

## Memorandum

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TO: Ryland Mc Clendon, Jayne Hayse, and Crew Heimer

FROM: Transit Planning Board (TPB) staff

DATE: July 05, 2007

SUBJECT: **TPB Comments on the I-75/575 HOV/BRT DEIS**

The TPB staff has reviewed the DEIS and we would like to share our comments with our planning partners. Our review of the document was strictly technical and to get technical input to the incorporation of this project in our effort to identify the projects in regional transit network.

### **Comments by page number:**

#### **Pg. 2-15: Table 2**

Presents the 11 transit alternatives initially studied. Two of the LRT alignments began at North Avenue Station with other beginning at Arts Center. All other alternatives began at Arts Center except Commuter Rail which began at Five Points and the Heavy Rail which began at Bankhead Station. Alternatives were refined to three – an Express Bus HOV (Alt A) paralleling I-75 to Arts Center Station, an LRT from North Avenue, along Northside Drive, I-285/I-75 to North Marietta Parkway (Alt B) and BRT/HOV (Alt C) from Arts Center and then along Northside Drive, I-285, I-75 to North Marietta Blvd.

The LRT alternatives were eliminated because of public feedback and potential environmental impacts, particularly along the I-75 corridor. Alternative 8 – the heavy rail alignment, only had cost associated with its elimination.

Alternative A was selected as the LPA using the HOV lanes south of I-285. Alternative B (LRT) was determined to be the least cost-effective.

*Comments and questions: Since the LPA uses the I-75 corridor south of I-285, why were these alternatives eliminated? Is a cost-only elimination of the heavy rail alternative consistent with CEQ/NEPA guidelines? None of the initial eliminations stated a technical fatal flaw, but public opposition in the corridor where the LPA was eventually located and potential impact on undefined historical resources. Won't the LPA have the same potential impacts on the historic resources? Additionally, Alternative B had a different ending point than Alternatives A and C. Therefore, is it truly an alternative comparison since Alternative B was also the only LRT alternative? Perhaps it would be good to support this discussion of the elimination of the alternatives by incorporating by reference the detailed document(s) that contain the detailed assessment and supporting analysis.*

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### **Pg. 2-59 – Operations**

Operation of the Build HOV/TOL/BRT anticipates in the peak period 39 trips / hour / direction to Arts Center, 12 trips / hour/ direction to Civic Center and West Peachtree Street, 12 trips / hour / direction to downtown Atlanta, and 10 trips / hour / direction to Perimeter Center. This means that between Cumberland Boulevard and the 17<sup>th</sup> Street in Atlanta, the HOV/TOL/BRT alternative anticipates 63 trips / hour / direction in a shared, non-barrier separated HOV lane. Additionally, this section states that local bus frequency not on the BRT system would operate at 10 to 30 minute peak and 30-60 minute off-peak headways.

*Comments and questions: 63 buses / hour / direction is more than a bus per minute. Since there are no route segments in the Atlanta region where buses or rail operates at less than 5 minute headways, we are concerned about the reasonableness of this operating plan. Operating expenses are one of the major funding issues in this region. Operating this many buses would raise annual operational costs. Could this service be operated more efficiently with a different type of operational plan? We also wonder if 30 minute off peak frequencies for all local routes is acceptable. Isn't a more robust local bus service needed to support this investment? Local bus service is likely have shorter route lengths than the proposed BRT routes, with off-peak frequency on major routes greater than two buses an hour.*

### **Pg. 2-60 – Transit stations**

Five BRT stations are proposed at Cumberland, Terrill Mill, Franklin Road, Marietta, and Town Center. Cumberland, Terrill Mill, and Marietta would be elevated stations located in the center of the I-75 ROW while Franklin Road and Town Center would be located offline. The Town Center location is immediately adjacent to the existing Busbee P&R between the existing P&R and I-75. Pedestrian bridges would connect the stations within the freeway ROW to the station parking garages located off the freeway. The number of buses would require significant improvements to the Arts Center station.

