



Bicycle Safety Overview

March 1, 2023 Senate Transportation Committee

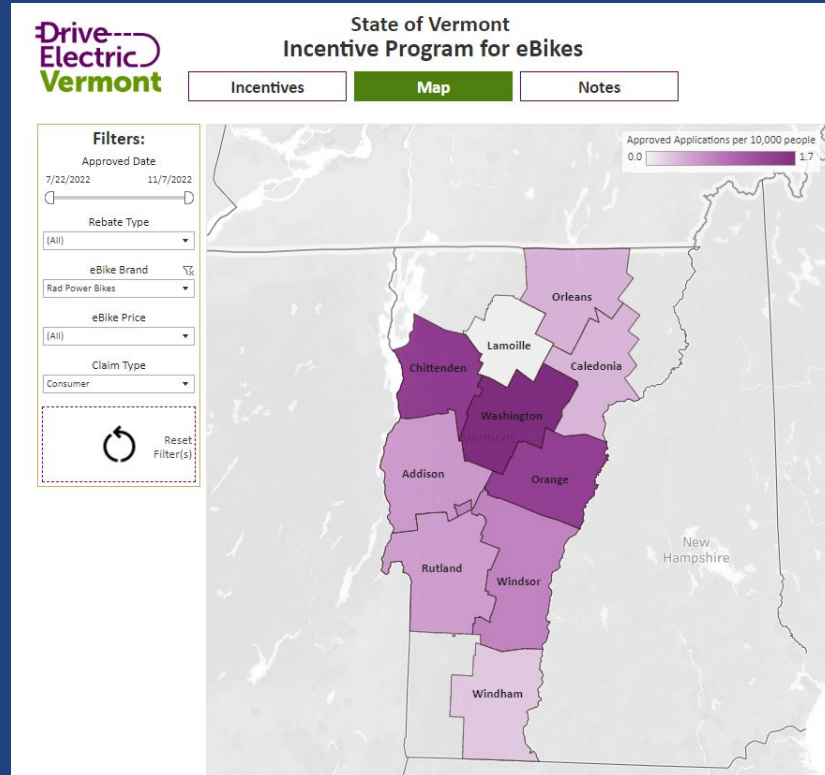
Christina Erickson, Executive Director
Local Motion

A yellow L-shaped graphic is positioned in the bottom-right corner of the slide.



Local Motion's mission is to make it **safe**, accessible, and fun for everyone to bike, walk, and roll in Vermont.

Successful E-Bike Rebate Program



Vermont Conveyance Definitions - DRAFT

Type	Min. Age	License Req'd?	Registration	Helmet	Other Equipment Required	Lights	Speed Restriction	Motor restriction	Considered a Motor Vehicle?	Position on Roadway	State Statute Reference
Motorcycle	16 (License)	Yes	Yes	Yes	If no windshield, operator shall wear glasses, goggles or face shield	Headlight and taillight required 30 minutes after sunset to 30 minutes before sunrise.	Same as vehicles (posted speed limit) – No restriction built into the motorcycle itself	None?	Yes	Same use as motor vehicle i.e. travel lanes	23 VSA §4(18)(A)
Motor Driven Cycle (commonly known as a moped)	16 (License)	Yes	Yes			Headlight and taillight required 30 minutes after sunset to 30 minutes before sunrise.	30 MPH unassisted on level roadway	Maximum of two brake horsepower and maximum piston or rotor displacement of 50 cubic centimeters	Yes	Same use as motor vehicle i.e. travel lanes	23 VSA §4(45)(A)
Bicycle	None	No	No	No	Brake that enables operator to make the braked wheels skid on dry, level, clean pavement.	Front white light from half hour after sunset to half hour before sunrise and rear steady or flashing red light OR minimum of 20 square inches of reflective material or both.	Same as vehicles (posted speed limit) – No restriction built into the bicycle itself	n/a	No (However, same rights and responsibilities, as applicable)	As near to the right side of the improved part of the highway "as is safe" – exceptions noted for moving left (debris, left turns, etc.)	19 VSA §2301
Motor Assisted Bicycle	None	No	No		Same as bicycle	Same as bicycle	20 MPH by motor alone on paved level surface with 170 lb. operator	Internal combustion motor not to exceed 1000 watts or 1.3 HP and electric motor not to exceed 1000 watts	No	Same as bicycle	23 VSA §4(45)(B)(i)
Class 1 Ebike	None	No	No	No	Same as bicycle	Same as bicycle	Assistance only when pedaling and cut off of assistance at 20 MPH	Fully operable pedals and an electric motor less than 750 watts	No		23 VSA §4(46)(A)(i)
Class 2 Ebike	None	No	No	No	Same as bicycle	Same as bicycle	Assistance may be by motor alone and cut off assistance at 20 MPH	Fully operable pedals and an electric motor less than 750 watts	No		23 VSA §4(46)(A)(ii)
Class 3 Ebike	16 +	No	No	No	Same as bicycle	Same as bicycle	Assistance only when pedaling and cut off of assistance at 28 MPH	Fully operable pedals and an electric motor less than 750 watts	No		23 VSA §4(46)(A)(iii)
Segway (Electric personal assistive mobility device – EPAMD)	None	No	No	No	Front, rear and side reflectors. A system to bring the device to a controlled stop	Front white light from half hour after sunset to half hour before sunrise			No (same rights and duties as pedestrians)	municipality may regulate use and operation	23 VSA §1141a

