

3. Issues Affecting the Alternatives under Consideration

Since the publication of the *Northwest I-75/I-575 Corridor AA/DEIS* in May 2007, a number of events have occurred that affect selection of a preferred alternative and moving forward with the environmental review of the project. Review of the comments on the AA/DEIS identified substantial opposition to elements of the build alternatives. The national economy is now in a recession and GDOT has had to reevaluate funding opportunities for the proposed project. New transportation plans and policies have been adopted or passed that no longer support elements of the build alternatives evaluated in the AA/DEIS. In addition, ARC has updated its Travel Demand Forecasting Model from 13 to 20 counties. These issues described below are changed conditions since the AA/DEIS and affect the alternatives under consideration.

3.1 Summary of Significant DEIS Comments

At the close of the comment period for the AA/DEIS, GDOT had received over 850 individual comments from government agencies, stakeholders, and members of the public. Table 3-1 summarizes the key issues of concern that were identified from review of the comments.

3.2 Project Financial Feasibility Re-Evaluated

The following three sections discuss how changed economic conditions have caused GDOT to re-evaluate the financial feasibility of the project alternatives.

3.2.1 New Analysis of Financial Funding Opportunities

Since the publication of the AA/DEIS in May 2007, financial market conditions in the U.S. have deteriorated significantly, which has affected virtually all sources of debt and equity capital as well as the cost of capital. Some financial products have even disappeared from the market and previously active equity investors and debt lenders are no longer viable market players. Tightening credit terms are also now the norm in the market for taxable debt, primarily commercial bank loans. As such, GDOT requested Georgia Transportation Partners (GTP) to evaluate funding opportunities for the proposed project.

GTP conducted a number of financial analyses in light of the unprecedented volatility and uncertainty in the financial markets (GTP 2009). GTP evaluated a range of financial scenarios to assist GDOT in deciding on the best plan to complete project financing by May 2010. The approach, however, also is very uncertain due to the foreseeable continued volatility of the financial markets. GTP evaluated toll revenue bonds, general obligation bonds, general obligation bonds with refinancing using toll revenue bonds, a concession, and system-backed financing. This analysis concluded that the general obligation bond scenario would provide the lowest overall cost of capital and it is the only financing option that currently provides certainty in these uncertain times. And

Table 3-1. Summary of Significant AA/DEIS Comments

No.	Comment Issues
The Alternatives	
1	Georgia Motor Trucking Association as well as numerous individual regional trucking firms submitted comments in opposition to separate truck-only facilities alleging they provided negligible benefit to either truck or other general-purpose traffic using I-75.
2	TOL (truck-only lanes) or TOT (truck-only toll lanes) elements of the project were not part of the adopted RTP (ARC 2004a) or the TIP (ARC 2006) at the time of the publication of the AA/DEIS in May 2007.
3	Proposed operating plans for the bus service for either the BRT (bus rapid transit) or Reduced BRT element of the proposed project were considered unreasonable and provided exceptionally high transit service.
4	Agencies, major stakeholders, and members of the public either voiced concern that the AA/DEIS did not evaluate the HOV element of the project as a stand-alone build alternative and/or provided support for consideration of HOV or HOT lanes.
5	The proposed HOV element of the proposed project was inconsistent with the GDOT proposal for highway improvements for the 2008-2013 transportation improvement program. At the time the AA/DEIS was published, the adopted TIP (ARC 2006) called for a managed lane system with tolling for all users – essentially a combined HOT and TOT facility.
Impacts of the Alternatives	
1	The large footprint of the proposed project (including two HOV and two truck-only lanes in each direction on I-75) would result in substantial adverse effects on adjacent neighborhoods and property owners.
2	Proposed increased number of buses traveling to Metropolitan Atlanta Regional Transit Authority (MARTA) Arts Center Station as part of the BRT or Reduced BRT elements of the proposed project would cause substantial adverse effects on Midtown Atlanta.
Financial Feasibility of the Alternatives	
1	The very high cost of constructing and operating any of the proposed build alternatives was considered potentially infeasible and/or an inappropriate allocation of public funds for a single project.
2	The proposed mandatory use and required tolling of the truck-only lanes was strongly opposed by major trucking industry stakeholders.
3	The exceptionally high level of transit service proposed for the BRT and Reduced BRT elements of the project contributed to making the entire project financially infeasible long-term.

