ORANGELINE HIGH SPEED MAGLEV

The Orangeline Development Authority is a joint powers agency formed to pursue deployment of the Orangeline High Speed Maglev system in Southern California. The Authority is composed of the following public agencies:

City of Artesia
City of Bell
City of Bellflower
City of Cerritos
City of Cudahy
City of Downey
City of Huntington Park
City of Los Alamitos
City of Maywood
City of Palmdale
City of Paramount
City of Santa Clarita
City of South Gate
City of Vernon

Chair
Kirk Cartozian
Councilmember, City of Downey

Vice Chair
Troy Edgar
Councilmember, City of Los Alamitos

Secretary/Treasurer
Michael McCormick
Councilmember, City of Vernon

Auditor
Scott A. Larsen
Councilmember, City of Bellflower
City of South Gate

General Counsel
Michael Colantuono
Colantuono & Levin, PC

Executive Director
Albert Perdon, P.E.

Supporting Agencies
Gateway Cities Council of Governments
Southern California Association of Governments
City of Garden Grove
City of Huntington Beach
City of Long Beach
City of Stanton

ORANGELINE DEVELOPMENT AUTHORITY
REGULAR MEETING
Wednesday, August 8, 2007
16401 Paramount Boulevard
Paramount, CA 90723

Buffet Dinner – 6:00 p.m.
Regular Meeting – 6:30 p.m.

AGENDA

1. Call to Order
2. Pledge of Allegiance
3. Roll Call and Introduction of Attendees
4. Public Comments
5. Approval of Meeting Minutes of July 11, 2007
6. Approve Formation of Authority Board Committees
7. Adopt a Resolution of the Orangeline Development Authority Board of Directors approving signature authority for designated Authority officers.
8. Adopt a Resolution of the Orangeline Development Authority Board of Directors approving the Member Agency Equity and Distribution of Investment Earnings Policy
9. Review of freight maglev proposal
10. Approve attendance at the 2nd Annual North American PPP & Infrastructure Finance Conference
11. Approval of Warrant Register
12. Communication Items to the Board
13. Communication Items from the Board
CALL TO ORDER

City of Bellflower Mayor and Board Chair Scott Larsen called the meeting to order at 6:30 p.m.

PLEDGE OF ALLEGIANCE

City of Los Alamitos Councilmember and Authority Vice-Chair Troy Edgar led the assembly in the salute to the flag.

ROLL CALL AND INTRODUCTION OF ATTENDEES

Board Members:
Scott Larsen – Authority Chair, Mayor, City of Bellflower
Troy Edgar – Authority Vice Chair, Councilmember, City of Los Alamitos
Diane J. Martinez – Mayor, City of Paramount
Tony Lima – Councilmember, City of Artesia
Elba Guerrero – Mayor, City of Huntington Park
Laura Lee – Mayor, City of Cerritos
Steve Hofbauer – Councilmember, City of Palmdale
Kirk Cartozian – Councilmember, City of Downey
Thomas Martin – Mayor, City of Maywood

Others:
Albert Perdon – Executive Director, Orangeline Development Authority
Rory Burnett – Finance Director, Orangeline Development Authority and City of Vernon
Steve Lefever – Director of Development, City of South Gate
Sharad Mulchand – Transportation Planning Manager, Los Angeles County Metro
Dean Grose – Alternate Board Member and Councilmember, City of Los Alamitos
Eduardo Vega – City of Cerritos
Mary Strenn – Interim City Manager, City of South Gate
Steven Yee – City of Downey
Michael Litschi – OCTA
Keith McCarthy – Downey resident and former Authority Board Member
Charlene Palmer – ARCADIS
Maria Shafer – Minutes Secretary

PUBLIC COMMENTS

City of Bellflower Mayor and Board Chair Scott Larsen opened public comments for those in the audience who wished to address the Authority on other than agenda items. There was no response and the public comments section of the meeting was closed.

APPROVAL OF MEETING MINUTES OF JUNE 13, 2007

MOTION: City of Artesia Councilmember Tony Lima moved to approve the meeting minutes of June 13, 2007, as presented. City of Palmdale Councilmember Steve Hofbauer seconded the motion, which carried, unanimously.
ITEM 06 – ADOPT A RESOLUTION OF THE BOARD OF DIRECTORS OF THE ORANGELINE DEVELOPMENT AUTHORITY MAKING APPOINTMENTS TO THE OFFICES OF CHAIR, VICE CHAIR, SECRETARY AND FINANCE DIRECTOR

The Chair turned the meeting over to Executive Director Al Perdon.

Mr. Perdon reported that the Authority's by-laws require the appointment of a Chair and Vice Chair at its July meeting. He added that due to the retirement of the current Authority Secretary, Gary Milliman of South Gate, the Board will also need to appoint a new Secretary. It is also recommended that the Board create a new position, that of Finance Director, and that Rory Burnett of Vernon be appointed as such.

Mr. Perdon opened the floor for nominations for the position of Chair.

City of Los Alamitos Councilmember Troy Edgar nominated City of Downey Councilmember Kirk Cartozian for the position of Chair. There were no other nominations.

MOTION: City of Bellflower Mayor Scott Larsen moved to close nominations. City of Paramount Councilmember Diane Martinez seconded the motion, which carried unanimously.

City of Downey Councilmember Cartozian was declared Authority Chair and took lead of the meeting.

The Chair opened the floor for nominations for the position of Authority Vice Chair.

The Chair nominated City of Los Alamitos Councilmember Troy Edgar for the position of Vice Chair. There were no other nominations.

MOTION: City of Bellflower Mayor Scott Larsen moved to close nominations. City of Huntington Park Mayor Elba Guerrero seconded the motion, which carried unanimously.

City of Los Alamitos Councilmember Edgar was declared Authority Vice Chair.

MOTION: City of Paramount Councilmember Diane Martinez moved to appoint current Authority Treasurer, City of Vernon Councilmember Mike McCormick as Secretary as well. City of Artesia Councilmember Tony Lima seconded the motion, which carried unanimously.

MOTION: City of Bellflower Mayor Scott Larsen moved for the creation of the position of Finance Director and that Rory Burnett, Finance Director for the City of Vernon, be appointed to same. City of Cerritos Mayor Laura Lee seconded the motion, which carried unanimously.

ITEM 7 – ADOPTION OF A RESOLUTION OF THE BOARD OF DIRECTORS OF THE ORANGELINE DEVELOPMENT AUTHORITY TO APPROVE THE FISCAL YEAR 2007-2008 BUDGET

Mr. Perdon reported that the Budget was presented to the Board in draft form at the last meeting during which Authority Board Members provided specific comments relative to the proposed budget. He presented details of the comments as stated in the Agenda Report dated July 11, 2007. These were carefully considered in the development of a final budget in addition to information regarding anticipated federal grant funding.

