



***U.S. 280 CORRIDOR TRANSIT STUDY
EXECUTIVE SUMMARY***



Introduction & Background

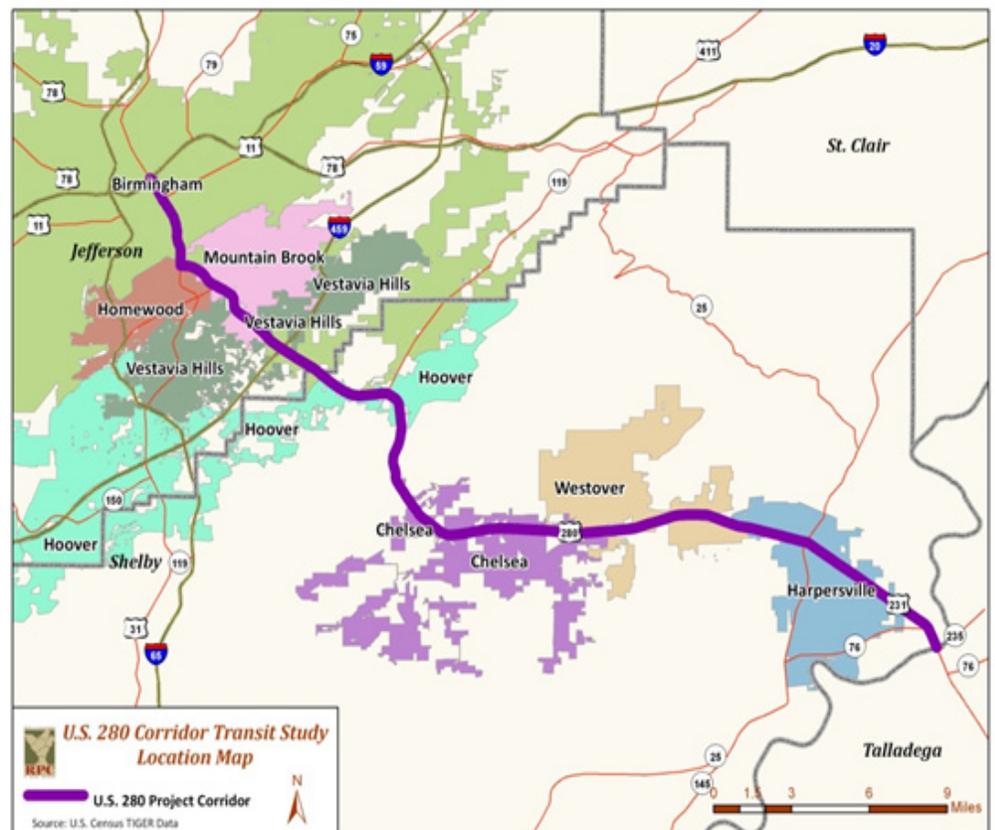
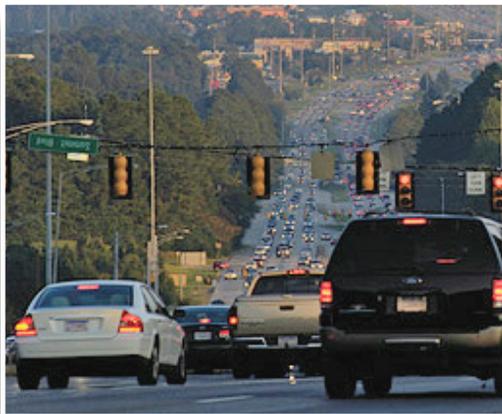
The U.S. 280 Corridor has developed rapidly over the past 20 years, and is one of the most congested roadways in the Birmingham metropolitan planning area. This study included an assessment of various public transportation and congestion management alternatives to improve mobility within the U.S. 280 Corridor in Jefferson and Shelby Counties. Additionally, the study also evaluated various policies within the jurisdictions along the corridor to improve safety and enhance non-motorized transportation options. The study incorporated numerous opportunities for local planners / engineers, decision-makers, key stakeholders and members of the general public to provide input into the development of transportation improvement and development strategy recommendations for the U.S. 280 Corridor.

The U.S. 280 Corridor Transit Study has been completed based upon the framework set forth in the Birmingham Transportation Alternatives Analysis (2004), which recommended the completion of a detailed analysis of the U.S. 280 Corridor to identify feasible transit options. This U.S. 280 study has been funded through an earmark administered by the Federal Transit Administration (FTA) through the Birmingham-Jefferson County Transit Authority (BJCTA). The Study was also completed separately from the Alabama Department of Transportation (ALDOT) Elevated Lanes Study; however, one alternative considered was comparable to the ALDOT Elevated Lanes. Additionally, ALDOT staff participated on the U.S. 280 Corridor Transit Study as members of the Study Stakeholder Committee.

