

## **Dulles Corridor Rapid Transit Project**

The TRP, which was formed by ASCE at the request of Secretary Homer, assessed the geology, tunnel alignment and physical limitations on the construction of the tunnel, as well as conducted a review of the project's estimates and proposals. In their report, the TRP stated that \$2.5 billion would be a reasonable total cost to construct Phase 1 of the Dulles Metrorail Extension with a large bore tunnel through Tysons Corner. They also stated that after a similar review of the estimates for the largely aerial option, they believed the likely cost for the aerial alignment to be \$2.25 billion.

In their review, the TRP noted that the expected duration of construction, installation and testing work for both alternatives would be comparable, but that the start of large bore tunnel solution would be delayed by up to one year to complete sufficient Preliminary Engineering and secure National Environmental Policy Act and equivalent State legislation approval. They also noted several cost saving features of the tunnel's lesser surface impacts, including a reduction in cost by at least \$30 million for less permanent utility and temporary construction easement; and a savings of as much as \$40 million due to lesser utility relocation and support costs. Other cost saving features of the tunnel option included: the large bore tunnel alternative allows for significant savings in operation and maintenance costs, an estimated \$5 million per year (in current dollars); and, while they have not been calculated, life cycle cost savings would favor the tunnel. In addition, the TRP noted that optimizing competition, establishing financial incentives and risk-sharing in procurement actions would have high potential for eliminating excessive contingencies from pricing-yielding lower capital costs.

The aerial alternative, which the TRP noted would have half the expected life span of the tunnel (60 and 120 years, respectively), would also generate serious negative traffic and business access impacts during construction along routes 7 and 123, as well as Interstate 495, concurrent with the HOT Lane construction. While the large bore tunnel would have a much smaller impact in those areas, it would have substantial construction impact on median of Dulles Access Road, generating heavy truck traffic for the removal of tunnel much created during boring, and for delivery and staging of pre-cast tunnel lining segments. The TRP concluded that despite being potential sources of project risk, the impacts would be manageable.

The TRP concluded that while it was clear that the aerial option could be done cheaper and faster, the large bore tunnel alternative would allow for a more integrated development of Tysons Corner. With more attractive development in place, and with greater development density allowed by the tunnel alternative, the TRP noted that it would be reasonable to assume that the tunnel option would provide a greater long-term economic and business impact than the aerial option.

On December 29, 2006, the Virginia Department of Transportation (VDOT) signed the first of several agreements that will ultimately transfer responsibilities for the Dulles Toll Road to the Metropolitan Washington Airports Authority (MWAA). It is the first in a series of steps required for the Dulles Metrorail Project to be built by MWAA. VDOT will continue to operate and maintain the toll road until a federal Full Funding Grant Agreement for the Metrorail project is executed. This action is scheduled for the fall of 2007.

You can access the TRP's report and other information on the Dulles Metro Web site at: [www.dullesmetro.com](http://www.dullesmetro.com).