

1.221J / 11.527J / ESD.201J Transportation Systems

FALL 2004

ASSIGNMENT 2B: Transportation System Fundamentals

Date assigned: (Lecture 3)

Date due: (Lecture 7)

Value: 18 points

Each of the 30 Key Points is important in understanding transportation systems. In this assignment, you will write a paper which relates these key points to a specific transportation concept.

The transportation concept that you will examine is the integration of high-occupancy vehicle (HOV) lanes, high-occupancy toll (HOT) lanes, and bus rapid transit (BRT). While HOV/HOT/BRT is the focus of this assignment, it is *not* simply “about HOV,” “about HOT,” or “about BRT.” We urge you to take a broad view, considering their relationships to other transportation systems, such as traditional general capacity freeway lanes and conventional tolls, as well as issues such as 1) implications of BRT for traditional bus transit and commuting; 2) how BRT/HOV relates to larger issues such as urban form; and 3) the overall impact on the urban transportation network.

Your task is to take some of the 30 Key Points and relate them to this transportation system. Of course, not all key points are equally relevant. Indeed, some may be irrelevant to this particular system. Choose the key points you think are most applicable. Explain your rationale for choosing the key points you select and clearly discuss how each selected key point applies in this case. In addition, discuss connections *between* your key points where appropriate, and the effects one may have on the other(s).

Use the articles given in Assignment 2A, as well as several other articles to be handed out at the end of class on September 21, as sources of information for your paper. Feel free to conduct additional research to aid in the formulation of your thoughts. Further information on the key points can be found in the lectures and the readings, while additional details on the HOV, HOT, BRT, and their integration can be found in many online resources. Lexis-Nexis (web.lexis-nexis.com/universe) is an excellent searchable database for newspaper and

journal articles. If you are unfamiliar with Lexis-Nexis, please see the TA for assistance.

The assignment has a maximum page limit of twelve pages (not including the reference list), 1.5- or double-spaced, using 12-point font. As with previous assignments, clarity and presentation will be factored into the grading of this assignment.