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2010

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September 7, 2010

Mr. Steve Heminger
Executive Director
Metropolitan Transportation Commission
101 8th Street
Oakland, California 94607

Dear Mr. Heminger:

As are aware, TransForm has commissioned a "new analysis" of the Oakland Airport Connector (OAC) Project titled, "The Oakland Airport Connector Options Analysis Report" dated August 2010, which was prepared by Kittelson & Associates, Inc. BART staff have reviewed the report's findings and prepared a response, which I am transmitting to you today in hopes that you and your Commission members will find the time to review our analysis.

In summary, without any new preliminary engineering studies, bus route drawings, and incorrect information about the OAC station placement, the Transform Report concludes that the Rapid Bus option is a better alternative for this region. The report neglects the customer in its analysis. The automated guideway system used for OAC is what customers have told us that they want (a reliable service with trains every 4.5 minutes to OAK and 99% on time performance). The OAC Project has been studied extensively over the years, including significant work to compare the Automated Guideway System that BART favors versus a Rapid Bus option.

Thank you for your consideration, interest and commitment to this project over the years. Please do not hesitate to call me if you have questions or comments at (510) 464-6060.

Sincerely,

Dorothy W. Dugger
General Manager

The 2010 Transform Report

BRT and Full BRT Options

The Oakland Airport Connector Options Analysis Report dated August 2010, concludes on page 5 of the Executive Summary, "The overall best option, based upon **comparison criteria**, is **Full BRT**". The Comparison Criteria Matrix is attached to the Executive Summary. The first column of the Comparison Criteria Matrix labeled "Original Criteria" is a copy of Table 1.3-2 which was developed as the BART-Oakland Airport Connector Evaluation Criteria. With no preliminary engineering, bus route drawings or detailed unbiased discussion to address many of the items, the report arrives at a conclusion for all 18 of the Criteria.

On page 14 of Section 2, the Project Overview explains **"This analysis has been conducted at a planning level, sufficient to allow a fair comparison to be made of four options, including the determination of feasibility and order of magnitude costs of each option. However, it is not intended to substitute for a full preliminary engineering assessment of the Rapid Bus and Full BRT Options."** BART agrees the report does not include any preliminary engineering for Rapid Bus and Full BART Options to support its conclusions. For instance, a continuous map of Hegenberger Road or Airport Roadways is needed to show the bus routes to support statements that indicate the **Rapid Bus** can be implemented by simply restriping Hegenberger Avenue and **Full BRT** exclusive bus lanes can be provided with no widening of Hegenberger Avenue. Three low resolution aerial photographs of intersections for three miles of the bus route are included, not nearly enough to determine feasibility or provide a fair comparison to AGT and Quality Bus options that have undergone a two year full FEIR/EIS evaluation and detailed preliminary engineering. For the AGT option, BART has completed the procurement, selected a technology and obtained Board approval to Award. The OAC contract award not only includes a fixed construction price but also 20 years of operations and maintenance costs and a guarantee of performance, far beyond the order of magnitude and planning level that **BRT** and **Full BRT** options were studied in this new three month planning study.

The capital cost estimates for the **Rapid Bus** and **Full BRT** are based on sketch planning techniques using standardized unit costs factors which may or may not apply to the actual situation. It is very common for cost estimates developed in this way to be very low as there are many factors which have not been addressed. Examples include impacts on utilities, right-of-way requirements, impacts during construction and project constructability. The contingency amount included in the estimates should have been much higher to account for these and other design uncertainties. Also, it is not clear whether the normal "soft costs" such as project management, engineering design and construction oversight have been included. These costs cost be as much as 35% of the total construction cost. The same concern applies to the operating cost estimates.

Like Transform's 2009 Rapid BART Report this new 2010 Report recommends a **Rapid Bus** (instead of **Rapid BART**) that travels down the outer lanes of Hegenberger Road and includes queue jumps which allows vehicles in right turning lanes to clear out of the way so the bus can get through the intersection first. As BART showed in 2009, Rapid Bus is effectively another version of the preferential signal treatment proposed by BART for the Quality Bus in the FEIR.

The 2010 Report does conclude that **Rapid Bus** will not meet Evaluation Criteria item 2, which has on-time performance equal to BART. The report shows that the **Rapid Bus** schedule will vary up to 8 minutes due to its inability to reliably get by traffic and Coliseum events. To provide the reliability that the traveling public demands in order to meet this criteria, **Full BRT** is proposed. The report explains **Full BRT** will improve schedule reliability to within 4 minutes but exclusive lanes for the buses are needed on Hegenberger Road as well as a 4 lane bridge over Coliseum Way.

