15(1) | 3305 feet of sidewalk along Campbell, Thrall, Clarendon, Ross and Fairview Streets | \$821,000 |
| Town of Bennington | Ninja Path | STP BP15(2) | 6800 feet of shared use path from Harmon Road to Bennington College (Sections 3-8) | \$1,108,000 |
| Town of Pittsford | Sidewalk Extension | STP BP15(3) | 2400 feet of sidewalk running along Arch Street and Pleasant Street | \$187,000 |
| Town of Colchester | West Lakeshore Drive Shared Use Path Project | STP BP15(4) | 4,435 feet of 10' wide separated multi-use path along West Lakeshore Drive, from Church Road to Prim Road. | \$532,000 |
| Town of Manchester | Depot St. Reconstruction | STP BP15(5) | 3290 feet of re-allocating space on Depot Street to improve bicycle and pedestrian access and safety | \$580,000 |
| City of Vergennes | Main St. Sidewalk | STP BP15(6) | 800 feet of sidewalk on the east side of Main Street (VT 22A), from Kennedy Brothers to Champlain Discount Foods | \$305,000 |
| City of Burlington | Burlington Bicycle and Pedestrian Improvements | STP BP15(7) | 385 feet of shared use path on Colchester Avenue, from | \$96,000 |

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|---|--|----------------------------|--|--------------------|
| | | | Mansfield Avenue to South Prospect Street | |
| Town of Middlebury | Exchange Street Sidewalk | STP BP15(8) | 2000 feet of sidewalk along Exchange Street | \$378,000 |
| Town of Alburgh | US2 Sidewalk | STP BP15(9) | 1500 feet of sidewalk along US Route 2 (Main Street) from the intersection with Peterson Plan to the entrance to the elementary school | \$25,000 |
| Town of Jericho | MMU Path Segment 2 | STP BP15(10) | 1650 feet of shared use path along Browns Trace Road from Pratt Rd. to Lee River Road | \$435,000 |
| City of Rutland | Rutland Creek Path Segment 4 | Will add funds to BIKE(61) | Additional funding for 1300 foot shared use path from Monsignor Park to River Street | \$70,000 |
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| 11 Large Design/Construction Projects | | | Total Design/Construction Projects | \$4,537,000 |
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| 2015 Bike/Ped Program - Scoping Projects | | | | |
| | | | | |
| Town of Dover | Valley Trail C Shared Use Trail Study | STP BP15(11) | | \$33,000 |
| Town of Middletown Springs | Middletown Springs Path Study | STP BP15(12) | | \$38,500 |
| Town of Warren | Sugarbush Access Road Path Study | STP BP15(13) | | \$27,500 |
| Town of Charlotte | Charlotte Town Link Trail Connections Study | STP BP15(14) | | \$50,000 |
| Town of Killington | Killington Road Complete Streets Study | STP BP15(15) | | \$30,000 |
| Town of Plainfield | Plainfield Lower Village Sidewalk Network | STP BP15(16) | | \$30,800 |
| City of Burlington | Burlington Bicycle and Pedestrian Improvements | STP BP15(17) | | \$50,000 |

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|---|---|--------------|--------------------------------------|------------------|
| Albany Community School | Albany Community School Route Study | STP BP15(18) | | \$33,000 |
| Town of Waterbury | Colbyville - Route 100 Corridor Sidewalk/Path Scoping Study | STP BP15(19) | | \$33,000 |
| Town of Wolcott | North Wolcott Rd Bike/Ped Scoping Study | STP BP15(20) | | \$35,200 |
| Town of Jericho | Village Connection Study | STP BP15(21) | | \$35,000 |
| | | | | |
| 11 Scoping Projects | | | Total of Scoping Projects | \$396,000 |
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| 2015 Bike/Ped Program - Small-Scale Projects | | | | |
| | | | | |
| South Hero Recreation Commission | RRFB Route 2 | STP BP15(31) | | \$14,000 |
| City of Burlington | Colchester Ave. RRFB | STP BP15(32) | | \$23,500 |
| Village of Swanton | Village RRFBs | STP BP15(33) | | \$37,500 |
| Town of Williston | Village Center RRFBs | STP BP15(34) | | \$28,500 |
| Town of Groton | Groton Village Sidewalks | STP BP15(35) | | \$35,000 |
| Town of Jericho | RRFB/Raised Crosswalk | STP BP15(36) | | \$31,000 |
| | | | | |
| 6 Small Scale Projects | | | Total of Small-scale projects | \$169,500 |

Bike/Ped Projects Substantially Completed in 2015

In addition to the new projects selected in 2015 there were a number of projects, both scoping and construction, which were completed in 2015 as outlined below.

