October 21, 2003

To: Judge Frederick P. Horn / Orange County Grand Jury

From: Jennifer Emi

Subject: OCTA Report Response to the Grand Jury Report, 'CenterLine Redux'

Enclosed, please find a copy of the Orange County Transportation Authority's response to the Grand Jury's report, 'CenterLine Redux'.

Should you have any questions, please contact me at (714) 560-5725. Thank you for your understanding.
September 29, 2003

Orange County Grand Jury
700 Civic Center Drive
Santa Ana, CA  92701

Dear Orange County Grand Jurors:

Thank you for reviewing the Orange County Transportation Authority’s (OCTA) CenterLine light-rail project in your recent “CenterLine Redux” report. We appreciate the observations you shared and the suggestions you offered. The report has been incorporated into the public record and will further assist us in designing and constructing the best light-rail system possible for Orange County.

We know with certainty that Orange County is a growing urban area with more than 3.0 million residents and is predicted to grow by an additional 600,000 new residents and 450,000 new jobs by 2025. To respond to this growth, OCTA is providing a variety of transportation solutions designed to improve and preserve mobility in Orange County.

The CenterLine light-rail project is being designed to complement Orange County's existing network of freeways, streets and roads, buses and commuter rail by offering a quick and efficient way for people to travel. The initial CenterLine segment is 8.5 miles long and runs from Santa Ana through Costa Mesa and Irvine to John Wayne Airport, with a proposed 0.8 mile extension to Santa Ana College. The CenterLine will connect to numerous destination points throughout the core of the County, including city, county, state, and federal offices; the Santa Ana Artists Village; The Depot at Santa Ana; several libraries; various retail centers; Mater Dei High School; numerous commercial and residential developments; South Coast Plaza; the Orange County Performing Arts Center; and John Wayne Airport.

There are 362,710 residents and 321,835 jobs within two miles of the proposed CenterLine route. On opening day, The CenterLine will carry about 17,400 daily passengers and 24,800 by 2025 and will lead to approximately 14,000 fewer daily cars on our busy streets.

In addition, a number of cities throughout Orange County recognize the benefits that light rail will bring to their communities. Ten different cities in West Orange
County and five cities in North Orange County have formed coalitions to encourage the expansion of light rail to their cities.

Below, please find our response to your findings and recommendations as required by law. Should you have any questions or require any additional follow up, please do not hesitate to contact Jennifer Emi at (714) 560-5725.

Findings:

Finding 1. Light rail is a component of the public transportation system for the future growth of Orange County.

OCTA agrees. Light rail is a vital component of Orange County's future public transportation system for the future growth of Orange County. It offers a higher person carrying capacity and faster speeds than bus, as well as economic development opportunities around stations.

Finding 2. There is currently no single bus line traveling the proposed CenterLine route.

OCTA agrees. While there is no single OCTA bus line traveling the CenterLine route, there are bus routes that overlap the CenterLine route. Within the corridor there are nine routes that follow segments of the proposed rail alignment. Two services, Routes 57 and 76 provide connections between Santa Ana and John Wayne Airport over the major portion of the CenterLine alignment while Route 62 provides a direct connection to the CenterLine terminus at The Depot (Santa Ana Regional Transportation Center) in Santa Ana from Route 57. Depending on points of origin, other trip combinations are available involving the other six routes.

The three routes mentioned above operate in mixed traffic and make local, curb-side stops.

Finding 3. A link to Santa Ana College will increase the projected ridership.

OCTA agrees. The Santa Ana College link increases projected ridership, and will provide commuters with additional access and increased frequency through the Santa Ana loop of CenterLine. Santa Ana College has more than 25,000 enrolled students, more than 3,000 faculty and a severe parking shortage with only 3,100 parking spots. Enrollment in Santa Ana College is expected to
continue to increase. The CenterLine provides a solution to the commuting and parking needs of its students, faculty, and staff.

**Finding 4.** *The location of the stations is a key element to the success of a light rail system.*

OCTA agrees. Convenient access to stations and the populations they serve increase ridership. In December 2002, a peer review panel comprised of light-rail operating professionals was convened. They noted that The CenterLine’s proposed alignment was connecting at appropriate locations.