*Comments and questions: The proposed Terrill Mill pedestrian bridge has patrons crossing over 11 lanes of traffic including several shoulders meaning that the distance to be crossed is likely to be similar to crossing over the downtown connector. The pedestrian bridges between the parking garages and the proposed Marietta and Cumberland stations are longer. These are significant structures. Are these types of pedestrian bridges reasonable from the standpoint of all pedestrians being able to walk that far and are they financially feasible? Transit stations within freeway medians are generally not considered desirable.<sup>1</sup> Some examples of similar station types would be useful in supporting these station designs as reasonable, not from an engineering point of view, but from a transit customer's point of view.*

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<sup>1</sup> Caltrans automatically ranks stations located within freeway medians a “2” out of possible “4” in its “California Transit Oriented Development Database” <http://transitorienteddevelopment.dot.ca.gov/station/stateViewStationDesignRatings.jsp?stationId=9> Last Accessed: May 14, 2007).

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### **Pg. 2-62 – Transit Fleet Improvements**

The HOV/TOL/BRT build alternative would require an additional 80 vehicles for local service and 157 vehicles for BRT service. The 80 local vehicles would be typically 40-45 foot buses while the BRT services would include 92 45-commuter buses (a la MCI Coaches) and 65 60-foot articulated buses. This means the total fleet for operation of the local and express buses under the HOV/TOL/BRT system would be 237 vehicles. In 2005, CCT had 73 vehicles available for maximum service. The report also states that while there may be an increase in the number of cars per train on MARTA rail services due to increases in transfers at Arts Center, that since MARTA has a surplus of cars at this time, no expansion of the fleet is required.

### **Pg. 2-69: Section 2.6.1**

“All Transit services and facilities under the build alternative are assumed to be maintained and operated by CCT.” Table 2-8 on Page 2-71 states the No-Build Annual operational costs (in constant 2006 dollars) for CCT will be \$27,703,803 with the build alternative of HOV/TOL/BRT being \$55,291,938 and the HOV/TOL/reduced BRT being \$47,018,433. This means CCT’s operating costs is anticipated to increase by at least \$20 million annually. CCT’s annual operating expenses reported to the NTD in 2005 were \$13,172,107. The build conditions assume an increase in CCT annual operating expenses in constant dollars of between 250% and 290%.

*Comments and questions: Given that the bulk of CCT’s operating funding is completely based upon general funds from the county and passenger fares, is this a reasonable assumption? Since this is being proposed as a regional project and a major focus for the region, is it acceptable to force the entire operational cost upon one county?*

### **Pg. 4-43**

This section presents the total operations plan and states that there would be 34 buses / hour / direction to Arts Center, 14 buses / hour / direction to downtown Atlanta, and 12 buses / hour / direction to Civic Center for the HOV/TOL/BRT alternative. Additionally, there would be 68 buses / hour / direction to the Cumberland station which would be these busiest station on the system and it is implied that this 68 buses / hour / direction includes the 10 buses / hour to Perimeter Center, but adding these together (34+14+12+10) equals 70 buses / hour / direction to Cumberland.

*Comment: These numbers need to be reconciled and consistent with the information presented on pg. 2-59.*

### **Pg. 4-46 - Section 4.4.3**

Transit Reliability and Safety states that the service would be more reliable in the build alternative because of its location within the tolled HOV/HOT lanes on I-75 and would not be subject to the disruptions on the general purpose lanes.

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*Comment: This appears to be in conflict with the fact that the highest bus volumes are between Akers Mill Road and 17<sup>th</sup> Street where the HOV lane is not barrier separated and would be subject to any disruptions in the General Purpose lanes. Thus there is a potential for service reliability to be disrupted.*

### **Section 4.4.4 – Transit Ridership**

No-Build transit ridership is estimated at 46,500 for CCT with 5,700 riders transferring daily, mostly to MARTA rail services. Under the HOV/TOL/BRT Alternative ridership is estimated at 63,900 daily riders, with 64,100 for Reduced BRT, and 63,900 for TSM.