1. E-bike Education Flyers/Handlebar Hangers

- Working with a newly forming consortium of Vermont bike shops, we will engage this group to deliver e-bike education at point of sale.
- Handlebar tags will be part of a broader package of safety materials for shops to distribute to customers who purchase bikes.
- These materials will highlight key bike safety laws and best practices, and will be hung on e-bike handlebars and offered to customers.
- No additional funding for this safety initiative is needed.

love to bike?



Tips for Staying Safe on Vermont Roads

Make Sure Your Bike is Working

Check your bike over before you go for a ride. Make sure the brakes work, the tires are inflated and the chain is properly lubricated.

Control Your Bike

Most bike crashes don't even involve a car. Make sure you know how to control your bike before you take it out on the road. Local Motion offers classes to help you improve your riding skills.

Obey All Traffic Laws

People riding bikes have many of the same rights as drivers, but you also have many of the same responsibilities. For example, bike riders have to make a complete stop at stop signs and red lights.

Use Lights At Night

Use a headlight and a rear reflector (or better yet, a red taillight) when riding at night.

Claim Your Space and Be Predictable

Ride on the road, take the space you need to be safe, and ride straight. For a practiced rider, the street is generally a safer place to ride than the sidewalk, as you are much more visible to drivers when you are on the street.

Yield to People Walking

On busy streets or when riding with children, you may decide to ride on the sidewalk, which is legal in Vermont unless specifically prohibited by local ordinance. But people walking on sidewalks always have right of way over people biking. Be courteous - when approaching from behind, slow down and ring your bell or give a friendly greeting.

Ride in the Same Direction as Traffic

Riding against traffic is dangerous. Follow the law (and common sense) and ride in the same direction as cars.

Signal Your Turns

Look back before you make a lane change or a turn and make sure it is safe to change positions. Use your arm to signal where you are going.

Ride to the Right

Ride in the rightmost lane. Exceptions: if there are hazards in the road, if you are turning left, if you are in a right-turn lane and not planning on turning right, or to stay out of the "door zone" of parked cars. Stay as far right as is safe: generally at least two to three feet from the edge of the road. Ride two abreast only where not prohibited by local ordinance.

1. E-bike Education Flyers/Handlebar Hangers

- **Timeline:** Printing in April 2023, distribution in May 2023
- **Local Motion's role:** Creating content, coordinating with bike shops
- **VTrans' role:** Printing flyers and assist with distribution
- **Funding needs for LM's role:** None, covered by State Highway Safety Office's Behavioral Safety Unit (BSU) grant

2. Vulnerable User Safety PSAs

Existing videos to promote:

- “How to Ride Your Bike Around Buses”
- “How to Bike Through a 3-Lane Intersection”
- “How to Make a Left Turn while Biking in a City”
- “How to Deal with Road Debris”

New Videos to create and promote:

- “How to Safely Pass a Vulnerable Road User”
- “How to Safely Ride an E-bike”





2. Vulnerable User Safety PSAs

- **Timeline:** Production and promotion implemented by Spring 2024
- **Local Motion's role:** Provide consulting services for video content, promoting via our own channels and sharing with partners
- **VTrans' role:** Creating and promoting video/messaging via possibly paid placements
- **Funding needs for LM's role:** None, covered by State Highway Safety Office's Behavioral Safety Unit (BSU) grant



3. Bike Safety Workshops & Outreach

- Annual program for ~100+ UVM students and staff focusing on bicycle safety and etiquette, distributing lights and u-locks.
- Series of awareness campaigns that we provide to help both drivers and bicyclists be safe while using our roadways.
- Offer multiple Driver's Ed classes to high school students, focusing on Vulnerable User safety. Serves several schools a year. Explore with DMV how to add to the curriculum for all.

