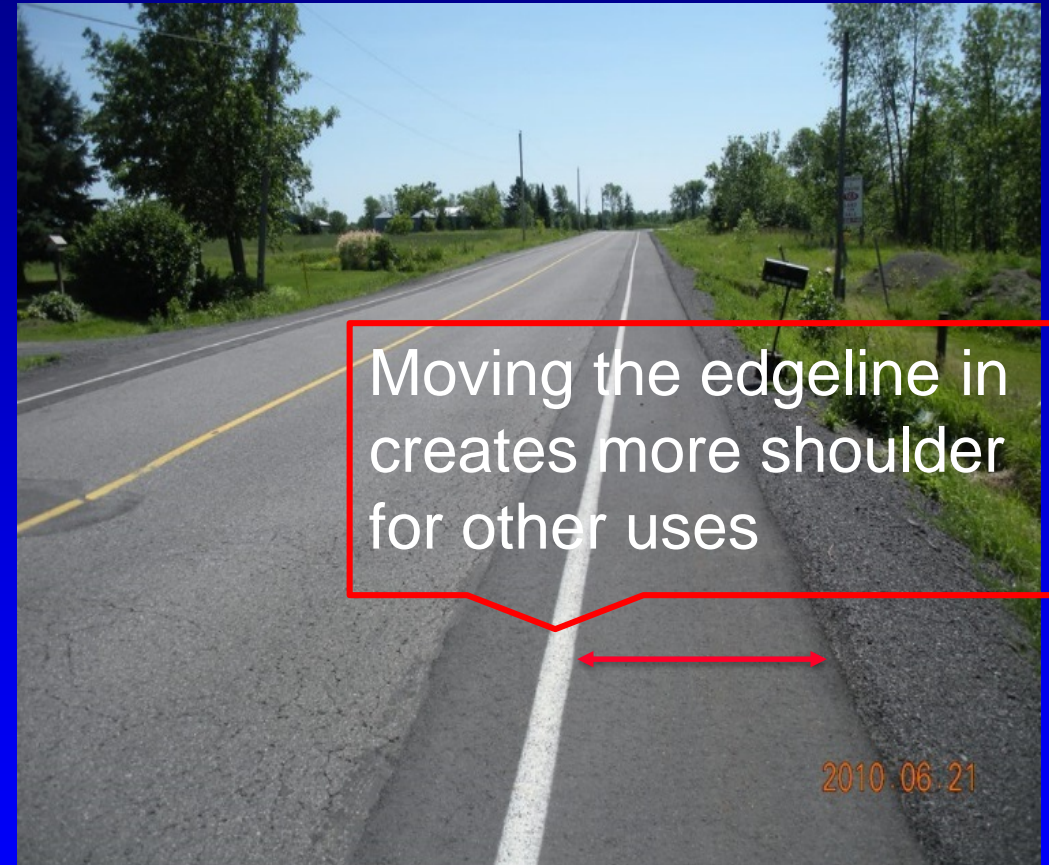


Low-Cost Bicycling and Walking Safety Improvements



Narrow Travel Lanes

- When roads are re-stripped, mark travel lanes at 10 or 11 feet to gain shoulder width. Research shows that 10 or 11 foot lanes are the safest width (for all users) on roads posted at 40 MPH or less.
- Cost - \$0 (assuming that an edgeline would be marked anyway)



Mark shoulders as bike lanes

- Mark shoulders as bike lanes where appropriate
 - 4 foot minimum width, 5 foot adjacent to parking
- Cost - \$65 - \$100 per bike symbol.
Approximately 10 per mile
- 35% Reduction in crashes



Maintain existing shoulders

- Sweep shoulders so they are useable



Gravel forces
bicyclist into
travel lane

Enhance Sign Visibility

- Use fluorescent yellow-green (FYG) for pedestrian warning and crossing signs (required for School-related signs)
- Minimal added cost



Enhance Sign Visibility

- Add appropriate color strip to sign posts to enhance visibility (same as sign background)
- Cost - \$25 per sign post treated



Enhance Sign Visibility

- Make sure signs are visible by clearing brush, tree limbs, etc. that may be obscuring them



Provide Crosswalks

- Mark crosswalks using the block pattern – highest visibility
- Cost - \$500 for typical two lane crossing
- 40% reduction in pedestrian crashes



Make Crosswalks Visible

- Locate parking relative to crosswalks, driveways and intersections to provide clear sight lines. State statute prohibits parking within 20 feet of crosswalks at intersections. This is good guidance for mid-block crosswalks.



Enhance Crosswalks

- Add an in-street pedestrian sign at existing crosswalks
- Cost – Approximately \$300 per sign
- Need a permit to install on state highways



Enhance Crosswalks

- Provide pedestrian refuges at crossings
- Especially useful for multi-lane or excessively long crossings
- Cost - \$1500 to \$2500 depending on size
- 46% reduction in crashes



Enhance Crosswalks

- Add bulbouts to existing crosswalks to make them more visible (can do a trial with hay wattles, temporary paint or other materials)
- Benefit – Better sight lines for pedestrians and drivers. Shorter crossing distance
- Cost - \$13,000 per corner



Enhance Crosswalks

- Install Rectangular Rapid Flashing Beacons (RRFB)
- Use for vulnerable pedestrian populations or high ped volume crossings or at crossings with known compliance problems
- Cost - \$10,000 to \$15,000 per crosswalk



Provide Sidewalks

- Fill in small gaps in the sidewalk network.
- Address “goat trails” by providing sidewalks
- Cost - \$35/FT uncurbed to \$150/FT curbed

Existing
pedestrian use
indicates need
for sidewalks



Winter Maintenance

- Have a policy about clearing sidewalks of snow in the winter – Prioritize access to schools, transit stops, public buildings
- Winter maintenance is an accessibility (ADA) issue
- Cost - varies



Provide Secure Bicycle Parking

- Provide bike racks at key locations – schools, public buildings, shopping destinations, large employers
- Covered parking for long-term locations
- Cost - \$160 per rack



VTrans small-scale bicycle and pedestrian grant program

- Application available April/May each year
- Funding for construction only (no admin or design)
- State funds only so minimal administration needed
- 50/50 match – local match can be in-kind such as Town Highway crew time
- Projects selected in September with construction the following year
- Eligible projects include:
 - crosswalk enhancements
 - bicycle lane markings/signs
 - edgeline markings
 - addressing ADA compliance issues
 - critical small gaps in sidewalk networks

VTrans Bike/Ped Program

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- VTrans Bike/Ped Program Web page –

<http://vtrans.vermont.gov/highway/local-projects/bike-ped>

Low-Cost Bicycling and Walking Safety Improvements