Notes:

HOV = high-occupancy vehicle

HOT = high-occupancy toll

BRT = bus rapid transit

TOL = truck-only lane

TOT = truck-only toll

TIP = transportation improvement program (ARC 2006)

due to the financial market constraints, and associated high cost of capital, a concession financing structure alternative would most likely increase the project funding shortfall. It should be noted that another detailed analysis of all possible financing scenarios will be prepared before the final decisions are made regarding the preferred alternative.

3.2.2 Congressional Balancing

Since passage of legislation in 1999, the Georgia State Transportation Board has been struggling with required balancing of State and Federal infrastructure expenditures in Georgia's congressional districts, versus applying funds where they are needed most. The legislative requirements were amended in 2000 to require that 85 percent of the expenditures be balanced. Subsequently, the requirements were further reduced to 80 percent and expenditures on interstate highways were excluded. The balancing requirement continues to complicate the planning of funding for transportation improvements.

Funding for the Northwest Corridor Project has been affected by this legislative requirement. Current planning activities associated with the update of the ARC Regional Transportation Plan indicate that funding allocations for the project have changed. The amount of funding is declining and the year of funding is delayed.

3.2.3 Decline in Available GDOT Funds

In addition to the deterioration in the national economy and strength of the debt market, GDOT's funding sources have declined. The deterioration in the housing market and declining property values has resulted in decreased property tax revenues to the State government. Personal spending and sales tax revenues to the State government also have declined due to the recession, loss of jobs, and high unemployment. As a result, GDOT's forecast availability of construction and operation funding for the Northwest Corridor Project has declined. In fact, the *GTP Feasibility Report* (GTP 2007) indicated that all of the build alternatives evaluated in the environmental document exceeded GDOT's funding capabilities. As a result, GDOT committed to move forward with the proposed project, but needed to consider lower-cost alternatives than those evaluated in the AA/DEIS.

3.3 A New Transportation Planning Framework for the Corridor

Since the publication of the AA/DEIS, a number of principles guiding transportation planning for the corridor have changed. The following sections discuss the State's new regional freight mobility plan and planning studies on the use of truck-only lanes and managed-lane systems for the Atlanta metropolitan area.

3.3.1 The New Regional Freight Mobility Plan

In late 2005, concurrent with planning studies for the Northwest Corridor Project, the Atlanta Regional Freight Task Force, ARC, and GDOT initiated activities to develop the *Atlanta Regional Freight Mobility Plan* (ARC 2008b). The goal of this planning effort was to enhance regional economic competitiveness by providing efficient, reliable, and safe freight transportation while maintaining the quality of life in the region's communities. The plan objectives were to:

- Facilitate an understanding of the importance of freight mobility to the region's economy and quality of life,
- Develop a dialogue between public decision makers and private sector freight stakeholders regarding freight needs and strategies,
- Integrate freight considerations in the public planning processes,
- Identify freight considerations in the public planning processes,
- Identify a regional freight transportation subsystem that is recognized as essential to continued regional economic growth, and
- Develop a goods movement action plan that is data driven and stakeholder informed.

The findings and results of this freight mobility planning effort were published in the *Atlanta Regional Freight Mobility Plan* (ARC 2008b). This report documented the importance of the I-75 corridor for freight traveling both north and south of the Atlanta region, the very congested traffic conditions in this corridor, and specific bottlenecks in this corridor at the I-285 and I-575 interchanges. Among a number of alternatives, the report presented analysis on the feasibility of a system of truck-only lanes in the Atlanta region to improve freight mobility. This planning effort, however, concluded that the construction of truck-only lanes would not be cost effective.

3.3.2 Changed GDOT Policies on Truck-Only Lanes

Following the publication of the AA/DEIS, GDOT completed a comprehensive study on truck lanes called the *Statewide Truck Lanes Needs Identification Study* (GDOT 2008b). This effort concluded that "the construction of a stand-alone truck-only lane network in metro Atlanta is not recommended."

This study was initiated due to the importance of commerce to Georgia and the Port of Savannah, the forecast growth in freight tonnage, and the dominant use of trucks to distribute goods. The study evaluated truck-only lanes as complementary treatments to current interstate highway facilities and key state routes. It assumed truck-only lane use would be voluntary and tolling would not be implemented.

