



Northeastern

Senior Transportation Engineering Design Project Presentations

Wed, April 22, 2009, 6:30 to 9:00 pm

108 Snell Engineering Center, Northeastern University

Faculty advisors: Peter Furth and Daniel Dulaski



Boylston Street and Public Garden Cycle Tracks

Client advisor: Nicole Freedman, Bicycle Planner, City of Boston

This project shows the feasibility of eliminating a travel lane on Boylston Street (Fenway to Charles Street) and the streets circling the Public Garden, and using the redeemed space to create a separated, two-way bike path or cycle track. The Boylston Street cycle track will extend the Muddy River path to downtown, with a connection to the Esplanade via the Arthur Fiedler footbridge. Traffic signal analysis shows the feasibility of the proposed road diet. Design concepts adapted from the Netherlands are used to provide maximum safety and convenience.

Old Colony Bikeway

Client advisor: Nicole Freedman, Bicycle Planner, City of Boston

A traffic-separated bikeway has been designed from Melnea Cass Blvd. and Mass. Ave. to the UMass access road near the Boston Globe, using "road diets" on Southamptton Street, Preble Street, Old Colony Ave., and Morrissey Boulevard. This path will create a critical bikeway link to South Boston and Dorchester, with connections to HarborWalk and the Neponset River trail. The project includes redesign of two large intersections, traffic analysis that demonstrates the feasibility of converting roadway space into bike path, and intersection safety treatments.

"HarborRide"

Client advisor: Nicole Freedman, Bicycle Planner, City of Boston

This project shows the feasibility of providing a bike trail from the North End to Chinatown distinct from Harborwalk, yet offering bicyclists a similar level of quality. It applies a road diet to Commercial Street, creating a separated 2-way bike path (cycle track) on the sea side of the street. In the Wharf District, a cycle track has been designed from Christopher Columbus Park to South Station through the Rose Kennedy Greenway, sited so as not to interfere with existing Greenway facilities for active use. By South Station, it shows the feasibility of a road diet on Atlantic Ave. and providing a separated path on the station side, continuing via Kneeland Street to Albany Street and connections to proposed paths to the South End and South Boston.

Lee / Clyde Greenway, Brookline

Client advisor: Todd Kirrane, Transportation Administrator, Town of Brookline

Lee and Clyde Street in Brookline, from Route 9 to Newton Street, links the more urban, northern part of Brookline (including Brookline's only public high school) to the southern, more suburban part of the Town. Its wide lanes, high traffic speeds, and narrow sidewalks make it a barrier for walking and bicycling. This project demonstrates the feasibility of reducing it from four to two travel lanes and using the redeemed space to create a greenway with walking and bicycling paths. It includes analysis of intersections to ensure safety and traffic capacity, and shared street treatments to maintain access to homes along the new greenway.