Orangeline Development Authority

July 11, 2007
Page 2
Mr. Perdon detailed the recommended clarifications and budget adjustments listed in the Report. He addressed differences between the 2007 and 2008 budget noting that no significant technical work will be done this year but that the major focus will be to use results of Phase 1 preliminary engineering and financial planning to secure private funding for Phase 2 and for and obtaining additional members to the Authority. He added that Member Cities contributions are proposed to be maintained at the same level as in the prior year, but taking into account an inflation rate of 3%. The proposed budget also includes an additional $56,000 in anticipated federal grant funding.

Ensuing discussion pertained to the status of the federal grant funding agreement. Concern was expressed regarding the 3% inflation adjustment to the member investment contribution and the request from one member city that it not be increased.

Vice Chair Edgar expressed concern about the burden for Authority Board Members to bring in new Member Cities.

City of Palmdale Councilmember Hofbauer noted that the City of Palmdale has already budgeted for the fee and felt each City should make a commitment.

Vice Chair Edgar opined that the focus this year should be outward and City of Cerritos Mayor Laura Lee felt that the contribution amounts should not be changed because of the possibility of losing Members.

City of Bellflower Mayor Larsen noted that City of Santa Clarita Mayor Marsha Mclean suggested keeping the contribution as is until December 31, 2007 with the possibility of increasing it after reassessment in the beginning of 2008.

Discussion followed regarding challenging the Authority to attain additional commitments, the necessity for added revenues, including a cost-of-living adjustment, and the possibility of maintaining contributions as they are but reassessing the issue at a later date.

MOTION: City of Bellflower Mayor Larsen move to accept the Budget with the only change being that Member City investment contributions would remain at the 2006/2007 level, without an inflation adjustment, but that the investment contribution levels would be reassessed at the first Board Meeting in 2008. City of Palmdale Councilmember Hofbauer seconded the motion, which carried unanimously.

ITEM 8 – CONSIDER FORMATION OF AUTHORITY COMMITTEES

Mr. Perdon presented background to the item and recommended that the Authority Board formally consider the formation of ad hoc committees rather than standing committees, which would require compliance with the Brown Act requirements regarding posting of meeting notices and agendas, recording of meeting minutes and holding open public meetings. The latter would impose an increasing burden on staff and not practical with the Authority’s limited resources.

An ad hoc committee would have a time limited to its operation and function to achieve a particular purpose. It would be comprised of only Authority Board Members, and one less than a majority of Authority Board Members. It would allow a way to get things done in a cost-efficient manner. Committee reports and recommendations would be present to the Authority Board in open public meetings.
He reiterated the recommendation for the Authority Board to form an ad hoc Development Committee as well as an ad hoc Legislative Committee. Formation of the ad committees would be formalized by resolution at the Authority Board’s next meeting.

Discussion followed regarding the length of term of the ad hoc committees, the possibility of allowing non-Board Members into the committees. Relative to the later, actions would need to be by Board Members only, although other members could participate.

Mr. Perdon reported that currently, the Authority Board is comprised of 13 Members; a quorum would be 8 Members and 7 Members would be one less than a majority of the Board.

Discussion followed regarding the focus of the Development Committee, naming the Legislative Committee as the Government Affairs Committee, needing to establish a committee charter as well as objectives and goals. The ad hoc committees would be formed for a particular purpose and once the purpose was accomplished, the committees would be dissolved.

Discussion continued regarding the process for choosing committee members.

Chair Cartozian, Vice Chair Edgar, Members Hofbauer, Lima and Larsen volunteered to be part of the Governmental Affairs ad hoc committee. It was recommended that Members McLean and McCormick as well as John Noguez also be part of the committee.

Member Larsen and ARCADIS representative Charlene Palmer indicated interest in being part of the Development ad hoc committee.

Mr. Perdon announced that the item will be brought back to the Board for formal action at the next meeting.

**ITEM 9 - APPROVAL OF WARRANTS**

**MOTION:** City of Huntington Park Mayor Elba Guerrero moved to approve the warrant register as presented. City of Los Alamitos Councilmember and Authority Vice Chair Troy Edgar seconded the motion, which carried unanimously.

**ITEM 10 – COMMUNICATION ITEMS TO THE BOARD**

Mr. Perdon presented the report including the Treasurer’s report, News/Events and meetings held during the month of June. He noted that a letter was sent to L.A. County Supervisor Gloria Molina requesting a meeting and encouraged Board Members, especially those who signed the letter and whose communities are represented by her, to participate in the meeting.

Brief discussion followed regarding the possibility of inviting Assemblyman Hector de la Torre to attend the meeting with Supervisor Molina.

Mr. Perdon also reported that he will be meeting with an Orange County developer who is interested in the Orangeline High Speed Maglev. In addition, he received a call from a representative of Governor Schwarzenegger who is interested in speaking with him about the Orangeline High Speed Maglev.
Vice Chair Edgar reported on a recent meeting with the Orange County Transportation Authority and also with the City of Santa Ana which may be acting to join the Authority.

City of Bellflower Mayor Larsen reported contacting the lead team on the Orange County Great Park project whose principal indicated interest in the Orangeline High Speed Maglev.

**ITEM 11 – COMMUNICATION ITEMS FROM THE BOARD**

City of Palmdale Councilmember Hofbauer reported that the City recently passed the Environmental Impact Report for the Transit Village project in Palmdale. He added that this is the first step toward development of the transit-oriented development surrounding the Transit Center.

Mr. Perdon reported sending requests to the Member Cities to pass resolutions in support of Milestones 7 and 10 and the Authority proposal to the California Transportation Commission. He requested that Authority Board Members encourage their city councils to support this effort; that each Authority Board Member asks their respective City Clerks to place the item on their City Council agendas.

The Chair thanked the Board for its support and thanked City of Bellflower Mayor Larsen for his leadership during the last three years. He added that he is looking forward to the future and encouraged everyone's participation. He indicated that he sees himself and Vice Chair Edgar working together as a team.

Vice Chair Edgar and Mr. Perdon also expressed their appreciation to Member Larsen for his leadership.

Mr. Perdon reported on discussions Assembly Member Hector de la Torre held with the Governor's office to express his support for the Orangeline Maglev project and to request that the Governor also support the project. He noted that the Governor's office is looking for privately-funded projects and for proposals from the investment community indicating commitment to investment in California infrastructure projects. Mr. Perdon recognized and expressed appreciation for Assembly Member de la Torre’s work on behalf of the Orangeline High Speed Maglev.

**ITEM 12 – ADJOURNMENT**

There being no further business to come before the Orangeline Development Authority, the meeting was adjourned at 7:41 p.m. The next regularly scheduled meeting will be held on Wednesday, August 8, 2007 at 6:00 p.m.

