



Introduction

Purpose of This Study

The I-270/US 15 Multi-Modal Corridor Study is a joint project planning study undertaken by the Maryland State Highway Administration (SHA) and the Maryland Transit Administration (MTA). The study area includes 31 miles of proposed highway improvements along the I-270 and US 15 corridor between I-370 in Montgomery County and Biggs Ford Road in Frederick County, and the 14-mile Corridor Cities Transitway (CCT), a proposed rapid transit corridor within Montgomery County that extends from the Shady Grove Metrorail station in Rockville to the COMSAT facility just south of Clarksburg. The transitway would provide direct connections to the Metrorail Red Line at Shady Grove and the MARC Brunswick Line at Metropolitan Grove. The CCT will directly serve a number of major activity centers and growth centers in the corridor. Feeder bus service to station areas will be provided by local transit operators.

The objective of this planning study is to provide the public and decision-makers with appropriate and relevant information needed to make an informed decision on a preferred mix of highway and transit investments as defined by the various alternatives under study. The National Environmental Policy Act of 1969 (NEPA) requires consideration of the impacts to the natural and built environment of any federally funded transportation investment. NEPA requires a systematic interdisciplinary analysis of the costs and benefits of a proposed action, including the following:

- The probable environmental impacts of the action, including impacts to the natural and built environment
- The effects of the proposed action on the transportation system
- The measures taken to avoid potential impacts
- Strategies for minimizing or mitigating unavoidable impacts, as appropriate

In addition, consultation with federal, state, and local agencies and public participation in the planning process are required.

The alternatives under consideration include the No-Build Alternative (Alternative 1), the Transportation Systems Management/Transportation Demand Management (TSM/TDM) Alternative (Alternative 2), and five roadway build alternatives that consider the addition of highway lane

capacity in the form of general purpose lanes or managed lanes as either high-occupancy vehicle (HOV) lanes or express toll lanes (ETLs). Each of the roadway build alternatives is combined with either bus rapid transit (BRT) technology or light rail transit (LRT) technology on the CCT. In addition, a Premium Bus transit alternative is joined with one of the roadway build alternatives. The build alternatives are designated by a number and letter where the number

HIGHWAY LANE DESCRIPTIONS

- **General Purpose** (GP) lanes are regular traffic lanes designed to accommodate all motor vehicle traffic on interstate and state highways, generally posted at speeds of 55 miles per hour or higher.
- **High-Occupancy Vehicle** (HOV) lanes are dedicated lanes which can only be used by vehicles with two or more occupants or by motorcycles. HOV lanes are managed lanes designed to encourage car-pooling.
- **Express Toll Lanes**SM (ETLsSM) are another type of managed lanes designed to alleviate congestion in the general purpose lanes and provide relatively free-flowing traffic. Motorists who wish to travel in the less congested ETLs pay a toll that is collected at highway speed by an E-ZPassTM transponder.

TRANSIT MODE DESCRIPTIONS

- **Light Rail Transit** (LRT) is an electric railway system that can operate single cars or short trains. The LRT system proposed for this project would operate completely on a dedicated right-of-way or guideway, separated from traffic on local streets.
- **Bus Rapid Transit** (BRT) is a mode of transit that has characteristics common to both conventional bus systems and LRT. BRT for this project would use rubber-tired transit vehicles, most likely articulated buses, along a reserved transit guideway. Vehicles would be similar to LRT vehicles in performance and appearance. However, they would be able to leave the transit guideway to access local destinations using the local road network.
- **Premium Bus** service would provide bus service using dedicated (managed) highway lanes and direct access ramps to travel from station to station. Premium bus provides limited stop service and non-stop service between origins and destinations.

represents the roadway alternative and the letter represents the transit alternative. The roadway alternatives are numbered 3, 4, 5, 6 and 7. The transit alternatives are lettered A (LRT), B (BRT) and C (Premium Bus), where C is only paired with roadway Alternative 5. The project would be designed and constructed in a manner that minimizes adverse effects on the environment and maximizes benefits to the communities.