Table 4-27 presents the 2030 Daily Ridership Boardings per Revenue Mile. The HOV/TOL/BRT has a ridership per revenue mile of 1.597 compared with 2.244 for the No-Build alternative and 2.272 for the HOV/TOL alternative, the highest DRB/RM.

*Comment: This table presents the HOV/TOL alternative as the most efficient choice, even though the No-Build and HOV/TOL alternatives have the lowest and second lowest ridership projections respectively of 46,466 and 47,014 daily riders, respectively.*

### **Pg. 4-55**

The transit service levels are again presented as 34 buses / hour / direction to Arts Center, 12 buses / hour / direction to Civic Center, and 14 buses / hour / direction to downtown Atlanta. This section also indicates that the 15<sup>th</sup> Street bridge is required for the HOV/TOL/BRT alternative to function adequately at Arts Center. Additionally, the last sentence on the fifth paragraph reads “For example, buses stopping every cycle of the traffic signal would not allow time for the intersection to recover. On the other hand, buses stopping every other or every third cycle does provide some time for recovery.” This quote is referring to the location of bus stops and their potential for impact on traffic operations on the surface streets within downtown and Midtown.

*Comment: Again, the volume numbers in Chapter 4 need to be reconciled with the volume numbers in Chapter 2. While there is recognition that the location of the bus stops can impair traffic operation, there is no mention of whether these proposed bus volumes, along with the already existing service from GRTA and GCT will create conditions where there is a bus or more stopping every cycle. Signals on major arteries, particularly such as West Peachtree Street tend to have cycle lengths of 90-120 seconds and the proposed bus volumes to Arts Center Station therefore would create conditions of a bus every cycle.*

### **Pg. 4-56**

Figure 4-10 presents the 2030 Bus Volumes in Midtown and downtown Atlanta. The figure actually shows the change in Peak Hour Bus Volumes between the No-Build and HOV/TOL/BRT Alternative.

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*Comment: The figure is mis-labeled and should be called “2030 Change in Bus Volumes in Midtown and downtown Atlanta – No-Build vs. HOV/TOL/BRT Alternative.” A figure showing the bus volumes would include all the proposed buses from the GRTA Xpress program, Gwinnett County express buses and MARTA buses, at least the existing service levels.*

### Section 7.2.4.1 – Capital and Operating and Maintenance Costs - Pg. 7-23

This section presents the costs for the various alternatives. They are presented, in year of expenditure dollars, as:

- HOV/TOL Alternative: \$3.52 billion
- HOV/TOL/TSM Alternative: \$3.92 billion
- HOV/TOL/BRT Alternative: \$4.07 billion
- HOV/TOL/Reduced BRT Alternative: \$3.80 billion

As for annual Operating and Maintenance costs over the No-Build Alternative are:

- HOV/TOL Alternative: \$158,000
- HOV/TOL/TSM Alternative: \$27.57 million
- HOV/TOL/BRT Alternative: \$27.59 million
- HOV/TOL/Reduced BRT Alternative: \$19.32 million

*Comment: The BRT Alternative is \$550 million above the HOV/TOL alternative. Given the level of transit service being provided and the transit components of the project, this level of capital expenditures seems disproportional. Since there is the assumption that all operating costs will be borne by CCT and our greatest regional funding issue is operating funds, it seems predetermined that the alternative that will be implemented is the HOV/TOL Alternative.*

### Section 7.2.5.2 – Financial Feasibility - Pg. 7-24

It states in the third paragraph of this section that “The local share of project capital funds will be provided primarily by the State of Georgia and GDOT. . . . Capital funding for the BRT elements are anticipated to be shared between the FTA and GDOT.” Additionally, in the fourth paragraph, “current assumptions [are] that the FTA New Starts Program will fund 50% of the capital costs of the proposed BRT elements.”