__________________________________
Mike McCormick, Secretary

Attest:

_______________________________
Kirk Cartozian, Chair
AGENDA REPORT

TO: Members of the Orangeline Development Authority

FROM: Kirk Cartozian, Chair

DATE: August 8, 2007

SUBJECT: Approve Formation of Authority Board Committees

RECOMMENDATION

That the Authority Board establishes and designates members to serve on the following committees:

1. Development Committee
2. Government Affairs Committee
3. Contract Negotiation Committee

DISCUSSION

The Authority Board discussed the formation of two committees at its meetings in June and July 2007. It was the consensus of the Authority Board to consider formal action establishing a Development Committee and a Government Affairs Committee. The Board directed that this item be presented for final action at the August meeting, at which time the purpose, objectives, membership and operating procedures of each committee would be specified.

I recommend that the Board also establish a Contract Negotiating Committee. This committee would have the specific responsibility to negotiate an amendment to the current contract with Albert Perdon & Associates. The current Agreement covers services provided by the firm, including by its principle who serves as the Authority’s Executive Director, for the period September 1, 2006 through October 31, 2007.

It is in the Authority’s interest to continue the services of this firm in order to maintain progress in advancing the Authority’s program. The current Agreement must be amended in October 2007 to enable the Authority to continue receiving the services of this firm.

Descriptions of each committee are shown in the attachment.

ATTACHMENT:

1. Description of Proposed Board Committees
Description of Proposed Board Ad Hoc Committees

1. Development Committee
   a. Purpose and Objectives
      i. Make recommendations to the Authority Board pertaining to liaison with the development community and related efforts for securing funding for Phase 2 project development.
      ii. Gain development community awareness and understanding of the Orangeline High Speed Maglev.
      iii. Secure support of the development community, including joint marketing efforts to promote the Orangeline High Speed Maglev.
      iv. Assist in securing Phase 2 funding by attracting development community interest and investment in the Orangeline High Speed Maglev and in station-area development.
   b. Membership
      i. The following Authority Board Members, comprising less than a majority of the Authority Board, will serve on the Development Committee:
         1. Kirk Cartozian
         2. Troy Edgar
         3. Elba Guerrero
         4. Scott A. Larsen
         5. Marsha McLean
         6. Bruce Barrows
      ii. Non-members may participate in Committee deliberations; only members will have voting privileges
   c. Operating Procedures
      i. Meet as frequently as Committee deems necessary, either in person, via conference calls or by other means, and report to the Authority Board on activities on a regular basis.
      ii. Function until Committee purpose and objectives have been achieved, at which point in time the Committee will dissolve.
      iii. As this is an Ad Hoc committee, the requirements of the Brown Act do not apply.

2. Government Affairs Committee
   a. Committee Type
      i. Ad Hoc Authority Board Committee
   b. Purpose and Objectives
      i. Make recommendations to the Authority Board pertaining to government affairs related to secure funding for Phase 2 project development.
      ii. Promote the Orangeline High Speed Maglev through outreach to local, state and elected officials and secure their support.
      iii. Obtain membership of additional cities in the Authority to help secure Phase 2 funding.
      iv. Obtain support of State Legislature, including possible state legislation, and gain support of Governor Schwarzenegger.
   c. Membership
i. The following Authority Board Members, comprising less than a majority of the Authority Board, will serve on the Development Committee:
   1. Kirk Cartozian
   2. Troy Edgar
   3. Mike McCormick
   4. Marsha McLean
   5. Tony Lima
   6. John Noguez

ii. Non-members may participate in Committee deliberations; only members will have voting privileges

d. Operating Procedures
   i. Meet as frequently as Committee deems necessary, either in person, via conference calls or by other means, and report to the Authority Board on activities on a regular basis.
   ii. Function until Committee purpose and objectives have been achieved, at which point in time the Committee will dissolve.
   iii. As this is an Ad Hoc committee, the requirements of the Brown Act do not apply.

3. Contract Negotiating Committee
   a. Purpose and Objective
      i. Negotiate amendment to current contract between Orangeline Development Authority and Albert Perdon & Associates.
   b. Membership
      i. The following Authority Board Members, comprising less than a majority of the Authority Board, will serve on the Contract Negotiating Committee:
         1. Membership to be determined
      ii. Non-members may participate in Committee deliberations; only members will have voting privileges.
   c. Operating Procedures
      i. Meet as frequently as Committee deems necessary, either in person, via conference calls or by other means, and present recommendations to the Authority Board.
      ii. Function until Committee purpose and objective has been achieved, at which point in time the Committee will dissolve.
      iii. As this is an Ad Hoc committee, the requirements of the Brown Act do not apply.
AGENDA REPORT

TO: Members of the Orangeline Development Authority

FROM: Albert Perdon, Executive Director

DATE: August 8, 2007

SUBJECT: Resolution of the Orangeline Development Authority Board of Directors Approving Signature Authority for Designated Authority Officers

RECOMMENDATION

That the Authority Board adopts the attached Resolution:

A RESOLUTION OF THE ORANGELINE DEVELOPMENT AUTHORITY BOARD OF DIRECTORS APPROVING SIGNATURE AUTHORITY FOR DESIGNATED AUTHORITY OFFICERS

DISCUSSION

At its December 14, 2005 Regular Meeting, the Authority Board approved a motion to designate the Chair, Vice Chair and Treasurer to sign Authority checks and to require two out of the three signatures on checks issued by the Authority.

The Authority Board established the new position of Finance Director at its Regular Meeting of July 11, 2007, which assumes many of the responsibilities of the former Treasurer position. Included is the day-to-day responsibility of managing the finances of the Authority, receiving and preparing warrants for invoices, maintaining the Authority’s checking account and printing checks.

The new role of the Treasurer is primarily limited to overseeing the financial management system, and to ensuring that the Authority’s financial affairs are in order.

With these changes in responsibilities and appointment of the new Finance Director, it is recommended that the Board authorize the following Authority Officers to sign checks, while retaining the requirement that Authority checks must be signed by two of the four authorized officers: Authority Chair, Vice Chair, Treasurer, Finance Director.

ATTACHMENT:

1. A RESOLUTION OF THE ORANGELINE DEVELOPMENT AUTHORITY BOARD OF DIRECTORS APPROVING SIGNATURE AUTHORITY FOR DESIGNATED AUTHORITY OFFICERS
RESOLUTION NO. 07-08

A RESOLUTION OF THE ORANGELINE DEVELOPMENT AUTHORITY
BOARD OF DIRECTORS APPROVING SIGNATURE AUTHORITY FOR
DESIGNATED AUTHORITY OFFICERS

WHEREAS, the Authority Board of Directors has given careful consideration to the report regarding signature authority for designated Authority officers,

NOW, THEREFORE, the Orangeline Development Authority Board of Directors does hereby resolve as follows:

SECTION 1. The following Authority officers are authorized to sign Authority checks:
   a. Authority Chair
   b. Authority Vice Chair
   c. Authority Treasurer
   d. Authority Finance Director

SECTION 2. Authority checks must be signed by two of the four officers authorized to sign Authority checks.