U.S. 280 Corridor Study Area

For analysis purposes, the study area for the U.S. 280 Corridor Transit Study extended from I-20 / I-59 in downtown Birmingham (Jefferson County) eastward across Shelby County, terminating at the Shelby County / Talladega County line at the Coosa River. The approximately 35 mile long corridor was analyzed by dividing the corridor in four (4) distinct segments:

- Segment 1 from I-20 / I-59 and extends to E.B Stephens Highway
- Segment 2 from E.B. Stephens Highway to I-459
- Segment 3 from I-459 to S.R. 119
- Segment 4 from S.R. 119 to the Coosa River at the Shelby County line



Evaluation Methodology

The evaluation methodology for the U.S. 280 Corridor Transit Study included several phases. The first phase was the identification of the initial set of 40 alternatives and a pre-screening analysis for fatal flaws across those alternatives. The recommended alternatives from the pre-screening / fatal flaw analysis were then evaluated through a two-tiered system, culminating in the selection of the Locally Preferred Alternatives for the U.S. 280 study corridor.

The initial 40 alternatives developed for the U.S. 280 Corridor Transit Study were based upon the region's transportation policy framework and the study goals and performance measures relevant to the Purpose and Need for this study. The study goals and performance measures were developed and refined by the Stakeholder Committee at the beginning of the process. In addition to the 40 transit alternatives identified for the corridor, the "No Build" and Baseline/Transportation Systems Management (TSM) alternatives were also included.

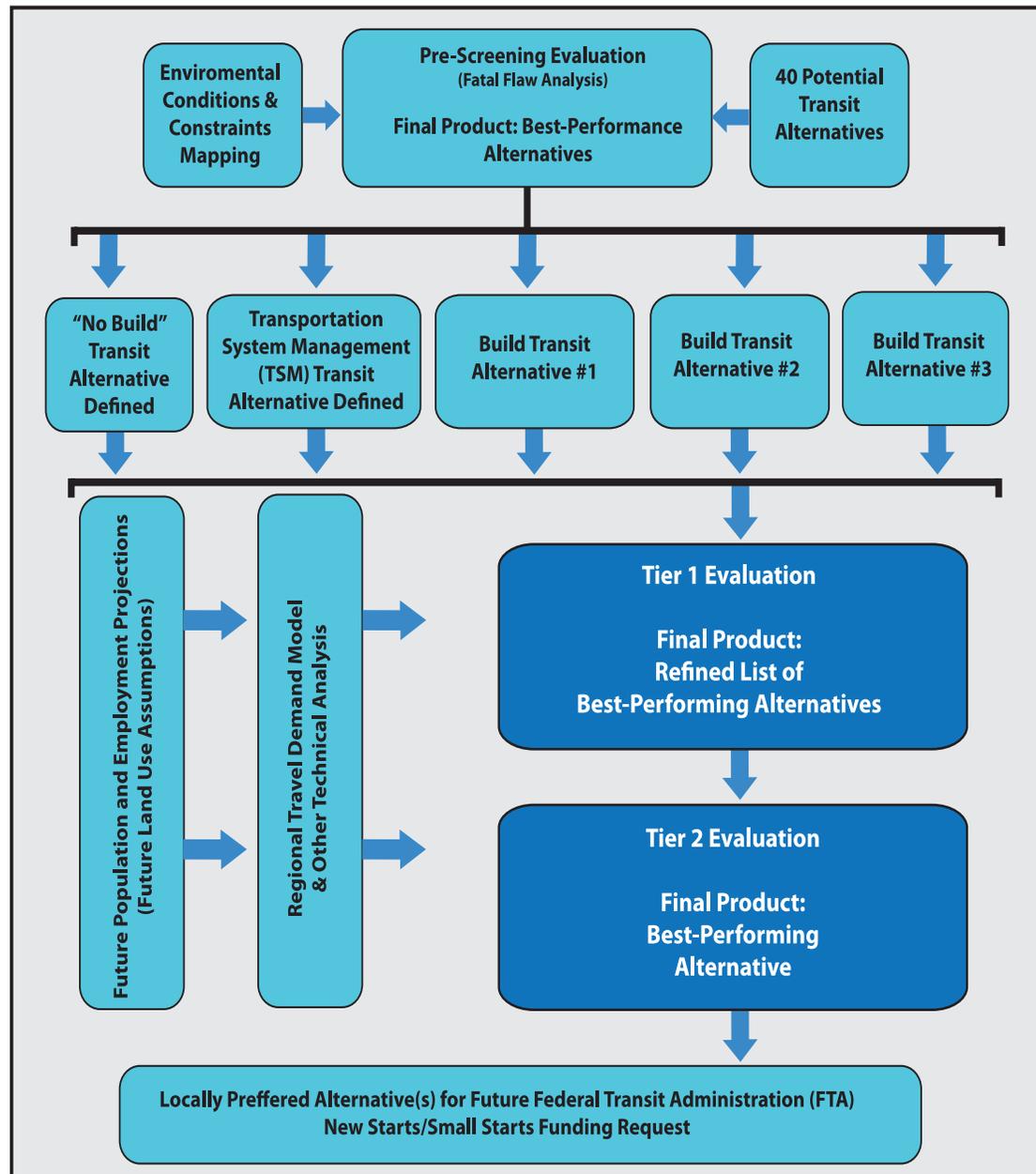
Some of the initial alternatives incorporated all or portions of proposed highway system improvement projects initiated by the Alabama Department of Transportation (ALDOT), including elevated roadway lanes in locations along the corridor. During the course of the analysis process, the ALDOT Elevated Lanes were no longer seen as a viable alternative and were removed from the list of alternatives. However, the Premium Bus with Four Grade-Separated Managed Lanes remained as an alternative and would be comparable to the ALDOT Elevated Lanes.