3. Bike Safety Workshops & Outreach

Bike Smart Educational Program

Currently serves 40-50 schools, reaching ~10,000 children annually.



3. Bike Safety Workshops & Outreach

Safe Routes to School
Walk to School Day



Safe Routes to School
Yard Signs



3. Bike Safety Workshops & Outreach

Example Interior Bus Safety Ad

Love to walk?

Wear Bright Clothing

Reflective clothing will help you be seen, especially at night.

Love to bike?

Ride To The Right

Stay as far right as is safe: at least 2-3 feet from the edge of the road. Exceptions: hazards, turning left, hills, staying out of the "door zone", etc.

Love to drive?

Don't Pass Stopped School Buses

Children are our most vulnerable road users. There is never a good reason to pass a stopped school bus.

Safety is a two-way street.

a project of **LOCAL MOTION** Vermont Safe Streets Network

"Rubber Side Down" Yard Signs

RIDE IN THE SAME DIRECTION AS TRAFFIC
Even On The Sidewalk

KEEP YOUR BIKE RUBBER SIDE DOWN

STOP AT STOP SIGNS AND STOP LIGHTS
& Signal Your Turns

KEEP YOUR BIKE RUBBER SIDE DOWN

USE LIGHTS WHEN RIDING YOUR BIKE AT NIGHT

KEEP YOUR BIKE RUBBER SIDE DOWN

STAY OFF SIDEWALKS
~ or ~
RIDE AT WALKING PACE

KEEP YOUR BIKE RUBBER SIDE DOWN

WEAR A HELMET,
in case your bike goes
RUBBER SIDE UP

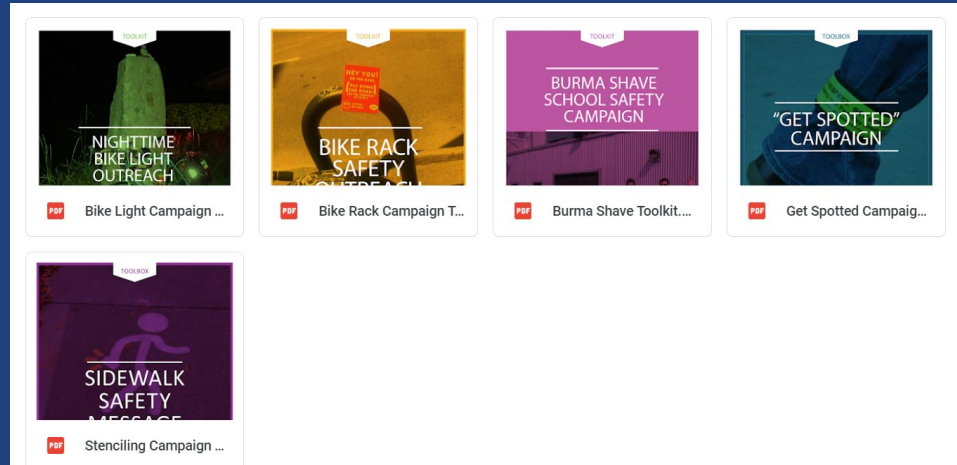
KEEP YOUR BIKE RUBBER SIDE DOWN

3. Bike Safety Workshops & Outreach

Pass With Care Yard Signs



Safe Streets Toolkits





4. Safe Routes to School (SRTS)

Safe Routes to School in Vermont includes the “Six E’s”:

- **Education** (Bike Smart and Walk Smart)
 - **Evaluation** (data collection)
 - **Engineering** (Travel Plans, Walk Audits, Pop-Up Demonstration Projects)
 - **Equity** (access for everyone)
 - **Encouragement** (events)
 - **Engagement** (including larger community)
-
- Currently, there are 62 Vermont schools participating in SRTS

Vermont Safe Routes to School is part of the VTrans Bicycle and Pedestrian Program.



Local Motion is an official partner of the national Safe Routes Partnership





4. Safe Routes to School (SRTS)

Increasing the impact of Vermont's Safe Routes to School programming:

- Local Motion is currently delivering this programming, thanks to remaining SRTS funds from VTrans, which will run out in December 2023.
- New federal guidance allows Safe Routes to School programming to benefit high schools in addition to K-8 (IIJA, Section 1119).
- Expanding to more schools, and engaging existing schools more deeply and effectively in the “6 E’s” will require additional funding.