CenterLine stations will serve key activity areas such as the Santa Ana Regional Transportation Center, Santa Ana Civic Center, Mater Dei High School, Bristol Street businesses, South Coast Plaza, cultural venues on Avenue of the Arts, the Irvine Business Complex, and John Wayne Airport. Thousands of residents, workers, and customers access these locations daily. OCTA has worked with stakeholders in these communities where stations will be located to ensure that their current and future needs are addressed.

In order to promote ridership, The CenterLine design criteria requires that stations be positioned to provide convenient and safe access to the system for pedestrians, bike-riders, drop-off passengers, bus passengers transferring to the train, and park-and-ride users. In addition, OCTA, corridor cities, local communities, and private businesses are working together to identify opportunities for transit oriented development (TOD) around station locations. TOD centered around light rail systems in other cities has enhanced the success of both the light rail system and business development.

**Finding 5.** *An open dialogue between OCTA and the residents along the route is important to the planning and implementation of the CenterLine.*

OCTA agrees. The CenterLine outreach and technical teams have been actively meeting with city staff, local elected officials, individual community members, community groups, neighborhood associations, chambers of commerce, etc. OCTA has encouraged a balanced public dialogue about the project by hosting a public debate on CenterLine that featured leading rail opponents, and currently facilitates a CenterLine Ad Hoc Advisory Committee through the OCTA Citizens Advisory Committee.
Since the beginning of Preliminary Engineering (Spring 2002) OCTA has sent project newsletters to nearly 100,000 addresses, conducted four Open Houses and met with dozens of neighborhood groups. This level of effort typifies that which occurred in prior study phases since 1991.

Over the next six months, OCTA will continue to do extensive mailings, host a county-wide Open House, conduct outreach meetings, distribute the Supplemental Draft Environmental Impact Statement/Report (SDEIS/R) to libraries, post it on the internet, and make it available in CD format, and operate a 24 hour/day Telephone Hotline for comments and inquiries.

**Finding 6.** An accurate forecast of the ridership, the construction schedule and the cost is essential to the success of the CenterLine Project.

OCTA agrees. We have taken an extremely conservative and forthright approach to projecting ridership, the construction schedule, and cost for The CenterLine. These numbers are consistently updated and reevaluated as the project changes and develops. At the April 28 OCTA Board of Directors meeting, CEO Art Leahy announced that during Preliminary Engineering an updated schedule was created that accelerates the opening of The CenterLine by two years. The new schedule also results in a total project cost savings of approximately $102 million. OCTA will submit its revised schedule and cost estimates to the Federal Transit Administration (FTA), which will use the data to help determine which projects receive federal funding.

As it relates to the cost forecast, when Orange County voters passed Measure M, the ½ cent transportation sales tax in 1990, they designated that a portion of the funds raised would help create a mass transit system separate from the fixed route bus system. Through Measure M, approximately $340 million (1988 dollars) was secured for the development of a high capacity advanced rail transit project. The $340 million set-aside included funds for the development of a capital fund of up to $190 million (YOE dollars) for the construction of a future rail system. The balance will be set aside in an interest-bearing Rail Operations Fund that will be used for The CenterLine rail operations. The Rail Operations Fund will maintain a principal balance and generate interest sufficient to supplement LRT farebox revenues through and beyond 2025. By 2025, OCTA will have an available balance of $243.7 million in the Rail Operations Fund for use in supporting the continued operation of the CenterLine.
Measure M combined with other identified sources such as the FHWA/FTA Congestion Mitigation and Air Quality Program (CMAQ) funds, Proposition 116 State Rail Bond funds, and State Transportation Improvement Program (STIP) funds provide a 50-percent match to FTA Section 5309 New Start funding for The CenterLine.

To assure that its funds are used for viable projects, the FTA plays a vital role in verifying the reasonableness of ridership forecasts. Ridership forecasts provide the FTA with an overall measure of cost-effectiveness to compare light rail projects across the nation.