*Comment: At a minimum of 50% match and with the full BRT elements costing \$550 million, this would represent GDOT spending \$225 million in local match for this project. This represents a significant increase in state investment in regional transit in the Atlanta region based upon a state contribution of over \$17 million in capital funding to transit projects between 1996 and 2005 according to the NTD.*

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States that project operating costs and revenues are dependent upon the update of the regional transportation model currently underway and therefore the operating costs and revenues can not be estimated with certainty at this time. Additionally, the project is noted as proceeding as a Public-Private Initiative with the Georgia Transportation Partners group, but in the final paragraph of this section indicates that this project and financial plan are based upon a design-build approach.

***Comments and questions: If the project operating costs and revenues can not be estimated with certainty at this time, how can we estimate operating costs to CCT in this document? Is this project is a design-build project or a public-private initiative? Design-build indicates a project delivery process, but indicates no level of private investment. Are the Georgia Transportation Partners a private investment partner or a contractor to GDOT?***

### **Section 7.2.5.3 – Cost Effectiveness**

The last paragraph states “Therefore, considering that FTA has not approved the baseline transit alternative, the cost effectiveness of the project alternatives cannot be estimated with certainty at this time.”

***Comment: If this is the case, release of this DEIS would appear premature and this project should not be applying for FTA New Starts funding since an approved baseline alternative is required by FTA for projects applying for these funds.***

### **Section 7.6.2 – Transit Issues - Pg. 7-36.**

This section records several issues that need to be addressed during the PE/FEIS phase including an expansion of the MARTA Arts Center Station involving the addition of bus bays at the ground level of the station. It is indicated that this improvement may not be needed if there are unused bus bays at the Arts Center station.

***Comment: The availability of unused bus bays at the MARTA Arts Center Station should be confirmed with MARTA. A letter of support from MARTA regarding expansion of the bus bays would be helpful in creating support for this conclusion.***

### **Overall Comments**

The documentation of the operating plan between Chapters 2 and 4 should be consistent. Chapter 4 has an operating plan with 34 buses / hour / direction to Arts Center Station and 14 buses / hour / direction to downtown Atlanta from Cumberland, while Chapter 2 has 39 buses / hour / direction to Arts Center and 12 buses / hour / direction to downtown Atlanta from Cumberland. Is Chapter 4 the final desired operating plan? If so the numbers need to be changed in Chapter 2.

On a larger view there are several major issues that still need to be addressed by this document, among them:

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- The assumption that Cobb Community Transit (CCT) will be responsible for the operation and maintenance of the proposed transit services would be stronger if it were documented with a letter of support from CCT and Cobb County. Additionally, the Section 7.5.2.2 – Financial Feasibility states the operating costs are not estimated with certainty additionally raises some concerns. Finally, there is no estimation of the additional paratransit operating cost or vehicles that will be required for CCT to provide new paratransit services along such segments as Lower Roswell Road (Route 104M), S. Cobb Drive (Route 20), and Canton Road (105P).
- According to the operation plan in chapter 4, there are 60 buses / hour / direction between Akers Mill Road and Northside Drive along the shared, non-barrier separate HOV lane along I-75 representing a headway of a bus / minute. This is a significant increase in bus services for this region and could present some significant operational challenges, such as travel time reliability particularly since the segment along which the highest volume of buses is running is a non-barrier separated facility.
- Transit operations in the Atlanta region are constrained by the availability of operating funds. Therefore, the elimination of all rail alternatives, which could have presented some operational efficiencies by allowing fewer vehicles, and therefore fewer vehicle miles traveled, raises some potential questions. Particularly since the one rail alternative that was in the final three alternatives analyzed in the AA had a different terminal point (North Avenue station) than the bus based alternatives (Arts Center Station). With the entire project cost escalating to the amount of \$4 billion, the elimination of Alternative 8 – Heavy Rail from Bankhead Station, simply on cost alone does not seem like a reasonable conclusion.
- Finally, the presentation of efficiencies in terms of passengers seems to presuppose the HOV/TOL alternative, based upon the lower operating costs of the HOV/TOL alternative.