

Evaluating Policies for the Expansion of Fiber Optic Infrastructure, Implications for Planning Regional Economic Growth and Integration in Western Massachusetts

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The Interstate 91 is located in Western Massachusetts and is currently undergoing construction improvements including installation of multiple intelligent transportation system (ITS) technologies that will span from state border to border and provide a “fiber optic backbone” to the region with connections statewide. This ITS project is a collaboration with many stakeholders to support the needs of the transportation network in the region and the economic needs of the Pioneer Valley. The project is estimated at 34.6 million dollars and will span the 63 miles of I-91 from the Connecticut border (the Lower Pioneer Valley) to the Vermont border.

The project includes installation of a camera based detection system to evaluate traffic congestion, information message boards and a fiber optic infrastructure to connect these technologies to the MassDOT District Office and the State. When completed, the ITS project will have 6 conduit; 2 dedicated to the ITS infrastructure and 4 available for lease for economic development purposes in the underserved regions of Western Massachusetts along I-91.

This will provide broadband access at key locations or nodes in Western Massachusetts. Currently, 41% of these communities, mainly in Berkshire and Franklin Counties, do not have access to broadband. The proposed benefits of being linked to a digital infrastructure are projected to have wide ranging and long term economic development results.

This presentation will examine the economic development strategies currently outlined in the Pioneer Valley and consider the dedicated access to the digital infrastructure or “backbone”. The main focus will be to identify what means or metrics to utilize when measuring the economic development impacts of this infrastructure improvement; what economic development impacts are proposed; and what data are available to measure these impacts. The I-91 project provides a very interesting case study, in which the relationship of transportation infrastructure improvements and fiber optic infrastructure improvements converge to promote economic development.