

Chappaquiddick Road and Dike Bridge Road Transportation Evaluation- Northeastern University

Executive Summary

The Chappy Path Committee coordinated the funding of a senior design project with Northeastern University's Civil and Environmental Engineering Department. The objective of the project is to: evaluate the transportation infrastructure along Chappaquiddick Road (ferry to Dike Bridge Road) and Dike Bridge Road, to determine how well each transportation mode (e.g., pedestrians, bicyclists, and motor vehicles) are accommodated, evaluate parking lot operations on the Chappy Side, develop initial improvements, survey stakeholders for input, and as a conclusion submit a final plan with engineering designs and projected costs for consideration by Edgartown residents and government.

Northeastern Project's Initial Concepts and Recommendations include:

After an extensive data collection effort and site visit, a number of concepts were considered for the project. All concepts considered would fit within the existing right-of-way (i.e., no land takings required). Each concept considered on-site constraints, user needs, and impact on comfort and safety (Table 1).

Table 1 – Design Alternatives for Chappaquiddick Road and Dike Bridge Road

<i>Alternative</i>	<i>Treatment</i>	<i>Infrastructure Required</i>	<i>Comfort and Safety</i>
Do Nothing		None	None
"Sharrows"	Pavement markings & legends	Pavement markings	Minimal
Bike Lanes	Pavement markings & legends	Additional pavement (next to roadway)	Minimal
Multi-Use Path		Additional pavement with buffer separation	High

In addition to the concepts for the roadways, recommendations were included for the intersection of Chappaquiddick Road and Dike Bridge Road, as well as parking lot operations (Chappy Side).

Findings of the Northeastern Project

The study recommends the use of a multi-use-pathway, on the north side of the roadway, to address current conflicts and potential safety concerns between bicyclists, pedestrians, and motor vehicles. It also greatly increases the opportunity for intimidated residents and visitors to utilize the existing legal right-of-way for transportation, exercise and enjoyment as is available in a large part of the rest of Edgartown and Martha's Vineyard. An environmentally sensitive path designed in harmony with the surrounding landscapes preserves the rural feel of the roads and the island while accommodating the needs of residents and visitors to travel to the beaches and preserved landscapes with a minimum of risk and maximum enjoyment without the use of an automobile.

Data

A full text of the first HTE Northeastern presentation is available on the web at: <http://www.mvtimes.com/marthas-vineyard/pdfs/edgartown/chappy-bike-path-report.pdf>

More Information on Back of Sheet