The 40 initial transit alternatives included combinations of the following three (3) modes along one or more of the four (4) corridor segments:

- Premium transit services (express bus service in dedicated high-occupancy vehicle lanes and in mixed traffic)
- Bus Rapid Transit (BRT) lines at-grade and on elevated structures in some locations, and
- Light Rail Transit (LRT) at-grade and on elevated structures in some locations.

A total of 15 individual criteria were used to pre-screen the various transit alternatives for U.S. 280 to eliminate the alternatives with fatal flaws. These criteria were directly related to the following:

- U.S. 280 Corridor Transit Study Purpose and Need Statement
- Generalized assessment of bus and rail transit technologies
- Environmental conditions in the U.S. 280 corridor



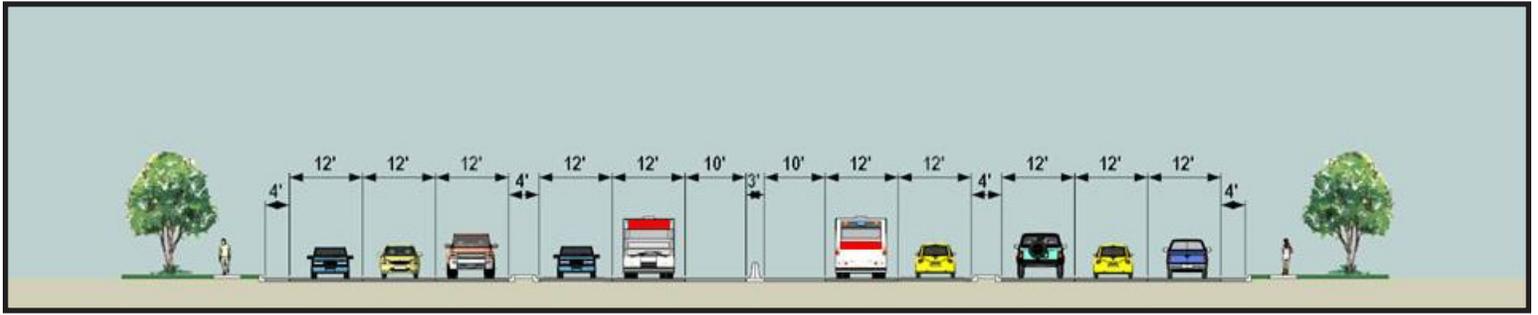
Selection of Locally Preferred Alternatives

The public comments received at the public workshop, in addition to comments received at the October 25, 2011 Stakeholder Meeting, were reviewed and incorporated into the development of the recommendation for the Locally Preferred Alternative (LPA). Based upon the small difference in Tier 2 results between the highest performing alternatives (Premium Bus with Two Managed Lanes in Each Direction and Bus Rapid Transit in Dedicated Guideway Outside the Shoulder), the recommendation was made to select both alternatives as LPAs. Stakeholder and public comments supported the dual LPA recommendation. The table below presents a summary comparison of how the two selected LPAs best meet the Need and Purpose for the U.S. 280 Transit Corridor Study.