APPROVED AND ADOPTED this 8th day of August, 2007.

____________________________
Kirk Cartozian, Chair

ATTEST:

____________________________
Mike McCormick, Secretary

I HEREBY CERTIFY that the foregoing Resolution was adopted by the Authority Board of Directors of the Orangeline Development Authority at a regular meeting held on the 8th day of August 2007, by the following vote, to wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

____________________________
Mike McCormick, Secretary
AGENDA REPORT

TO: Members of the Orangeline Development Authority

FROM: Albert Perdon, Executive Director

DATE: August 8, 2007

SUBJECT: Adopt a Resolution of the Orangeline Development Authority Board of Directors Approving the Member Agency Equity and Distribution of Investment Earnings Policy

RECOMMENDATION

That the Authority Board adopts the attached Resolution:

A RESOLUTION OF THE ORANGELINE DEVELOPMENT AUTHORITY BOARD OF DIRECTORS APPROVING THE MEMBER AGENCY EQUITY AND DISTRIBUTION OF INVESTMENT EARNINGS POLICY

DISCUSSION

On December 14, 2005, the Authority Board approved the Milestone 2 - Orangeline Maglev System Concepts and Criteria report. The Board’s action established the functional roles of the Orangeline High Speed Maglev system, including the underlying principle of the Orangeline Corridor Development Project that all member agencies are to be kept “whole” in terms of benefits to be derived from the Project. The intent of this principle was stated to be as follows:

“This means that the benefits derived from the Project will be distributed equitably among all the member agencies, enabling all member agencies to come closer to achieving their goals.”

This principle was restated in the Milestone 3 – Orangeline High Speed Maglev Project Alignment and Station Locations report and the Milestone 4 – Ridership Modeling Assumptions report approved by the Authority Board on February 8, 2006.

The Authority’s adopted Fiscal Year 2007-2008 Budget and Business Plan includes the following statement, which is also contained in prior fiscal year budgets:

“Revenues from member cities and in-kind contributions are considered as investments in the Orangeline Maglev Corridor Development Project, as opposed to donations or grants to the Authority. The Authority anticipates that the Project will generate sufficient revenues from operation of the
Orangeline Maglev system and from station area development to cover Project capital and operating costs, and to generate a return on investments in the Project.

Investments by member cities and in-kind contributions could remain with the Authority to cover the Project’s funding needs through construction and beyond, or be withdrawn, with interest, at an earlier date. The return on investment would be based on each party’s equity in the Project. The Phase 2 financial plans would describe these opportunities.”

In determining the equity of each member city, it is important to establish how the interest earnings on the member cities investment contributions over time are calculated. This is important because, as new cities join the Authority, questions may arise as to the fairness of the formula for calculating investment earnings, particularly in regard to the issue of risk and reward. As with any investment, there is the risk that the Orangeline High Speed Maglev project will not achieve the expected outcome and that member cities will not realize a return on their investments. It is advisable that the Authority Board establish how that risk factor is to be reflected in the rate of return on member city investment contributions to ensure that returns are in conformance with established policy.

Staff recommends that the following formula be used to set a value on the investment risks assumed by the Authority’s member cities in relation to their annual investment contributions. This formula is based on the premise that early investment assumes a higher risk than later investment due to the fact that the likelihood of success increases over time as support for the project grows and many of the initial hurdles are overcome. The formula for calculating the annual return on investment (ROI) would be as follows:

\[
\text{Annual ROI} = \text{Investment} \times \text{Annual Inflation Factor} \times \text{Annual Risk Factor}
\]

The inflation factor would be set at the established annual consumer price index, which in the table below is assumed to be 3%. The risk factor would be set at an initial rate of 15% and decline each year following 2004 by 1.5%, declining to 3% in 2011, as shown in the table below. The Investment Balance resulting from a $1000 annual retained investment would be as shown in the table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Investment</th>
<th>Inflation Factor</th>
<th>Risk Factor Phase 1</th>
<th>Investment Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>$1,000</td>
<td>$30</td>
<td>$150</td>
<td>$1,180</td>
</tr>
<tr>
<td>2005</td>
<td>$1,000</td>
<td>$30</td>
<td>$131</td>
<td>$2,532</td>
</tr>
<tr>
<td>2006</td>
<td>$1,000</td>
<td>$30</td>
<td>$113</td>
<td>$4,035</td>
</tr>
<tr>
<td>2007</td>
<td>$1,000</td>
<td>$30</td>
<td>$94</td>
<td>$5,658</td>
</tr>
<tr>
<td>2008</td>
<td>$1,000</td>
<td>$30</td>
<td>$75</td>
<td>$7,357</td>
</tr>
<tr>
<td>2009</td>
<td>$1,000</td>
<td>$30</td>
<td>$60</td>
<td>$9,109</td>
</tr>
<tr>
<td>2010</td>
<td>$1,000</td>
<td>$30</td>
<td>$45</td>
<td>$10,867</td>
</tr>
<tr>
<td>2011</td>
<td>$1,000</td>
<td>$30</td>
<td>$30</td>
<td>$12,579</td>
</tr>
<tr>
<td>Total</td>
<td>$8,000</td>
<td>$30</td>
<td></td>
<td>$12,579</td>
</tr>
</tbody>
</table>
It is recommended that the Authority Board restate the policies for member city equity and investment earnings in a separate resolution to ensure that the Authority Board intent is clear and unambiguous and that the policy is recognized as an underlying principle of the Orangeline High Speed Maglev project and agreed to by all current and future Authority member agencies.

The formula for calculating return on investment rates would apply only to investments made up to the conclusion of Phase 2 project development. Earnings distributions beyond Phase 2 would be subject to further action by the Authority Board at a subsequent time.

ATTACHMENT:

1. A Resolution of the Orangeline Development Authority Board of Directors Approving the Member Agency Equity and Distribution of Investment Earnings Policy
RESOLUTION NO. 07-09
A RESOLUTION OF THE ORANGELINE DEVELOPMENT AUTHORITY
BOARD OF DIRECTORS APPROVING THE MEMBER AGENCY EQUITY AND
DISTRIBUTION OF INVESTMENT EARNINGS POLICY

WHEREAS, the Authority Board of Directors has given careful consideration to the report presented at its meeting of August 8, 2007 regarding Authority member agency equity and distribution of investment earnings policy;

NOW, THEREFORE, the Orangeline Development Authority Board of Directors does hereby resolve as follows:

SECTION 1. Revenues from member cities and in-kind contributions are considered as investments in the Orangeline Maglev Corridor Development Project, as opposed to donations or grants to the Authority. The Authority anticipates that the Project will generate sufficient revenues from operation of the Orangeline Maglev system and from station area development to cover Project capital and operating costs, and to generate a return on investments in the Project.