The Orange County Transportation Analysis Model (OCTAM) is a state-of-the-art practice tool that allows OCTA to forecast ridership activity. To ensure CenterLine ridership forecasts are reasonable, we have also implemented the FTA software package, Summit, which is used by other agencies to generate forecast ridership statistics. These statistics reveal that the OCTAM ridership forecast for the CenterLine system compares favorably to other projects across the nation.

**Finding 7.** Enhancements added to a light rail system after the completion of Preliminary Engineering are a principal cause of budget overruns.

OCTA agrees. Our close partnership with The CenterLine corridor cities enables us to work together toward the shared goal of delivering a quality project at a reasonable cost. Workshops have been held throughout preliminary engineering with the Cities, local businesses, private utilities, and other stakeholders to identify their expectations, inform them of the technical, programmatic, and financial constraints, and involve them in the planning process. Special studies have been and will continue to be performed to analyze options, including possible enhancements to the system, and evaluate potential impacts to the system and budget.

A peer review of project cost estimates is being performed by experienced light rail professionals from other system who will provide cost reduction recommendations. In addition, Value Engineering will be conducted, a mandatory requirement of the FTA, OCTA's federal funding partner. The Value Engineering team is charged with ensuring that all possible means are considered at the 30% and 65% design level so that the project will stay within budget.
OCTA is committed to delivering this project on-time and within budget. We have established and will continue the practice of analyzing all decisions against financial goals and constraints. Design criteria, which specify technical standards for the project, will be conformed at the end of Preliminary Engineering and any requested changes or enhancements to the system from that time forward will be closely tracked by management. In addition, agreements with the cities and utilities regarding administrative and cost issues will be formalized in Memorandums of Understanding prior to the start of Final Design.

Recommendations:

Recommendation 1. The Orange County Transportation Authority (OCTA) continue with Preliminary Engineering for the CenterLine Project. (Finding 1)

The recommendation has been implemented. OCTA continues to move forward with the Preliminary Engineering phase of the CenterLine. Scheduled completion of Preliminary Engineering is December 31, 2003. Already, Preliminary Engineering has allowed us to make technical refinements and route modifications that will accelerate the project by two years, resulting in a cost savings of approximately $102 million.

Recommendation 2. OCTA consider initiating a bus line simulating the CenterLine route and operation before the start of CenterLine construction. (Finding 2)

This recommendation will not be fully implemented. A bus line operating over the CenterLine route would not be capable of approximating the performance of the CenterLine and therefore would not provide a meaningful simulation. The primary issues are the superior speed and capacity of light rail which cannot be duplicated by buses operating in mixed flow traffic. In addition, amenities such as dedicated parking, off-vehicle fare payment, and stations with rider conveniences would not be available. It is unlikely a bus operating along the CenterLine alignment would be able to attract choice riders because of these differences.

With respect to speed, it is estimated a bus operating in the evening peak period would require approximately 102-minutes to travel roundtrip between John Wayne Airport and The Depot in Santa Ana (Santa Ana Regional
Transportation Center). The CenterLine would travel the same route in 70-minutes. Moreover, by 2010, with increasing traffic congestion, the bus would require 117-minutes while CenterLine speed would remain at 70-minutes.

In terms of capacity, a rail car can carry 130 riders with ease. At a design frequency of 7.5-minutes and a peak load of 130 passengers, CenterLine could carry 1040 riders at the peak load point. Using a standard bus loaded to 50 riders, a design frequency of less than 3-minutes would be required to accommodate the same number of riders. Such frequency on the bus side would limit or possibly prohibit bus signal priority due to adverse impacts on cross traffic.

In Los Angeles, the Metro Blue Line travels between the Los Angeles Central Business District and Long Beach in 53 to 55-minutes depending on the travel direction. Parallel peak-hour limited stop bus service (MTA Line 360) requires approximately 85 to 97-minutes to travel between the same points depending on the time of day and direction. The Metro Blue Line carries over 70,000 riders on a typical weekday while the MTA Line 60-360 carries a little over 27,000 riders daily. While the rider statistics for Line 60-360 are impressive, it is clear, the Metro Blue Line is far more attractive because of the superior operating characteristics owing to speed and capacity.