4. Safe Routes to School (SRTS)

The best outcome of this program is if every school in Vermont had a way for children to safely walk or bike to school. Two options:

1. **Level-fund the program:** The program is at capacity for engagement and participation, and schools need more support to meaningfully engage and make change. Previous iterations of the program (run by another organization) allocated significantly more funds annually for a state-wide program, and without a Bike Smart component.
2. **Increase program funding:** this will allow us to reach more schools, and engage more completely in the “6 E” framework. Additional funding could support a full time SRTS Coordinator; update curriculum and materials; provide more training and develop teams of engaged volunteers,



4. Safe Routes to School (SRTS)

- **Timeline:** ongoing
- **Local Motion's role:** manage and run programming
- **VTrans' role:** provide funding
- **Funding needs for LM's role:** Renew current funding of \$100,000 per year, which runs out December 2023. OR, expand to \$270,000.

5. Bike Smart

- A complete bike skills education program for children ages 5 and up.
- Each of the three Bike Smart trailers includes 30+ kids' bikes, training materials, helmets, tools, and safety handouts for families.
- Each trailer is delivered to the program site for one to two weeks.
- This program currently serves 40-50 schools per year, reaching around 10,000 children annually.



5. Bike Smart

While the current program is very impactful, the best outcome would be that every school in Vermont has access to a quality bike skills program. Bike Smart, the way it is currently structured, cannot scale to reach all of the 350 Vermont public schools in its current form. With this in mind, we are proposing:

- To continue funding for the current program
- OR, to pilot a new model for the program with the potential to eventually reach every school in Vermont by supporting school districts in purchasing equipment and **establishing their own local Bike Smart programs**

5. Bike Smart

- **Timeline:** ongoing
- **Local Motion's role:** manage and run programming
- **VTrans' role:** Purchasing trailers with government resources, funding
- **Funding needs for LM's role:** Program cost: \$100,000.
 - \$60,000 is covered by existing grant, \$40,000 is in the SRTS grant ending in 2023
 - \$100,000 a year for 1-2 year pilot expansion project

Non-Safe Routes To School Programming Budget

Bike Education Safety Task	LM's Role	Current LM budget	Proposed budget	VTrans' role	Impact of proposed budget
1) E-bike Education at VT Bike Shops	Create content, work with shops on use and education	\$2,500, Mobility & Transportation Innovations - VTrans grant expiring December 2023	No change (FY 24)	Printing and	Education delivered to
2) Bike Safety PSA Campaign	Develop and consult on content, share via our channels and to partners	\$2,500, MTI grant expiring December 2023	No change (FY 24)		
3) Bike Safety Workshops	Deliver programming	\$8,400, CCRPC UPWP funding for workshops in Chittenden County expiring June 2023, with renewal likely for FY24. Portion of BSU and GoVermont funding is being used for workshops outside of CC.	No change (FY 24)		

Safe Routes To School Programming Budget

SRTS Program	LM's Role	Current LM Annual budget	Proposed budget	VTrans' role	Impact of proposed budget
4) SRTS (Level Funded)	Deliver current programming utilizing the 6 "E" wrap-around services.	\$100,000* *\$40,000 goes to current Bike Smart Programming	\$110,000* (FY 24) *slight increase due to inflation (gas for vans, staff compensation, equipment and supply costs)	Funding	Retain existing program of 62 schools served, working on only some of the 6 E's as capacity allows—largely Education, Equity and Encouragement, with limited Evaluation.
4) SRTS (Expanded to increase impact)	Hire full-time SRTS coordinator, deliver programming and expand services	\$100,000	\$270,000 (FY 25) Would allow for some/all of the following: more regional coordinators, adding adaptive bikes and related curriculum, teacher training, school participation incentives, updated Bike Smart / Walk Smart curriculum, updated and expanded school kits and, ideally, a full time Safe Routes to School Coordinator	Funding	Engage SRTS schools meaningfully in all 6 Es of engagement, and bring in more schools to the program.
5) Bike Smart Expansion PILOT	Deliver current programming establish and deliver pilot program and evaluate	n/a	\$100k/year for one to two years (Pilot) (FY 25) Would allow for some/all of the following: additional trailers, bikes, and bike maintenance funds for school districts to host their own Bike Smart trailer	Funding	10,000 VT kids reached annually with bike safety education and satellite Bike Smart programs established in 3 school districts per year through pilot



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