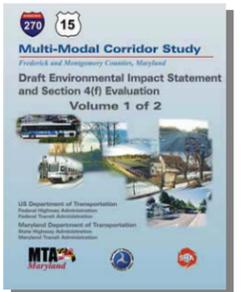
As part of the study, the project team must quantify and provide a comparison of potential environmental effects of each alternative under consideration. The environmental effects of the No-Build, TSM/TDM, and Alternatives 3A/B, 4A/B, and 5A/B/C are quantified in the Draft Environmental Impact Statement (DEIS), issued in 2002.

This Alternatives Analysis/Environmental Assessment (AA/EA) evaluates four additional build alternatives, Alternatives 6A, 6B, 7A, and 7B. Additionally, Alternatives 6.1: No-Build Transit and 6.2: Transit TSM are introduced for the purposes of analyzing the performance of transit investment alternatives consistent with Federal Transit Administration (FTA) New Starts requirements.

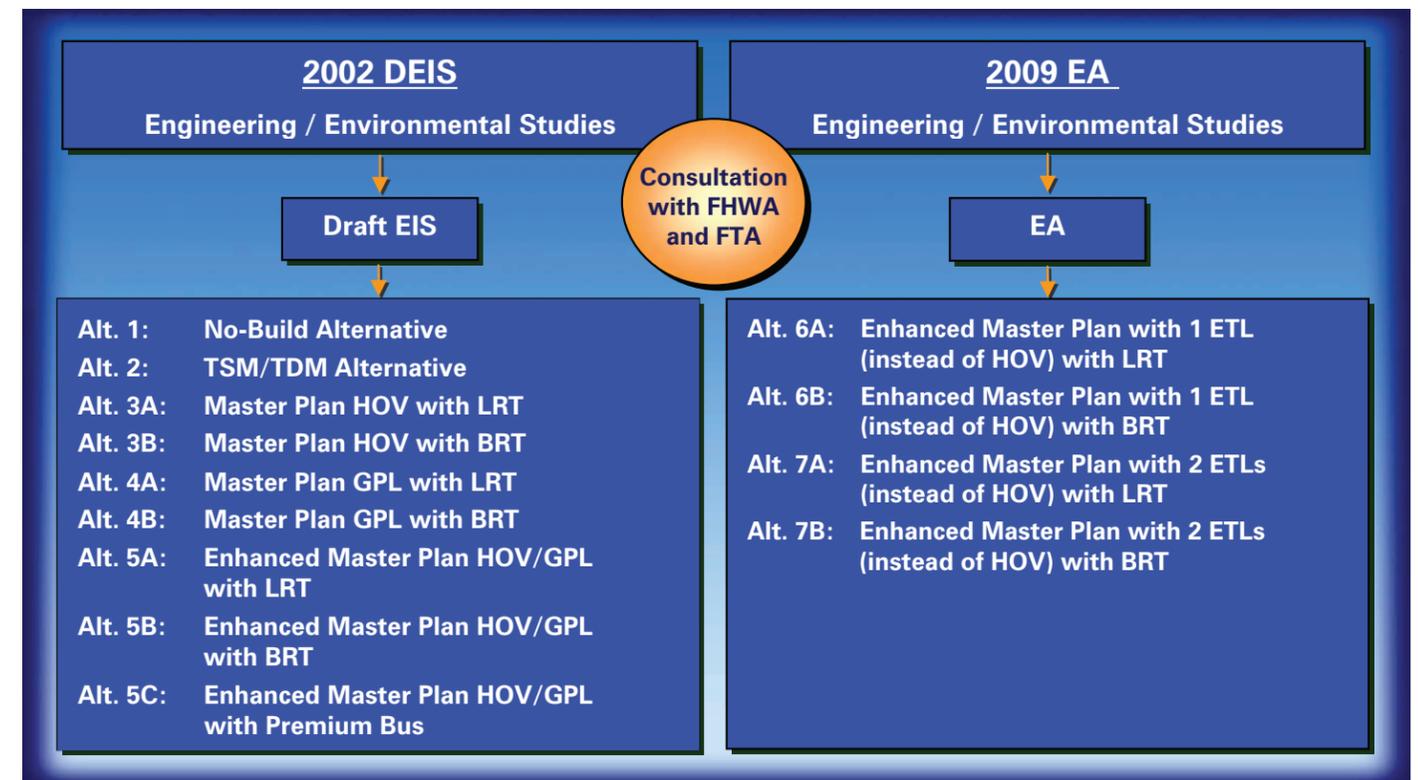
Purpose of This Alternatives Analysis/Environmental Assessment (AA/EA)