Scoping Projects Completed:

Arlington STP BP13(14) – Scoping study for pedestrian facilities along VT 7A

Bennington STP BP13(13) – Scoping study for the Ninja Bicycle Path

Berlin STP BP13(16) – Scoping study to improve bike/ped access along US 302

Highgate STP BP13(20) – Scoping study of bike/ped accesses along VT78

North Bennington STP BP13(22) – Scoping study for Mechanics Street

Plainfield STP BIKE(57) – Scoping study for pedestrian improvements

West Rutland STP SRIN(40) – Safe-Routes-To-School feasibility study for pedestrian school travel

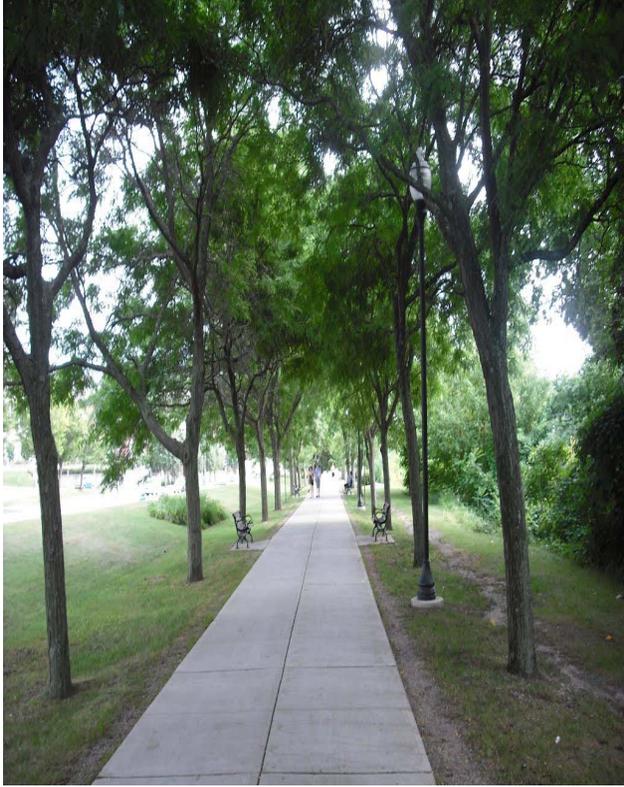
Windsor STP BP 13(23) – Scoping study of Bike/Ped access along US 5

Construction Projects Completed:

The Bike/Ped construction projects shown below were substantially completed in calendar year 2015.



BRATTLEBORO STP BIKE(58) –
IMPROVEMENTS TO THE WESTERN AVE.
(VT9)/UNION ST. INTERSECTION, INCLUDING NEW
SIDEWALKS, SIDEWALK RAMPS, BULBOUTS,
CROSSWALK MARKINGS AND SIGNING.



BURLINGTON STP 5000(17)C/4 –
CONSTRUCTION OF A BICYCLE & PEDESTRIAN
PATH IN BURLINGTON, WITH LIGHTING AND
OTHER AMENITIES, ALONG THE WEST SIDE OF
BATTERY ST. FROM COLLEGE ST. TO BATTERY
PARK.



BURLINGTON STP SDWK(13) –
CONSTRUCTION OF A SIDEWALK IN LARGER
WATERFRONT NORTH PROJECT NEAR THE OLD
MORAN PLANT IN BURLINGTON.



BURLINGTON STP SDWK(3) –
CONSTRUCTION OF NEW SIDEWALKS,
AND REPLACEMENT OF EXISTING
SIDEWALKS, ALONG FLYNN AVE. IN
BURLINGTON.



BURLINGTON STP SDWK(6) –
CONSTRUCTION OF A SIDEWALK ALONG CLIFF ST.
IN BURLINGTON.



BURLINGTON STP SRIN(23) –
CONSTRUCTION OF IMPROVED
PEDESTRIAN SIGNALS ACROSS
NORTH AVE. IN BURLINGTON,
ADDING COUNTDOWN INDICATIONS
AT SHORE RD., WOODBURY RD. AND
THE ETHAN ALLEN CENTER.
CONSTRUCTION OF SIGNALIZED
PEDESTRIAN CROSSING AT THE
NORTH AVE./PLATTSBURGH AVE.
INTERSECTION.



ESSEX TOWN STP BP13(24) & STP SDWK(9)
– INSTALLATION OF 1,130 FEET OF BITUMINOUS
CONCRETE SHARED-USE PATH ALONG VT2A IN ESSEX
TOWN, BETWEEN OLD COLCHESTER RD. AND PINECREST
DRIVE.



JERICO STP SDWK(22) – CONSTRUCTION OF 1,620 FEET OF 5 FOOT WIDE SIDEWALK ALONG BROWNS TRACE ROAD.



