



LHTAC

Hinesburg Edge Line Striping Success



Silver Street, Hinesburg



Jeanne Kundell Wilson, Hinesburg Town Administrator, is pleased to report that “the Town of Hinesburg has been painting edge lines on our Class 2 town highways, with 9’ of designated lane widths. We have found this to be a very beneficial program. We wanted to see if the narrowness would be functional and would encourage slower traffic. We already know that motorists benefit in safety from the stripe itself, especially in poor visibility conditions. Also for some individuals the side stripes provide a guide when meeting up with on-coming headlights at night. We also confirmed our expectation that the 9’ lanes would provide a wee bit of paved shoulder and thereby, without additional expense, make life a little nicer for cyclists, runners and walkers. In two years, it has been a success on all counts and use by runners and walkers has increased.”

Jeanne added that an additional benefit is purely economical. “If you keep motorists guided away from the pavement edge and shoulders, you can extend the useful life of the paving job, and the safety for the ‘edge’ users.”

In summary, the reasons Hinesburg now has edge lines at 9’ on their class 2 paved roads:

- 1) They keep vehicles away from the pavement edge/shoulders and help extend the life of smooth pavement, a direct economic incentive.
- 2) The lane width helps encourage slower driving, traffic calming.
- 3) Edge lines are a safety margin in poor visibility conditions, especially with an aging population.
- 4) Pedestrians and cyclists benefit from the slower traffic and a little paved margin at the edge.
- 5) Edge lines at a 9’ lane width do in fact hold up just fine. They were not scraped off by the snow plow as initially feared.

The price paid was \$.06/linear foot. To pave both lanes the cost was \$633.60/mile. The life expectancy is 2-3 years with the type of product used. On one road that was painted two years ago, it was found that on the inside of sharp curves, where motorists tend to cut the corner and drive over the edge line on a regular basis, it wore off much quicker than on the straight sections. The sharp curves could have been repainted after a year.

PAVEMENT MARKINGS STUDY

The FHWA staff at Turner-Fairbank-Highway Research Center (TFHRC) worked with the Pennsylvania Department of Transportation (PennDOT) to conduct a two-phased effort aimed at understanding how varying pavement marking treatments affect driver performance. Sixteen drivers, not familiar with the six-mile segment of the two-lane rural road chosen, participated in a variety of exercises over a three-week period. Detailed data was gathered for speed, lane position, and forces acting on the vehicle for each run, as well as driving ratings about the ease of driving each section of the road.

Researchers then plowed through the mountain of data gathered in the study. It was determined that the analysis of driver preference rankings from both the field and simulator studies led to the subjective finding that drivers favor more and brighter markings as they negotiate curves on two-lane rural roads at night.

For a more detailed report contact Dr. Ken Opiela (202) 493-3371 or Kenneth.Opiela@fhwa.dot.gov The above study taken from SAFETY COMPASS: A Publication of the Federal Highway Administration Safety Program: December 2006: Volume 1 Issue 1: Page 1

Reference: Vermont Local Roads News, September, 2007