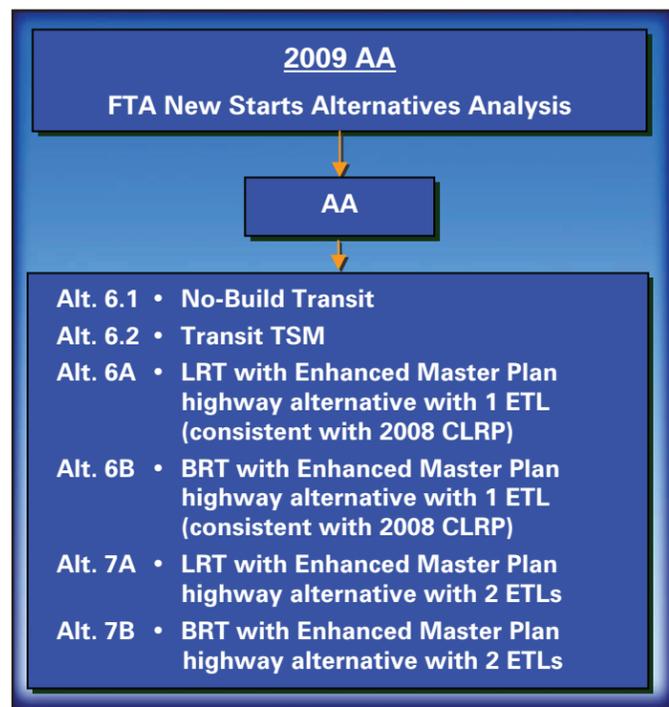
The AA/EA serves as a companion to the DEIS issued in 2002.

The companion designation means Alternatives 6A/B and 7A/B have been examined to the same level of environmental review as the alternatives that are presented in the 2002 DEIS. The assessment responds to a decision made in 2004 to study two additional highway alternatives that include ETLs. In this document the potential transportation and environmental impacts, costs, and benefits of the new alternatives, Alternatives 6A/B and 7A/B, are introduced, along with any changes to the planning environment that have occurred since the DEIS was published, such as changes to the existing land use, changes to county and city master plans, and projected future traffic numbers.



Alternatives Evaluated in 2002 DEIS and 2009 EA





development of federally funded major capital transit investment projects. The requirements of the AA process are intended to allow for an objective, efficient, and fully-informed evaluation and rating of the transit projects from throughout the United States seeking funding under the Federal New Starts process. The FTA discretionary New Starts program is the federal government's primary financial resource for funding locally planned, implemented, and operated transit "guideway" capital investments.

The purpose of an AA document is to evaluate the costs and benefits of a range of transportation alternatives designed to address a specific transportation purpose and need for a specific transportation corridor. The information presented is intended to support decision-making on a preferred investment strategy to take into more detailed study and development.

Two alternatives are included in this document that are subject only to analyses of costs and benefits in accordance with FTA guidance for Alternatives Analysis. These include Alternative 6.1: No-Build Transit and Alternative 6.2: Transit TSM. These transit alternatives are introduced to facilitate analysis of the benefits and cost-effectiveness of the capital improvements included in the build alternatives against the much lower cost no-build and transit TSM scenarios. Alternatives 6.1 and 6.2 assume the same highway build scenario as Alternatives 6A and 6B, which is consistent with the most recently adopted Constrained Long Range Transportation Plan (CLRP) for the National Capital Region.

