

# Transportation And Economic Impacts Of The Central Artery/Tunnel In Boston



Client

Facts

Period2006

Project Country

By Economic Development Research Group for the Massachusetts Turnpike Authority, 2006

Are public investments in transportation projects actually leading to the expected levels of benefit? To address that question, a range of federal and state agencies around the U.S. conducted assessments of recently completed transportation projects. To address those same issues, at the completion of Boston's Central/Artery Tunnel project ("the Big Dig"), the Massachusetts Turnpike Authority hired Economic Development Research Group to assess the economic impacts and transportation benefits of the project and compare them to those expected when the project was initially proposed and approved.

Boston's Big Dig replaced the I-93 elevated highway with an underground freeway through Central Boston, extended the I-90 tollway underground to the South Boston Seaport and Logan International Airport, built a new 10-lane bridge over the Charles River, and built a new 4-lane tunnel under Boston's harbor and ship channel. A new underground transit line (Silver Line) was also built as part of a package of transportation improvements. The project, constructed over the 1995-2005 period, was envisioned as a means of: 1) improving traffic flow in the Central City; 2) improving access to the underutilized South Boston Seaport area; and 3) enhancing urban design and quality of life in areas that had been cut off or overshadowed by the elevated highway structure. Key findings of the study:

**Traveler Impacts (Vol. 1).** Traffic volume and speed measurements on the interstate highways and tunnels show that overall traffic flow has improved 62% compared to pre-project (1995) levels, when measured by the reduction in vehicle-hours of travel. That is even better than the improvement forecast in the 1990 environmental impact report. The travel time and vehicle operating costs savings on the highway routes currently amount to \$167 million/year. However, that does not count the value of additional travel improvements occurring on local Boston streets, crossing the Charles River, and in Cambridge and Charlestown - which have not yet been measured.

**Access and Urban Design Impacts (Vol. 2).** The urban landscape improvements, including 315 acres of new park and landscaped areas, is not yet completed but has already led to new residential development prominently featuring proximity and views of the parks and open spaces. The I-90 extension, opening up access to the South Boston Seaport Area, is also notable for parallels to the 1960's extension of I-90 that created highway access to the Back Bay area. Both were formerly under-utilized districts in which substantial new office, residential and hotel development started once the interstate highway was extended and a new interchange was built there. In the South Boston Seaport Area, which stood for decades with no new development. that process is just starting to unfold. Already, "Big Dig" projects have led to commitments of over \$7 billion in private investment, including 7,700 housing units, 10 million sq. ft. of commercial space and 2,600 hotel rooms, supporting 43,000 more jobs in the city. The study concludes that it will take years before the full impact of the project on travelers, access and the economy will be fully measurable.

The study reports received broad coverage in newspapers, radio and television, both regionally and nationally. To read the report, click on the links below:

Vol. 1: Transportation and Economic Impacts of the Massachusetts Turnpike Authority and the Central Artery/Third Harbor Tunnel Project (PDF)

Vol. 2: Real Estate Impacts of the Massachusetts Turnpike Authority and the Central Artery/Third Harbor Tunnel Project(PDF)

### **Contact Persons**