SECTION 2. Investments by member cities and in-kind contributions could remain with the Authority to cover the Project’s funding needs through construction and beyond, or be withdrawn, with interest, at an earlier date. The return on investment would be based on each party’s equity in the Project. The Phase 2 financial plans would describe these opportunities.

SECTION 3. Return on investment calculations for the period 2004 to 2011 or until the completion of Phase 2 Project Development would be as described in the report pertaining to this matter presented to the Authority Board on August 8, 2007.

APPROVED AND ADOPTED this 8th day of August, 2007.

____________________________
Kirk Cartozian, Chair

ATTEST:

_______________________________
Mike McCormick, Secretary

I HEREBY CERTIFY that the foregoing Resolution was adopted by the Authority Board of Directors of the Orangeline Development Authority at a regular meeting held on the 8th day of August 2007, by the following vote, to wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

_______________________________
Mike McCormick, Secretary
AGENDA REPORT

TO: Members of the Orangeline Development Authority
FROM: Albert Perdon, Executive Director
DATE: August 8, 2007
SUBJECT: Review of Freight Maglev Proposal

RECOMMENDATION

That the Authority Board reviews the information provided and provides direction to staff.

DISCUSSION

Staff will report on the attached slide presentation and pertinent policy issues regarding a freight maglev proposal recently presented to the Southern California Association of Governments.

ATTACHMENT

The Electric Cargo Conveyor System (ECCO)
SCAG Regional Coordinators Meeting

Center Hull Aft
Perpendicular

Ysh(x), a=x=a+Lsh
Lsh

Ych(x), 0=x=Lch
X (ch)
Y (ch)

X* (sh)
Y* (sh)

Center for the Commercial Deployment of Transportation Technologies

Center for the Commercial Deployment of Transportation Technologies

July 26, 2007
Growth in Port Throughput is an Economic Issue

- Port Growth Provides Regional Economic Prosperity
  - 1 Out of 12 Local Jobs are Directly Related to the Port of LA/LB
  - Over half-million jobs indirectly related to ports
  - Port Growth Continues to Produce Good Paying Logistics Jobs While Supporting Southern California Manufacturing Base
  - Jobs increased by 200% 1994-2005
  - State and Regional Governments Derive Significant Income From Port Operations
  - Generated 6.4 Billion in State and Local taxes
- Near Half the Nation’s Imports Pass Through the Ports of LA/LB (Adds Pollution and Congestion)

Total Value of Containerized Trade through ports of LA/LB 2005

- Int’l Trade Total: $256 Billion
ECCO is an OVERALL Solution to Southern California Cargo Movement, not a Temporary “FIX”

- Sufficient Throughput Capacity to Accommodate Port Volume through 2035
- Removes Diesel Pollution—Exploits Renewable Energy to Eliminate all Pollution
- Relieves Most Congestion with Least Impact on Existing Transportation Infrastructure
Growth in Port Throughput is a Health and Safety Issue

According to Participants of Town-Hall Meetings, Diesel Particulate Emissions (DPEs) Produce a “Death Zone”
ECCO Significantly Reduces Pollutants and Can Be Powered by Renewable Energy Sources

OR

\[
\begin{align*}
\text{PM}_{30} & \quad 78 \text{ tons/year} \\
\text{NO}_x & \quad 1572 \text{ tons/year}
\end{align*}
\]

OR \underline{ZERO} Pollution Wind & Solar

\[
\begin{align*}
\text{PM}_{30} & \quad 0 \text{ tons/year} \\
\text{NO}_x & \quad 39 \text{ tons/year}
\end{align*}
\]

Environmental cost of draying 1.8 million containers vs “ECCOing” 1.8 million containers
"No Wheels" is ECCO’s Major Benefit Over Road and Rail

- Replaces Wheels with Arrays of Magnets for Realistic Guideway Elevation (Sketch Shows Relative Wheel Loading of ECCO Versus Road and Rail)
- Small Footprint Produces Many options for Rights-of-Way in Congested Urban Areas. Able to Climb 10% Grades (Cajon Pass)
- Computer Controlled and Elevated for Container Security
Motor Moved Off the Carriage and into the Guideway

- Uses Levitation Magnets for Linear Synchronous Motor (LSM) Traction
  - Allows for Many “Passive” Carriages on a “Active” Guideway
  - Guideway is the Motor and Activated Only When Carriage is Present—Saves Energy
  - No Need for Dangerous “Third Rail” Power Pickup or Overhead Wires
- Utilizes Existing Rail Load/ Off-Load Equipment, Processes, and Labor Crews
Background to ECCO Solution 2005/2006

2005

- Years of Public Transportation Proposals Leave Public Impression that "Maglev Costs Too Much"
- European Approach Requires Tight Tolerances Requiring Expensive Guideways
- CCDoTT Contracted with TransRapid to Determine Maglev Container Feasibility

2006

- Innovations in Material and Design Lead to "American" Technology
  - Invented in Lawrence Livermore Labs
  - Reduced to Practice by General Atomics
- Relaxed Guideway Tolerances reduce Freight System costs

Click on video to play
**CSULB ECCO**

**CCDoTT and its ECCO Technology Providers Have an Effective Solution to Port Throughput**

- **TransRapid** Developed the World’s First Commercial Maglev System (Shanghai), Using the German, ElectroMagnetic System (EMS)
  - 6 Million Passengers, 2.2 Million Miles, 99.9% on Time Service
  - Contracted with CCDoTT to Demonstrate ECCO Feasibility in 2003

- **General Atomics** Developed the Only full-Scale Maglev in U.S. (San Diego), Using the American ElectroDynamic System (EDS)
  - World’s First Maglev Container Mover
  - Contracted with CCDoTT on LA Port Project in 2006

- **Elevation Allows Maglev Technology to be Compatible with, and Even Complement Existing Goods Movement Infrastructure**

*“Based On Our Research, The Most Promising Initial Option For a U.S. Maglev System Today is For Cargo Transport In a High Usage, High Density Region Such as Moving Cargo From the Ports of Los Angeles (or Port of Long Beach, CA) to a Less Congested Transfer Site Inland”. Office of Naval Research*
ECCO is Compatible with Existing Terminal Processes and Compliments Rail and Truck Systems
Port of LA Electric Cargo Conveyor (ECCO) Project

- Two Parallel, Bidirectional Systems, Each with 36 Carriages are Required to Meet Throughput Requirements

