Massachusetts Institute of Technology 1.258J: Public Transportation Systems Spring 2017

Assignment 5

In 3000 words or less, develop, assess and select a recommended approach to various service contracting options that the MBTA or another public entity (e.g. the City Of Waltham) should proceed with to replace the current Route 70 and Route 70A that operate beyond the city center of Waltham. Alternative service options could include private minibuses, extensions of TMA services, on-demand van or sedan services, etc. Your assessment should summarize both the costs and benefits of various approaches from the perspectives of the current passengers using these services and MBTA operating costs avoided if the service was contracted to one or more replacement operators. Please discuss the fare policy options that you deem most appropriate for passengers and the revenue implications for the various parties to the service contracting agreement. Assume that MBTA passengers currently using Routes 70 and 70A beyond Waltham Center will be using the new service and, if travelling inbound beyond Waltham Center, will transfer to and from the newly combined Route 70/70A. You should also assess whether alternative service concepts might induce additional demand that may reduce the ultimate cost of providing the alternative service, and provide a simple demand analysis to justify the induced demand. Please fully document the source of the costs/fares that you use in your assessment and any simplifying assumptions that you must make to develop your recommendation. Finally, please comment on the broader public policy and equity issues that such an arrangement might presage for the MBTA and the regional public transit in the future.

Readings: Besides the service contracting literature in the course resources, please see two attachments by Michael Gordon that should be relevant to your assessments. Focus your reading of the thesis on Section 2.4 and Chapter 5.

This assignment will be completed individually and submitted in PDF format.

1.258J / 11.541J Public Transportation Systems Spring 2017

For information about citing these materials or our Terms of Use, visit: https://ocw.mit.edu/terms.