Organization of this AA/EA

The Signature Page presents the signatures of the officials approving the findings contained in the AA/EA document. Also included are:

- The project description
- Lead agencies
- A list of locations where the AA/EA is available for public review
- Information on upcoming AA/EA public hearings and the public comment period
- Contact information for any comments, questions, and requests for information on the I 270/US 15 Multi-Modal Study.

The Executive Summary is a standalone section that briefly presents the major components and findings of the study.

Chapter I – Purpose and Need describes the purpose and need for the highway and transit improvements in the I-270/US 15 Multi-Modal Study corridor, and highlights the major transportation issues and related project goals and objectives.

Chapter II – Alternatives Considered summarizes the alternatives initially developed as part of the 2002 DEIS and describes the new alternatives presented in this document.

Chapter III – Transportation Facilities, Services and Mobility Impacts describes the potential long-term impacts of the alternatives relative to roadways, public transportation, rail stations and parking, bicycle and pedestrian facilities.

Chapter IV – Environmental Resources and Consequences describes the potential long-term and in some cases short-term impacts of the alternatives on key resources of the natural and built environment. Chapter IV also includes a summary of the Section 4(f) resource evaluation.

Each section of Chapter III and Chapter IV begins with a brief description of the regulatory framework governing the analyses and the methods used, followed by a description of existing conditions, forecasts of those conditions to 2030 (both with and without the alternatives), and any beneficial or adverse effects of the alternatives. Where appropriate, possible minimization and mitigation measures are identified for unavoidable impacts

Chapter V – Transit Costs and Funding focuses on transit project costs and funding strategies in accordance with FTA requirements for Alternatives Analysis. It compares the capital, operating, and maintenance costs for the TSM and build alternatives, presents potential strategies for financing those costs, and identifies potential funding shortfalls and implementation strategies.

Chapter VI – Evaluation of Alternatives presents the results of the Alternatives Analysis described in previous chapters by highlighting the relative benefits and adverse impacts of the alternatives. Chapter VI uses

the information presented in Chapters III, IV, and V to discuss how well the alternatives would address the project purpose, needs, and goals. This chapter also describes key measures and how they could affect decision-making concerning the choice of a preferred alternative.

Chapter VII – Comments and Coordination presents a summary of the testimony received from the DEIS Public Hearings, the Express Toll Lane workshops, and the written comments received from both citizens and elected officials. Coordination with project stakeholders and local, state, and federal agencies is also summarized in this section.

Appended to this AA/EA are the following:

- Plan Sheets showing the proposed I-270/US 15 roadway improvements (Sheets HWY 1 through 15), relocated MD 75 (MD 75) and the proposed alignment for the CCT (Sheet TRAN 1 through 6).
- Summary of the Relocation Assistance Program of the Maryland State Highway Administration
- Farmland Conversion Coordination
- List of Relevant Coordination (Agencies, Communities, Elected Officials and Select Agency Correspondence from 2002 DEIS)
- References
- List of Contributors

Attached to the printed version of the AA/EA is a CD containing the AA/EA and the supporting technical reports, which include the methods and assumptions that provided the basis for the technical analyses and findings summarized in the AA/EA.

The technical reports included on the CD are:

- Socio-Economic/Land Use Technical Report
- Natural Environmental Technical Report
- Noise and Vibration Technical Report
- Hazardous Materials Technical Memorandum
- Air Quality Technical Report
- Draft Section 4(f) Evaluation
- Detailed Definition of Alternatives Report
- Transit Capital Cost Estimation Technical Memorandum
- CCT Travel Demand Forecasting Phase I Technical Memorandum

The evaluation of the alternatives was an iterative process that included extensive coordination with public agencies, elected officials, stakeholders, and members of the public. Alternatives were evaluated for environmental impacts, engineering constraints, transportation benefits, economic development opportunities, costs, and cost-effectiveness.