- Systems Travel between Port and SCIG Terminals 180° out of Phase
  - Two 18 Carriage Sections on Switched Spurs at Terminals
  - Evens Unload/Load Labor and Equipment Requirements
ECCO Load/Unload from Road and Rail with Container Magazine (State-of-the-Art)
Customized Grid Rail System for the ECCO: GRECCO
Immediate and Long Term ECCO Solutions

1. Near-Port ECCO Eliminates Pollution and Congestion Caused by Short Haul Trucking from Terminals to Alameda Corridor ICTFs, but Does Not Increase Port Throughput

- 2 Million+ Truck Trips per Year Move Containers Terminal Gates to ICTFs Near the Ports and Along the I-710
- Significant Reduction in DPEs due to Reduced Container Traffic and Truck Idling
- Provides a Feeder System for More Comprehensive ECCO Freight System

2. ECCO Freight System Beyond Port Region Relieves Southern California Transportation Infrastructure and Increases Port Throughput

- Extend ECCO Freight System to Inland Empire Warehouses and Trans-loaders, and on to Railheads at Victorville (BNSF) and Beaumont (UP)
- Recent Congressional Testimony Asserted that an ECCO System Would Remove Over Half of Container Traffic and Resulting DPEs from the LA Basin*
- Opens Southern California Infrastructure for Commuters, and Local Deliveries to Local Manufacturing Base and Commercial Centers

*Testimony before the Highways, Transit, and Pipelines Subcommittee of the House Transportation and Infrastructure Committee Hearing on Intermodalism, June 15, 2006.
Port Gateway Route

- Length = 4.7 Miles
- Containers per day = 5000+
- Agency: Port of Los Angeles
- Annual Operating Cost = $9.2 M
- Construction Cost = $575 M*
  *(this includes $90 Million for the Cerritos Channel Bridge, which would fulfill the same capacity as the $850 Million Desmond Truck Bridge)
- Operating and Maintenance per 40’ Container = $7
- Capital Amortization per 40’ Container* = $25

* (25 years at 6%)
I-710 Route

- Length = 20 Miles
- Containers per day = 5000+
- Agency: I-710 Commission

- Annual Operating Cost = $35.6 M
- Construction Cost = $2.4 B

- Operating and Maintenance per 40’ Container = $29
- Capital Amortization per 40’ Container* = $104

* (25 years at 6%)
Inland Port Route

- Length = 100 Miles
- Containers per day = 10,000+
- Agency: U.S. Department of Transportation

- Annual Operating Cost = $188 M
- Construction Cost = $8.5 B

- Operating and Maintenance per 40’ Container = $71
- Capital Amortization per 40’ Container* = $222

* (25 years at 6%)
ECCO Capital Costs are Competitive with Expansions of Other Modes of Goods Movement

- Initial Estimates are that ECCO Capital Cost is Within Range of Other Modal Upgrades, While Offering Better Transit Time, Lower Operating Costs, no Pollution and Other Benefits

- Capital Cost Estimates:
  - ECCO (Freight Maglev)
  - Rail - Alameda Like Corridor Based On Construction Cost of Alameda
  - Road - Truck Expressway/ Lanes Based on Cost of Proposed I-710 Truck Expressway

Estimated Capital Cost for Corridors to Inland Transshipment Facilities

Neither Estimate for Road or Rail Include the Rolling Stock
ECCO Capital Costs are Becoming Less Expensive than any Other Mode of Goods Movement

CCDoTT Has Produced the Only Economic Analysis of Freight Maglev

- Includes Rolling Stock
- 75 Year Lifecycle
- All Elevated—Grade Crossings Included
- Low Maintenance
- Paid by Fare Box
ECCO and SCAG’s Southern California Vision
Shared Rights-of-way
Placement of Both Passenger and Cargo Maglev Lines on Same Right-of-Way

Passenger at Grade

Elevated in Interstate Medium
Design, Build, Finance, Operate (DBFO) of Public/ Private Partnership (PPP)

Public Owner likely to be Port (Similar to Caltrans Owning Toll Roads-California’s AB 680)

TIFIA Possible Source (Transportation Infrastructure Finance and Innovation Act of 1998)
For Further Information:

Kenneth James  
Principal Investigator  
Phone (562) 985-4123  
email: james@csulb.edu

Steven Hinds  
Program Administrator  
Phone (562) 985-2259  
email: shinds@csulb.edu

Edward Thicksten  
Senior Consultant  
Phone (562) 985-2412  
email: ethicksten@csulb.edu

Additional project information can be obtained at:  
http://edms. engr.csulb.edu/public
AGENDA REPORT

TO: Members of the Orangeline Development Authority
FROM: Albert Perdon, Executive Director
DATE: August 8, 2007

SUBJECT: Approve attendance at the 2nd Annual North American PPP & Infrastructure Finance Conference

RECOMMENDATION

That the Authority Board approve Executive Director attendance at the 2nd Annual North American PPP (Public Private Partnership) & Infrastructure Finance Conference.

DISCUSSION

The 2nd Annual PPP & Infrastructure Finance Conference to be held on September 25-26, 2007 in New York promises to bring together in one place a high concentration of senior people in the investment community from firms such as: Babcock & Brown, Cintra, Poseidon Resources, Goldman Sachs, Credit Suisse, Carlyle, Group, Nuveen Asset Management and others. Also represented are senior people in the public sector that are seeking private investment for their infrastructure projects, such as Geraldine Knatz, Executive Director, Port of Los Angeles who is a featured speaker at the conference.

The conference offers a timely opportunity for the Authority to take advantage of the value that such a collection of financing experts brings in helping to secure private financing for the Orangeline High Speed Maglev. The Governor’s office has challenged the Authority to bring to the table investors who will state that they are willing to invest in the Orangeline High Speed Maglev and what they want in return from the state. Our ability to bring investors forward who demonstrate a clear interest and commitment to partner with the Authority and the state could be the key factor in securing the Governor’s support for the project.

The Authority’s initial meetings with a small sample group of investment bankers have shown that there is investor interest in the Orangeline High Speed Maglev. Attendance at the PPP conference will serve as a follow-up to the initial meetings and focus specifically on responding to the request from the Governor’s office. Our aim will be use the opportunity at this conference toward securing demonstrated investor interest in the project.

The Authority Board has previously authorized travel expenditures for the purpose of meeting with investment bankers. This request seeks authorization for additional expenditure to cover the conference registration fee of $1899.
ATTACHMENT

1. 2nd Annual North American PPP & Infrastructure Finance Conference
The 2nd Annual
North American
PPP & Infrastructure
Finance Conference

September 25th and 26th, 2007 ■ The Waldorf Astoria, New York

Silver Sponsors:

Bronze Sponsors:

With participation from key speakers including:

Barbara Reese, Assistant Secretary, Virginia DOT
Kenneth Newman, CFO, Wisconsin DOT
Cedric Grant, Assistant Secretary, Louisiana DOT
James Bass, CFO, Texas DOT
Kathy English, CFO, Delaware DOT
Marsha Johnson, CFO, Florida DOT
Peggy Catlin, Deputy Executive Director, Colorado DOT
David Livingston, Chief Executive Officer, Infrastructure Ontario
Steve Hogan, Executive Director, Northwest Parkway Public Highway Authority
John Hnatyshyn, Principal Advisor, Infrastructure Canada
Senator John Carona, Texas
William Armbruster, Deputy Assistant Secretary for Privatization, US Army
Larry Spring, CFO, City of Miami
Emeka Moneme, Director, Washington DC DOT
Eric Sisco, President, APM Terminals, N.A.