For these reasons, a bus line following the route of the CenterLine would not provide a meaningful simulation owing to the constraints imposed on buses operating in traffic and the lack of amenities associated with light rail service.

**Recommendation 3.** OCTA study including a link to Santa Ana College as part of the initial project. (Finding 3)

This recommendation is being implemented. The Santa Ana College alignment is included in the Preliminary Engineering design and the Supplemental Draft Environmental Impact Statement.

OCTA recognizes the value that the Santa Ana College alignment brings to the project. College administrators are supportive and believe that inclusion on The CenterLine alignment will provide students, faculty, and staff with a commuting option and help alleviate the severe parking shortage on campus. The College has more than 25,000 enrolled students and more than 3,000 faculty members.
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It is OCTA’s intent to include the Santa Ana College alignment with the initial project, subject to available funding.

**Recommendation 4.** *CenterLine stations at the University of California at Irvine and John Wayne Airport be located as convenient to facilities as the existing parking.* *(Finding 4)*

This recommendation will be implemented for John Wayne Airport. The June vote in the City of Irvine and subsequent action taken by the OCTA Board of Directors has resulted in a change of alignment to the CenterLine Project. The new alignment will now travel through a very small segment of Irvine and end at John Wayne Airport rather than at the University of California at Irvine.

The John Wayne Airport station will be located as conveniently as possible to the facility, while complying with the Federal Aviation Administration’s distance regulations for security, which mandates the station be located at least 300 feet away from the terminal. The station will reach key commuting populations with approximately 7,000,000 passengers traveling through John Wayne Airport and related employment of more than 10,000.

**Recommendation 5.** *OCTA consider the feasibility of placing the South Coast Plaza station as near to the ‘front door’ as engineering and operational considerations allow.* *(Finding 4)*

This recommendation is being implemented. South Coast Plaza is a key destination point with 4,600 employees and an estimated 22 million visitors per year. OCTA is working closely with the Cities of Costa Mesa and Santa Ana and the property owners to place the station as close to South Coast Plaza as feasible. Stakeholder cooperation, as well as engineering and operational considerations will influence the station’s ultimate location.

**Recommendation 6.** *OCTA hire a neutral facilitator to guide the discussions at community forums.* *(Finding 5)*

OCTA will consider implementing this recommendation. To date, The CenterLine outreach process has included numerous briefings to city councils, city staff, chambers of commerce, community groups, churches, and individuals. In addition, open houses have been held in the corridor cities, providing community members with an opportunity to learn more about the project and have their questions answered. As we move into the public review
process affiliated with the release of the environmental documents, we will strongly consider hiring a neutral facilitator if the outreach method is compatible.

**Recommendation 7. OCTA provide a conservative ridership forecast for the first five years of operation. (Finding 6)**

The recommendation has been implemented. Based upon the modeling methodology, OCTA anticipates an approximate CenterLine ridership gain of three percent per year, following the first year of operation.

The projected ridership increase takes into consideration the overall growth from opening day to the year 2025, a three percent growth rate is a conservative estimate for the first five years of operation. National trends have shown that the first few years following the opening of a light rail system usually yield a sharp growth increase followed by a stabilization of ridership numbers. However, our projections are contingent upon adopted growth rates and various other factors such as levels of congestion on the highway network, system maturity, population and job growth. There are no indications that these factors will lead to immediate and significant rates of growth in ridership within the first five years of operation, therefore a moderate and consistent growth rate is projected.

**Recommendation 8. Enhancements to the project during construction be paid for by the benefiting cities. (Finding 7)**

The recommendation will be implemented. OCTA works closely with the corridor cities to identify ideas and concerns regarding station locations and aesthetics. The conditions for paying for project enhancements/betterments will be set out in the cooperative agreements between OCTA and the benefiting city, negotiated prior to the start of construction.

Sincerely,

Tim Keenan
Chairman