

## **1.252J/11.540J Urban Transportation Planning Assignment #2: Massachusetts Avenue Redesign Due date: 10/6/06, 2:00pm**

### Background

For the purpose of this exercise, you are working on the staff of Andrew Gottlieb, the head of the Office of Commonwealth Development for the state and Governor Romney's "czar of land use and transportation" responsible for implementing a new "Smart Growth" agenda.

Central Square in Cambridge was re-landscaped several years ago to provide wider sidewalks, better bus shelters, cleaner pavement markings, bicycle lanes, as well as street trees and brick sidewalks. Prior to these improvements, the Central Square section of Mass Avenue looked pretty much like Mass Avenue between Lafayette Square and MIT. At right angles to Mass Avenue, River Street used to join Mass Avenue at an angle in the area, which is now a small park. (The revision of bus routes was required to facilitate the park.)

The city has plans to redevelop Lafayette Square (corner of Mass Ave/Main Street/Columbia Street) and redesign the stretch of Mass Ave between Central Square and Memorial Drive, which includes the sections adjacent to MIT. The design plans for Lafayette Square and Mass. Ave. can be found on the City of Cambridge website (links below). Mass. Ave, however, is a state road and the roadway portions of this reconstruction project are funded by the Massachusetts Highway Department (also called MassHighway or MHD). Most parts of this project are already under construction, as you have probably seen.

In addition, the City of Cambridge has recently proposed some revisions to their original plans for how the pavement markings, with the support of some advocacy bicycle and pedestrian groups and some within MIT. Their proposed plans are detailed in two files. The City of Cambridge hopes MassHighway will agree to their proposal, and Gottlieb appears inclined to side with Cambridge.

This project, happening right outside MIT's front door, highlights the institutional and political complexities involved in urban transportation planning.

### Tasks

The **first part of the assignment** involves looking at the improvements at Central Square and observing what works and what does not work. No formal traffic counts are required here; just give your impression based on recent lectures and readings.

The **second part of the assignment** is to evaluate Mass. Ave corridor between Central Square and Memorial Drive, review the Lafayette Square plans and make recommendations for redesigning it, drawing on lessons learned from Central Square. To do so, go and make observations of traffic in the area during two periods: peak hour (either AM or PM) and an off-peak period (preferably between noon and 2 PM) measuring cars, trucks, buses, bicycles, pedestrians crossing the street, and pedestrians boarding/alighting buses. Use the same methodology as Assignment #1. The key location for traffic counts is the 3-way intersection of Columbia Street, Main Street, and Mass. Ave. Traffic counts and observations can be done in groups.

You may discuss your observations within the group, but write your memo individually. Try to apply the planning framework presented in class to the issues you see at Mass Ave between Lafayette Square and Memorial Drive.

The intent of this assignment is to go beyond the observations about throughput and capacity of Assignment #1, and consider the physical street design as well as the broader political and institutional context of Mass Ave. State and federal funds that pass through the state are financing the reconstruction, and the responsible state agency (MassHighway) has strongly influenced the design of the plan, as has the City of Cambridge with support from MIT.

*Your memo should advise Gottleib on whether to intervene and how.*

- What are the central problem(s) the redesign is addressing?
- Who are the major institutions and constituencies?
- How would you involve the "community" and who is that?
- Imagine that the current construction activity does not preclude a change in plans. Is the plan for Lafayette Square reasonable, or should it be modified?
- How do you assess the current location of bus stops? Which of the alternative paint markings and parking plans would best fit with bus circulation?
- Develop recommendations for redesigning Mass Ave. drawing on your observations at Lafayette Square the Central Square redesign.

Your paper should be approximately 5 pages single-spaced (or 10 pages double-spaced) including any charts or images, and is due October 6 by 2:00pm.

<http://www.cambridgema.gov/cdd/et/infra/lsg/lsg.html>

<http://www.cambridgema.gov/TheWorks/projects/southmass.htm#>