Geraldine Knatz, Executive Director, Port of Los Angeles
Walter Howard, Senior Vice President, American Water
Elizabeth Rao, Assistant General Manager, Head of FasTracks, RTD, Denver
Malcolm Macintyre, Babcock & Brown
Jose M. Lopez Fuentes, Director, Cintra
Andrew Kingman, CEO, Poseidon Resources
Jeffrey Simon, President, Actus Lend Lease
Mark Florian, Managing Director, Goldman Sachs
Markus Pressdee, Managing Director and Head of Infrastructure, Credit Suisse
John W. Kunkle, Senior Portfolio Manager, Private Placement Division, Allstate Investments, LLC
Barry Gold, Managing Director, Carlyle Group
Aaron Gold, Managing Director, AIG Highstar
William M. Fitzgerald, Managing Director, Chief Investment Officer, Nuveen Asset Management

www.euromoneyseminars.com/NAPPP07
A pressing demand for new and improved infrastructure has seen a surge in the popularity of Public Private Partnership deals in the USA and Canada. This increase in deal volume necessitates governments, contractors, investors and financiers expanding and educating their teams to cope with the intricacies and sensibilities of these deals. With this in mind, we are running a separately bookable pre-conference workshop on the basics of North American PPP. This will provide an informative bite-size guide to all those looking to become more involved with PPP who wish to get more comfortable with the nuts and bolts business before making a bigger push.

The workshop represents a unique opportunity for education ranging from the basic history, structures and players in PPP deals, right through to the procurement process, to intricate structuring, management, procedural, tax, accounting, legal and documentary issues. The interactive setting offers a chance for you, your team and your department to be brought right up-to-date with all aspects of North American PPP deals.

Each session will open with a brief introduction, overview of the topic and clarification of terms before moving on to a detailed, step-by-step instructional. It will offer delegates the ideal opportunity to get up-to-speed on the key issues that affect the sector and prepare for the senior-level discussion that the main two-day conference promises to include.

The workshop will include instruction in the need-to-know aspects of PPP deals including:
- The history and potential applications of PPP
- Basic structures and asset classes
- Financing options for PPP deals
- Tax and accounting implications and structuring
- Legal and documentary issues
- The procurement and bidding processes
- Project management
- Contract management

If you desire requisite industry knowledge in order to make the most from the North American PPP and Infrastructure Finance Conference, this is an opportunity not to be missed.

**Your workshop leader:**
David Narefsky is a partner in the Government Practice Group of Mayer, Brown, Rowe and Maw. The firm has been counsel in the major privatization transactions that have been completed or are now underway in the United States, including the Chicago Skyway, the Indiana Toll Road and Chicago-Midway Airport. As well as a leading role in these transactions, David has been actively involved in the drafting and analysis of PPP legislation for various state and local jurisdictions.

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**DAY ONE – September 25th, 2007**

08.15  Registration and coffee
09.00  Chairman’s opening remarks
         Tom Nelthorpe, Editor, Project Finance Magazine
09.15  Politics, needs, laws and deals: Understanding the state of play across different states
         Are the projects there? A review of project requirements
         Is there strong political support?
         Is legislation adequate? Will the right laws get passed? Will projects receive adequate protection?
         Investment risk in different states
         Highlighting the states ready for PPP take-off and those returning to the drawing board
         Update on projects currently in the pipeline
         Barbara Reese, Assistant Secretary, Virginia DOT
         Marsha Johnson, CFO, Florida DOT
         Peggy Catlin, Deputy Executive Director, Colorado DOT
         Kenneth Newman, CFO, Wisconsin DOT
         Cedric Grant, Assistant Secretary, Louisiana DOT
         James Bass, CFO, Texas DOT
         Kathy English, CFO, Delaware DOT
         Emeka Moneme, Director, Washington DC DOT
         Moderated by:
         Bob Prieto, Senior Vice President, Fluor
10.15  A comfortable ride: How primary and secondary investors are approaching infrastructure
         Efficient portfolio allocation: Is infrastructure equity, real estate or a separate asset class?
         Have US institutional investors found a way to become comfortable with such investments yet?
         How Canadian institutional investors have approached the sector
         Necessary risk mitigation operations
         How much institutional liquidity exists in the area?
         Barry Gold, Managing Director, Carlyle Group
         John W. Kunkle, Senior Portfolio Manager, Private Placement Division, Allstate Investments, LLC
         William M. Fitzgerald, Managing Director, Chief Investment Officer, Nuveen Asset Management
         Aaron Gold, Managing Director, AIG Highstar
         Moderated by:
         Allan T. Marks, Partner, Milbank Tweed Hadley & McCloy LLP
11.00  Coffee and networking
11.45  Overview of the Canadian PPP sector
         Highlighting similarities and differences with the US model
         Assessing the role of federal and provincial government
         Reviewing large ticket transport deals currently ongoing
         Substantial deal flow in small ticket transactions: Focus on water, waste, renewables and social infrastructure
         How much deal potential remains in the Canadian PPP sector?
         John Hnatyshyn, Principal Advisor, Infrastructure Canada
         David Livingston, Chief Executive Officer, Infrastructure Ontario
         Paul Dunstan, President, Plenary Group
14.45 “Texas Hold’em” – An update on the current situation

- Is the politics a knee-jerk or a ground swell?
- Reviewing current activity in the state legislature
- What will the effect be on different states and the industry in general?
- Will Texan deals get through the instability?
- What does this mean for different equity players?