WILLISTON STP SDWK(15) – CONSTRUCTION OF 242 FEET OF SIDEWALK TO FILL IN A MISSING LINK ALONG VT2A IN WILLISTON, ADJACENT TO KNIGHT LANE.



WINDSOR STP SRIN(22) –
RECONSTRUCTION AND RELOCATION OF
175 FEET OF SIDEWALK NEAR KENNEDY
POND, INCLUDING IMPROVEMENTS TO
THE ADJACENT ACCESS ROAD TO THE
SWIMMING AREA.

Total Quantities Installed in 2015

Sidewalk = 6095 Lineal Feet (1.15 miles)

Shared Use Path = 3548 Lineal Feet (0.67 miles)

The Future of the Bike/Ped Program

Following a 7-year hiatus which began in SFY05, the Agency began funding new projects within the Bicycle & Pedestrian (Bike/Ped) Program through a competitive grant program in SFY12. In SFY12, approximately \$2,000,000 in federal funds were allocated for new projects; in subsequent years that amount has risen to \$4,000,000.

Funding Ratios

The Agency currently has two programs that fund bicycle and pedestrian improvements, the Transportation Alternatives (TA) Program and the Bike/Ped Program. Parameters for the TA Program are in state statute (Title 19, Chapter 1 §38); state statute requires that grant recipients pay the full matching share required for the projects. Furthermore, the Transportation Alternatives Grant Committee decided that scoping studies would be funded at the ratio of 50% federal funds and 50% local funds. The SFY17 budget proposal is predicated on projects within the Bike/Ped Program being funded at the same ratio as the TA Program. Furthermore, it proposes that funding for state funded projects be in line with transportation projects funded through the Downtown Program administered by the Agency of Commerce and Community Development.

| | Funding Ratio in SFY16 Program | Funding Ratio in SFY17 Program |
|--|--------------------------------|--------------------------------|
| Scoping Studies | 90% Fed/ State + 10% Local | 50% Federal + 50% Local |
| State Funded Construction Projects | 80% State + 20% Local | 50% State + 50% Local |
| Federally Funded Construction Projects | 90% Fed/ State + 10% Local | 80% Federal + 20% Local |

New and/ or Increased Funding Levels

New Awards for State Aid Construction Projects: SFY16 was the first year that the state proposed a line item for new awards for state aid construction projects – targeted for small scale improvements. The amount in SFY16 was \$150,000; the proposal in SFY17 increasing this to \$300,000 which will leverage \$300,000 in local funds for a \$600,000 investment in state only funded projects. Please see section above for pro rata share changes.

Local Motion ST BP16() – Ferry Operation: The Island Line Trail utilizes a bike ferry to make the connection across the Lake Champlain causeway from Colchester to South Hero. Local Motion stepped up to the plate and secured funding, and took all responsibility for the ferry and necessary improvements for its operation. In addition to purchase of a ferry, their efforts included improvements to the ramps and docks, turnarounds on each side of the cut, installation of viewing/ fishing platforms, repairs to the causeway, and installation of wave attenuators to ensure safe and dependable operation of the ferry. They also agreed to providing the day to day operational responsibilities of this ferry. The overall ferry budget to run the service in 2016 is estimated to be \$200,000. Fares revenue are estimated at \$80,000 based on ridership levels and days of service. The \$60,000 included in the SFY17 budget is approximately ½ of the cost differential to operate the ferry. VTrans recognizes the regional importance of this facility and thus would like to support Local Motion in sharing the cost of operation. VTrans supports Local Motion recognizing Local Motion’s long history of supporting efforts in the region and the setbacks they have faced over the years from natural events. By financially supporting Local Motion, it will also allow them to focus their efforts on enhancing their membership and finances to ensure they can continue supporting this regional bike ferry connection for the foreseeable future.

Statewide ST BP16() – VYCC: VTrans has supported the operations of the Vermont Youth Conservation Corps (VYCC) for many years through federal transportation enhancement (TE) funding. Changes in the eligibility of the program and the difficulties meeting all the federal requirements have put this in jeopardy. The SFY17 budget proposal includes \$100,000 of state funds, approximately one-half of the former commitment of TE funds, so that this

program can continue through a three-way partnership of VTrans, VYCC and the Department of Forest Parks & Recreation.

Discontinued Funding

Chittenden County STP SDWK() – The SFY17 proposal does not include new projects funded through this line item as Chittenden County project needs can be funded through the TA and Bike/Ped competitive grant programs. This funding had been at 80% Federal and 20% Local with annual award amounts of \$300,000 in federal funds.

Conclusion

This concludes the bicycle and pedestrian annual report. Below is the link to the bicycle and pedestrian page on the Agency’s website which has a great deal of additional information:

<http://vtransengineering.vermont.gov/bureaus/mab/local-projects/bike-ped>

Also if there are any questions or a need for additional information, please don’t hesitate to contact us at any time.

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