The analysis clearly showed that truck-only lanes would provide increased mobility, reduced travel time savings, and improve reliability for trucks using the special lanes compared to continued use of highway general-purpose lanes. However, the study identified that approximately 60 percent of truck travel occurs outside of the peak travel periods in metropolitan Atlanta. GDOT traffic counts indicate trucks average 10-15 percent of traffic volumes on Atlanta interstate highways, and heavy trucks comprise only 6 percent of the Atlanta region's peak period traffic volumes. The cost-benefit analysis indicated that the benefits exceeded costs. However, the estimated cost to provide a truck-only lane system was estimated to exceed \$13 billion for benefits to a small fraction of the traveling public. Moreover, due to latent traffic demand of vehicles using area arterials, the truck-only lanes would not alleviate corridor-level congestion,

especially considering a substantial share of the truck traffic would continue to use the highway general-purpose lanes during off-peak periods.

The study concluded that truck-only lanes are not the only strategy to improve freight movement in Georgia and the State's efforts to develop a managed-lane system for metropolitan Atlanta should provide significant benefits to all traffic, including truck traffic. ARC has recently initiated a follow-up effort to develop a truck route master plan for the Atlanta region.

3.3.3 A Regional Plan for a System of Managed Lanes

Following the publication of the AA/DEIS, combined efforts on the part of the State Transportation Board and the State Road and Tollway Authority (SRTA) were initiated to determine the operational and financial feasibility of managing traffic congestion through the use of occupancy and pricing to provide viable transportation options for Georgia. This combined effort was cemented through the signing of a joint resolution by the two agencies on March 26, 2008. The rationale was that their combined efforts could potentially identify fundamentally different strategies to financing and managing highway improvements to address the severe traffic congestion in light of decreased highway funding. In the event that managed lanes are determined to be beneficial and cost-effective, the agency staff will develop governing policies for managed lanes, including occupancy and pricing; and will develop a plan for a system of managed lanes separated from the general-purpose lanes with strategic access points along the transportation corridors.

In fact, the State Transportation Board just recently adopted a resolution to guide the future development of the proposed network of congestion-priced lanes for the region. In April 2009, the Board adopted a resolution that identified vehicles types that shall have preferential use on HOT lanes, including: passenger vehicles occupied by three persons or more, all buses, motorcycles, alternative-fueled vehicles, and on-call emergency vehicles. The resolution goes on to proclaim that these vehicle types shall be allowed to use designated HOT lanes at any time without incurring a toll charge.

In addition, this past year, GDOT has been developing a Managed Lane System Plan for the Atlanta region. The purpose of this plan is to develop a system-side approach to the implementation of managed lanes that would be consistent with the ARC Managed Lane Policy and would be developed in coordinate with all of the transportation planning partners. The implementation strategy will consider revenue and funding options, constructability, demand, and impact issues. Key decisions to be reflected in the plan will include:

- Determine the occupancy of vehicles that will be allowed to use the facilities,
- Balance between maximizing revenue versus maximizing transportation efficiency,



- Decide the types of vehicles that will be able to access the managed lane system, and
- Consider converting general-purpose lanes to managed lanes.

The Georgia State Transportation Board is expected to adopt the Managed Lane System Plan in late 2009.

3.4 An Updated Travel Demand Forecasting Model

As identified in the AA/DEIS, a number of traffic design and operational issues need to be addressed using the newly adopted ARC 20-county 2008 Travel Demand Forecasting Model. Traffic analysis in the AA/DEIS used the ARC 2004 Travel Demand Forecasting Model developed for the 13-county Atlanta region.

The model, however, was in the process of being updated at the time the AA/DEIS was published because in December 2004 the US Environmental Protection Agency (EPA) designated the Atlanta metropolitan area as in non-attainment for fine particular matter (PM_{2.5}). The new non-attainment designation, however, covered a 20-county Atlanta region. As a result, the ARC initiated an effort to expand the travel demand model boundary to include the 20 counties to meet the federal requirements for performing air quality conformity analysis. As part of this effort, the mode choice model was re-evaluated in 2005 to improve the model performance for suburban intra-county trips. In addition, a new commercial vehicle and truck model was added.

The updated Travel Demand Forecasting Model was released for public use in November 2008. The project team has completed initial analysis for the Northwest Corridor Project. This analysis indicates that travel behaviors encompassing the 20-county region are somewhat different from travel behaviors reflected in the data produced by the ARC 2004 Travel Demand Forecasting Model for the 13-county Atlanta region.