Exclusive bus lanes can be gained by either taking away existing lanes and designating them for buses only or widening the roadway. Taking existing lanes from the general traveling public will cause additional congestion and capacity reduction in the remaining lanes and/or a loss of parking. **Moreover, the City has previously objected to any bus proposal that would reduce the number of traffic lanes or displace parking on Hegenberger.** Building exclusive bus lanes in the Hegenberger Corridor can only be done by purchasing additional right-of-way and widening the I-880 overcrossing. BART also studied Transform's version of Full BRT as an option but with a very different conclusion. The FEIR found that taking the necessary right of way and widening the I-880 overcrossing will be more expensive than (and very impactful to adjoining business) the Automated Guideway Alternative (AGT).

The level of evaluation done to support the conclusion that **Full BRT** is not only feasible but also the best alternative is questionable. The report says exclusive bus lanes and intermediate bus stations located in the middle of Hegenberger Road can be provided by simply utilizing the existing median area and restriping the lanes on Hegenberger. Not mentioned in the report but shown on Appendix A (see Table 2) is that the exclusive bus lanes are obtained by converting existing traffic lanes on Hegenberger Road to exclusive bus lanes. Traffic projections are revised to reflect current weak economic conditions so as not to show that intersections will degrade to unacceptable levels in the future. **With a wide range of differing interests in the corridor including: Coliseum business owners, Caltrans, the Coliseum Authority, the City of Oakland and the Port of Oakland, it is highly unlikely that exclusive lanes gained through the removal of existing traffic lanes will be acceptable.**

Equally questionable, is the feasibility of a ramp up the middle of Hegenberger Road leading to a bridge over Coliseum Way. The ramp/bridge is necessary to get by thousands of vehicles coming to and leaving from over 200 special events annually (baseball, football, basketball, concerts etc) at the Coliseum Complex so through traffic can bypass the Coliseum Way intersection (See Appendix B – Conceptual Street Cross-Sections). A four lane concrete bridge standing about 22 to 25 feet tall would be about 1500 - 2000 feet long (about 3 to 4 times longer than the diagram shows). Even if the City of Oakland, the Coliseum Authority, the business and property owners impacted on either side of this ramp were to support this concept, the fact that the I-880 freeway and NB on-ramps to I-880 are just a few hundred feet west of Coliseum Way, makes the ramp infeasible.

Essentially, the report ignores the physical, political and business interests of the corridor in arriving at its conclusions. Even a planning level study should have concluded the **Full BRT** as described by Transform is infeasible because converting traffic lanes to exclusive bus lanes and

building a 4 lane bridge in the middle of Hegenberger Road would be very impactful and very likely unacceptable to the City, Caltrans, Port of Oakland and Coliseum Authority.

Traffic Congestion

The Transform Report uses traffic counts conducted in 2010 to estimate traffic volumes and the traffic impacts of the proposed traffic lane changes required for both the Rapid Bus and Full BRT options. Current conditions are highly unusual. Air passenger demand is at its lowest point in over 10 ten years. The improvements made in the 98th Street corridor and the airport terminal areas coupled with the low demand numbers of today provide a very positive picture. However, it important to consider that the long-term forecasts in the EIS/EIR showed that six traffic lanes were needed on Hegenberger Road. When air passenger volumes return to their former levels, the performance of buses operating in mixed traffic will deteriorate. Taking lanes away from general traffic to expedite the buses will result in higher levels of congestion in the regular traffic lanes. This congestion will impact the operation of the buses as the delays for all traffic at major intersections increase. The Transform study also discounts the impact of traffic delays in the airport terminal area. However, terminal area congestion does occur even today under the current low demand conditions. During peak travel periods, surges of air travelers arriving and departing can create congestion and delays on the terminal roadway system.

Unless the buses can be fully separated from traffic there will always be delays and issues of reliability due to congestion, accidents, construction, and other factors such as the events at the Coliseum sports facilities.

Ridership Projections for Rapid Bus and Full BRT Ridership Forecasts

The techniques cited in the Transform Report for ridership estimations are drawn from the *BRT Practitioner's Guide* and the *Traveler Response to Transportation System Changes* series of reports. The information from these reports applies to convention bus and BRT operations and was not intended to be used for a specialized airport connector service. The ridership forecasting techniques which were used in the OAC EIS/EIR and subsequent ridership updates involve the use of models which were calibrated specifically to reflect the travel preferences and characteristics of persons traveling to and from an airport. These models were based on the actual behavior of air passengers. The direct trip to the airport involves different considerations than a typical transit trip. User reactions to changes in fares, travel times, and travel reliability are different than those associated with normal travel, such as the daily commute, school or shopping trips. The result is that the comparison of the AGT system ridership, which was derived using these specialized models, with the forecasts for Rapid Bus and AGT in the Transform Report is invalid.