The AA/EA summarizes a presentation and analysis of detailed technical data contained in the technical reports, incorporates that information by reference, and provides the information necessary to make an informed decision. A CD containing the AA/EA and the supporting technical reports is provided with both the printed version of the AA/EA and the standalone Executive Summary. The technical reports provide information about the methodologies and assumptions used to form the technical analyses and findings basis summarized in the AA/EA. In addition to technical report references, the AA/EA document includes "call-outs" to the 2002 DEIS to make cross-referencing easier between the two documents and for the various alternatives. A second CD is also provided that includes the 2002 DEIS for easier review with the AA/EA document.

This document is also an Alternatives Analysis, prepared in accordance with FTA requirements guiding the

- Indirect and Cumulative Effects (ICE) Analysis Technical Report
- Corridor Cities Transitway Operations and Maintenance Cost Estimate Report
- Corridor Cities Transitway – Operations and Maintenance Facilities Alternatives Development and Analysis – Final

A second CD is provided that also contains the I-270/US 15 Multi-Modal Study DEIS published in 2002.



www.i270multimodalstudy.com

Document Availability

This AA/EA document and its supporting technical reports, along with the 2002 DEIS and its supporting technical reports, are available for viewing and download on the project website, www.i270multimodalstudy.com.

Printed copies of the AA/EA document and supporting technical reports are available for public review through the end of the comment period at selected public libraries, the Maryland-National Capital Park and Planning Commission office in Montgomery County, the Montgomery County Upcounty Regional Services Center in Germantown, the SHA Headquarters in Baltimore, the

SHA District 3 Office in Greenbelt, the SHA District 7 Office in Frederick, the MTA Headquarters in Baltimore, and at the Rockville, Gaithersburg, and Frederick city halls. Any person with special needs, such as English language assistance or Braille, should contact either the SHA or the MTA for assistance.

Informational Contacts

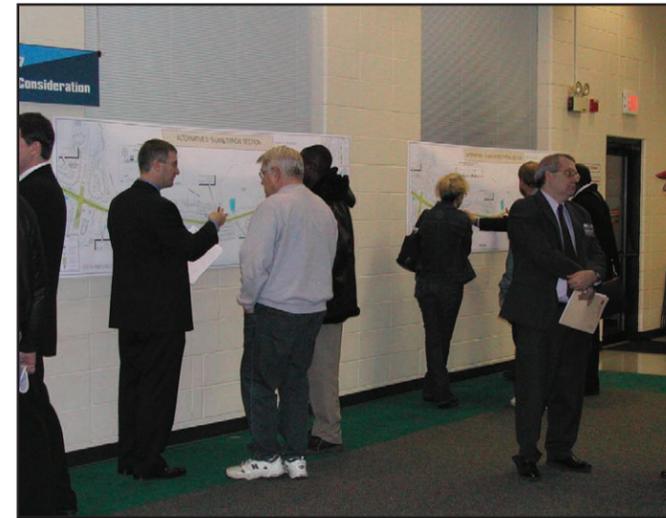
Additional information concerning this project may be obtained by contacting:

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Public Hearing

Next Steps

No sooner than 15 days after the document is made available for public review, public hearings will be held to record public and agency comments on the proposed project. These comments will be included in the project records and will be responded to in the Final Environmental Impact Statement (FEIS).

After consideration of comments received from the public and review agencies, the State of Maryland will select a Locally Preferred Alternative (LPA) in consultation with county and local jurisdiction officials and elected officials. The selection will be based on weighing the opportunities and trade-offs with respect to costs, benefits, environmental and socio-economic impacts, and affordability of the alternatives. The LPA could include project implementation phasing, along with a plan and schedule for subsequent implementation phases.