3.5 Conclusions Affecting the Alternatives

Consistent with the substantive comments on the AA/DEIS and reconsideration of the financial feasibility of the alternatives evaluated in the AA/DEIS, GDOT determined that the alternatives for the proposed Northwest Corridor Project needed to be refined in response to the changed conditions. Table 3-2 summarizes the significant comments on the AA/DEIS and how these changed conditions respond to agency, stakeholder, and public concerns.

Table 3-2. Significant AA/DEIS Comments and Responses

No.	Comment Issues	Responses
The Alternatives		
1	Georgia Motor Trucking Association as well as numerous individual regional trucking firms submitted comments in opposition to separate truck-only facilities because they provided negligible benefit to either truck or other general-purpose traffic using I-75.	TOLs have been removed from the project; and trucks would not be allowed to use the managed lanes.
2	TOL or TOT elements of the project were not part of the adopted RTP (ARC 2004a) or the TIP (ARC 2006) at the time of the AA/DEIS in May 2007.	TOLs have been removed from the project; and trucks will not be allowed to use the managed lanes.
3	Proposed operating plans for the bus service for either the BRT or Reduced BRT element of the proposed project were considered unreasonable and provided exceptionally high transit service.	The BRT element has been removed from the project and no New Starts funds would be sought for the justification of transit service use.
4	Agencies, major stakeholders, and members of the public either voiced concern that the AA/DEIS did not evaluate the HOV element of the project as a stand-alone build alternative and/or provided support for consideration of HOV or HOT lanes.	Removal of TOL and the BRT element leaves the HOV or HOT element as the stand-alone alternative.
5	The proposed HOV element of the proposed project was inconsistent with the GDOT proposal for highway improvements for the 2008-2013 transportation improvement program. At the time the AA/DEIS was published, the adopted RTP (ARC 2004a) called for a managed lane system with tolling for all users – essentially a combined HOT and TOT facility.	The proposed reduced project would be consistent with STIP plans.
Impacts of the Alternatives		
1	The large footprint of the proposed project (including two HOV and two truck-only lanes in each direction on I-75) would result in substantial adverse effects on adjacent neighborhoods and property owners.	The proposed reduced project would reduce right-of-way and property impacts to adjacent property owners.
2	Proposed increased number of buses traveling to Metropolitan Atlanta Regional Transit Authority (MARTA) Arts Center Station as part of the BRT or Reduced BRT elements of the proposed project would cause substantial adverse effects on Midtown Atlanta.	The BRT element has been removed; managed lanes would permit the use of express busses but would not increase the number of busses traveling to MARTA stations and/or using Midtown Atlanta streets over the No-Build Alternative.

Table 3-2. Significant AA/DEIS Comments and Responses (continued)

No.	Comment Issues	Responses
Financial Feasibility of the Alternatives		
1	The very high cost of constructing and operating any of the proposed build alternatives was considered potentially infeasible and/or an inappropriate allocation of public funds for a single project.	The proposed reduced project will have substantially lower project costs and includes a plan to address financial feasibility.
2	The proposed mandatory use and required tolling of the truck-only lanes was strongly opposed by major trucking industry stakeholders.	TOLs have been removed from the project; and trucks would not be required nor allowed to use the managed lanes.
3	The exceptionally high level of transit service proposed for the BRT and Reduced BRT elements of the project contributed to making the entire project financially infeasible long-term.	The BRT element has been removed from the project and no New Starts funds will be sought for the justification of transit service use.

Notes:

HOV = high-occupancy vehicle

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TOL = truck-only lane

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RTP = regional transportation plan (ARC 2004a)

In conclusion, elements of the alternatives evaluated in the AA/DEIS were eliminated from further consideration. First, the truck-only lane element, included in all four of the build alternatives considered in the AA/DEIS, was eliminated from further consideration due to lack of public support and changes in GDOT approaches to freight mobility in the Atlanta region. Second, the BRT element of two alternatives evaluated in the AA/DEIS was eliminated from further consideration due to lack of public support, concern about meeting the New Starts cost-effectiveness criteria, increasing competition for federal funding, and a lack of local funding to complete even the Reduced-BRT element of the project. Without the BRT transit component of the alternatives, there was no longer a need for GDOT to continue to evaluate the TSM transit element of the project.

Moreover, continued GDOT consideration of the HOV element included in all four of the build alternatives evaluated in the AA/DEIS needed to be consistent with newly adopted GDOT policies on managed lanes. The selection of the best managed-lane concept also needs to demonstrate its superior transportation effectiveness considering anticipated financial constraints.