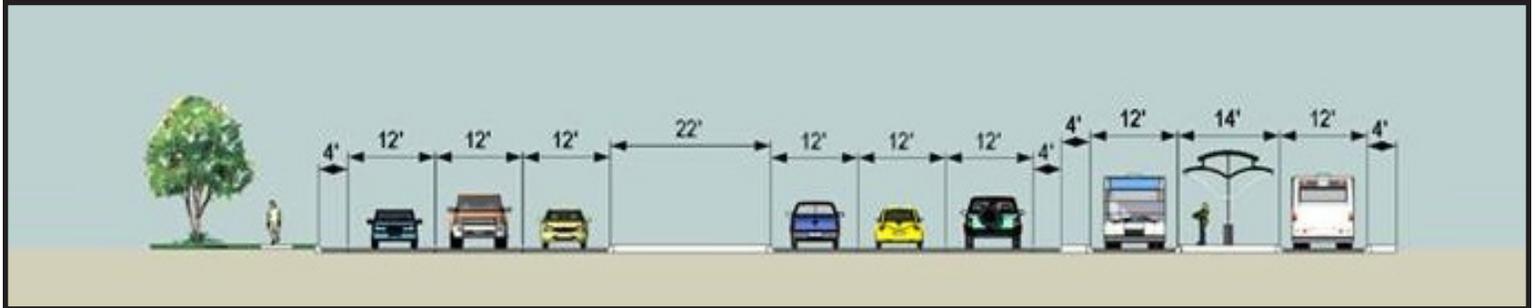
Summary of Purpose and Need Elements for Top Scoring Alternatives

Purpose and Need Element	Premium Bus with Managed Lanes	BRT in Outside Guideway	Rationale for "Best Meeting Purpose and Need" Element
<i>Efficiently serving the mobility needs of residents, workers, students, businesses, and other stakeholders in the Corridor</i>			<i>Managed Lanes Alternative has highest scores for mobility categories</i>
<i>Improving connectivity between Downtown Birmingham, key employment sites along U.S. 280, and the communities located in the Corridor to encourage economic development</i>			<i>Managed Lanes Alternative has slightly better connectivity due to direct connections to key activity centers without requiring a change of mode during trip</i>
<i>Connecting to other regional high-capacity transit services</i>			<i>Both alternatives satisfactorily meet Purpose and Need</i>
<i>Preserving the community character of the Corridor communities, while integrating residential and non-residential developments into compact, transit-oriented land use patterns in appropriate places</i>			<i>BRT Alternative best preserves community character and promotes TOD</i>
<i>Operating transit services that are financially feasible and have broad community and political support</i>			<i>BRT Alternative is most economical. Community support was split between alternatives and was not able to be determined from local jurisdictions</i>

Premium Bus Service with Two Managed Lanes



Bus Rapid Transit on a Dedicated Guideway Outside the Shoulder



For both LPAs, seven (7) transit stations were proposed, many with transit circulators to enhance accessibility to the proposed U.S. 280 Corridor transit system. The proposed U.S. 280 Transit System would connect to the planned bus rapid transit (BRT) system at Five Points. BRT was selected as the preferred alternative for Downtown Birmingham as recommended by the In-town Transit Partnership. (ITP).

Station ID	Proposed Station Location
1	Five Points Station
2	Downtown Homewood Station
3	Mountain Brook Station
4	Cahaba Village
5	Colonnade/Grandview Station
6	Cahaba River Park Station
7	SR 119 Station

The Regional Planning Commission in partnership with the University of Alabama Birmingham produced a video showing a dedicated bus lane in the median of US 280 rather than on the shoulder. The median alternative received a significant amount of public support, and the Regional Planning Commission wanted to illustrate what a dedicated bus lane could look like in the corridor. This video was developed before ALDOT shared their plans for intersection improvements in the corridor. ALDOT's intersection modifications should be considered short term improvements and will not conflict with the recommendations of this study which are part of a long term solution.



(watch the video at www.us280transitstudy.com)

Estimated Costs

Capital and operation and maintenance costs were calculated for all alternatives and used as part of the evaluation process.

Alternative	Capital Cost Estimate (2011 Dollars)
Enhanced Local Bus Service (TSM)	\$48,500,000
Premium Bus in Managed Lanes	\$414,750,385
BRT on Dedicated Guideway in Shoulder	\$173,702,321

Alternative	Estimated Annual O&M Costs
Enhanced Local Bus Service (TSM)	\$26,542,620
Premium Bus in Managed Lanes	\$15,472,080
BRT on Dedicated Guideway in Shoulder	\$15,338,700



BRT Station (Eugene, OR)



Managed Lanes (Miami, FL)

*For more information and a copy of the final report, please visit
www.us280transitstudy.com*



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