The AGT Airport Station Location

Transform has stated that the OAC Airport Station location drops passengers off "in the middle of the Airport parking lot". The Airport central parking lot is approximately 1400 feet wide making the average person who drives and parks walk about 700 feet. Other lots are much further away so a bus circulator system is provided. In fact the OAC the guideway spans over

the entire parking lot and places the OAC Airport Station patrons at the sidewalk under a covered walkway closest to Airport Roadways 5th curb, eliminating any walk across the parking lot. There remains a 440 foot walk from the center of the Airport Station Platform to across the signal controlled and covered pedestrian walkway to the Airport terminal door (average 1 minute 40 second walk). The attached plan sheet provides an illustrative view of the station location. Should the funds become available, the station will allow for a future pedestrian overcrossing of the Airport Roadways.

Jobs

The 2010 Report does not attempt to be impartial or even particularly accurate. When faced with a jobs analysis that includes both permanent and construction jobs, Transform's report leaves out the construction jobs that will be generated under each alternative by stating on page 54, ***"BART is currently estimating jobs for the AGT option on a much finer level. Providing an analysis using the macro level estimation methodology would not provide additional insight into the options, and has been excluded from this analysis."***

The construction jobs provided by the AGT option would be greater in number and more immediate than the construction jobs under the bus options. This omission is a clear indication of bias since it is an obvious area where the bus options will not compare well to AGT. Jobs are the big issue in Oakland today and Transform has been and continues to actively work to kill thousands jobs that are promised to the community, thus hurting the very communities and constituencies they purport to advocate on behalf of.

Picking up the analysis where the Transform Report leaves off, assuming 1 job-year is created for every $92,000 of government spending (per President's Council of Economic Advisors simple rule), and assuming the report's estimate of Construction Costs, the job-years created under each option would be:

AirBART: none
Rapid Bus: 224 ($20.6 million initial capital cost)
Full BRT: 1,365 ($125.6 million initial capital cost)
AGT: 4,989 ($459.0 million initial capital cost – actual project cost is $484M)

On Cost Evaluation Factors

The Cost Comparison Matrix uses an FTA analysis to determine that the cost of the project per new incremental rider is a staggering $102 per new rider, which is far from accurate. But to put this analysis into its proper context, the cost per incremental riders is one of six criteria the FTA uses to evaluate Projects competing for New Starts funding. OAC is not competing for New Starts Funding and so this analysis does not apply.

The index used also favors those projects with low capital and operating costs (such as improvements to existing bus lines and BRT Projects); FTA has recognized this bias and the unintended consequences of putting focus on this criteria. As a result, since January 2010, **Secretary LaHood reduced the focus on the cost-effectiveness criterion (since 2005, it had been "targeted" for evaluation) because it had a limiting effect on FTA's ability to evaluate**

a broad array of factors for funding. FTA has reduced the emphasis on this criterion and is undergoing a new rule-making process to see how this and other factors can be evaluated more fairly and in such a way as to incorporate livability and sustainability factors into the evaluation.

Still, when actually evaluating the validity of the cost evaluation factors, the Transform Report incorrectly double-counts the capital cost of the project and uses their own drastically reduced ridership figures to calculate an artificially high cost per incremental rider for the AGT option. The following adjustments were made to the $6 AGT option:

- Using Wilbur Smith Associates (WSA) $6 medium ridership forecast (which is tracking closer to current Airport usage)
- Taking out debt service from the AGT's operating costs eliminates the double counting of these costs
- Using the Project's annualized capital cost of $33 million
- Including of 100% of incremental BART system revenues (The report only counts 25%)

Incremental Cost per Incremental Rider Adjust from $102.74 to ~$42. This ratio uses an average 2013 and 2030 high ridership forecast for the revenues and a 2030 high ridership forecast for the denominator. Alternatively, if one assumes a $6 WSA medium forecast for the numerator and denominator, the cost drops to ~$38.

Operating Cost per Rider would drop from $16.01 to ~$8.00. This ratio used a 2013 ridership forecast. Because the WSA forecast assumes a 3 year ridership ramp up period, if 2016 ridership forecast is applied, this drops further to ~$5.60.

Fare Revenue and Net Operating Subsidy per Rider from $9.85 to ~$1.34. This ratio used a 2013 ridership forecast. Because the WSA forecast assumes a 3 year ridership ramp up period, if the 2016 ridership forecast is applied, this drops further to ~$0.94.