James Bass, CFO, Texas DOT

15.15 The globalization of the infrastructure sector

- Why are foreign contractors more willing to take equity stakes than home grown companies?
- The politics and realities of foreign ownership
- How aggressive can the bidding get? Is the current environment sustainable?
- Assessing different attitudes to construction risk
- Identifying the contrasting strategies of different bidders
- What additional liquidity and competition means for the public sector

Jose M. Lopez Fuentes, Director, Cintra
Francisco Fernandez Lafuente, Senior Director, Dragados
Ignacio Garcia, Development Director, OHL Concesiones
Bob Prieto, Senior Vice President, Fluor

Moderated by: Pamela Bailey-Campbell, Vice President, Public-Private Initiatives, PB

16.00 Coffee and networking

Exclusive Networking Session for Government Officials and Public Sector Representatives

16.30 The difference efficient tax planning can have on making a PPP project work

- Correlating effective tax mitigation and successful project completion
- Looking at tax requirements for PPP and municipal bond issuance across different asset classes
- A closer look at the legislation
- The role federal government can play
- Tax considerations when choosing an appropriate financing structure
- Providing incentives for private investors

Andrew Kingman, CEO, Poseidon Resources
Walter Howard, Senior Vice President, American Water
Stephen Zoota, Managing Director, Hydro-Captial Corporation

17.00 WATER AND WASTE

Flow to flow: Water treatment and waste management as a gateway to enhanced PPP

- The history and current state of deal flow in this area
- Highlighting current needs and reviewing the project pipeline
- Environmental considerations and EPA fines
- How efficient execution in a less politically sensitive sector could lead to advances in other areas
- Applying the same financing tools on a grander scale
- Case study analysis

17.45 Close of Day One followed by Drinks Reception
10.00 ROADS
Update on Northwest Parkway: The deal so far and it’s ramifications
• A closer look at the financing model now in place
• Traffic forecast levels: What is targeted and what is needed
• Evaluating the potential of ring road completion
• How this model has differed in most aspects to a conventional US PPP
• Why have investors been willing to look at this model?

Steve Hogan, Executive Director, Northwest Parkway Public Highway Authority

10.30 Coffee and networking

11.30 PORTS
Still waters run deep - but not always deep enough: Prospects for additional private investment and Public Private Partnerships in the US ports sector
• Why and how US ports are anticipated to grow in the coming years
• Current constraints on the efficiency of US port operations
• The need for intermodal, rail and other supporting infrastructure
• Why are ports an attractive investment?
• Private investment and PPP models that have worked or have potential in the sector

Geraldine Knatz, Executive Director, Port of Los Angeles

12.10 RAIL
Potential in passenger rail: Financing needs and ambitious expansion
• Overview of the expansion currently planned and the needs for increased service
• What sort of finance model has proved most successful?
• Update on current projects in the pipeline
• Applying availability payment structures
• The role federal, state and municipal government can play

Elizabeth Rao, Assistant General Manager, Head of FasTracks, RTD, Denver

12.40 STADIA
Public and private on the same team
• What structures are best used for stadium finance?
• Transportation and facility considerations
• Assessing investment needs in North America
• The role the government has to play
• Does stadium finance represent a more PR-friendly private public initiative?
• Case studies of Greenfield and Brownfield developments

Gregory Carey, Managing Director, Co-Head of National Infrastructure, Goldman Sachs

13.15 Lunch

14.30 AIRPORTS
Applying PPP to airport privatization, modernization and expansion
• Legal and regulatory frameworks relating to airport privatization
• Identifying different national need
• Can Chicago Midway be a catalyst for further development of the sector? A project update
• Adding value: Long term concession agreements
• Deal flow expanse through part privatization arrangements and sub-airport transactions

Rich Golaszewski, Executive Vice President, GRA

15.00 MILITARY HOUSING
Private finance opportunities in the military housing sector
• Review of current facilities and the urgent investment needed
• PPP, infrastructure or real estate?
• Issues of taxation on such assets
• What deals have been done to date and what is in the pipeline?
• Using availability payment structures

William Armbruster, Deputy Assistant Secretary for Privatization, US Army

15.30 PARKING
A space in the market: Municipal parking and PPP
• Exploring appropriate structures
• How many potential deals are of an adequate size for investment?
• Making calculations on efficiency lag
• Avoiding the headlines
• Case study analysis: Chicago parking

Kent Rowey, Partner, Freshfields

16.00 Chairman’s closing remarks followed by close of conference
After several years of growing activity, Public Private Partnerships (PPP) have begun to achieve a ground swell of publicity in North America. Flagship transactions in the toll road arena have been joined by activity in other sectors such as airports, ports, water & waste, lotteries and parking.

The infrastructure shortfall in North America has been well documented and slowly but surely PPP is becoming a viable tool across different states and provinces to finance the gap, both in terms of Greenfield and Brownfield projects.

However, there are serious obstacles to the further development of the industry. The complex nature of politics in North America has led to challenges for financiers, investors and contractors in convincing all from local to national level that PPP is an accountable and credible form of public finance. Moreover, on an electoral level, those in the public sector that have pushed for such solutions have often had to fight hard to gain acceptance. What is clear is that to push projects through, strong leadership is needed, along with effective communication and an increasingly credible history of procurement success.

Legislation is another issue that continues to impact development in different states and municipalities. As more governments become interested in creating the possibility for PPP, the necessity for a conducive legislative environment becomes paramount. Whilst some states are now on track, others have been forced to return to the drawing board.

However, overall North American PPP seems to be moving in the right direction, and although deals may sometimes take a painstakingly long time to come to fruition, it is clear that models are developing that both the public and private sector are comfortable with.

In 2006, Project Finance Magazine hosted the inaugural North American PPP and Infrastructure Finance Conference with unprecedented success. Over 900 senior decision-makers attended the event including government officials, investors, financiers, advisors, construction firms, sub-contractors, insurers and lawyers.

Event was very useful for networking as well as educating regarding North American prospective investment opportunities

Jerry Stalein, Arcapita Inc.

As the market develops, the areas that need to be discussed have also changed. Key questions for 2007 include:

- What can be learnt from the flag ship transactions in the market so far? What will change going forward?
- Are infrastructure assets currently over-priced due to the current levels of liquidity available? How are different institutional investors approaching such assets? Is the auction model the most efficient way to market such assets?
- Why are US construction firms less comfortable with taking equity stakes than their international counterparts?
- Could more revenue be derived from infrastructure assets if they were kept under public management?
- What factors make a state or province ripe for PPP activity?
- Can adequate operating efficiency be derived through shadow tolls and availability payments?
- How can the balancing act of public appeasement and marketability be best undertaken with regards to concession length?
- How successful have financial institutions been in walking the tightrope of finance and advice?
- Can federal government play a meaningful role in the development of PPP through PABs, TIFIA, major corridor listings and the provision of deal expertise?
- Aside from toll roads, what other infrastructure assets are primed for a future with PPP? What actually constitutes North American infrastructure?
- Is political and public opposition to PPP being adequately addressed? How effectively have deals been presented in the public domain? Is political risk being adequately mitigated? What impact would an ugly deal have?
Please contact Dan Sheriff (dsheriff@euromoneyplc.com) to register.

First 50 public sector representatives attend for free

Separately Bookable Pre-Conference Workshop US$799

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- **Three Delegates**: US$5497 ($300 Saving)

- **Separately Bookable Pre-Conference Workshop**: US$799

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**TRAVEL & ACCOMMODATION**

**VENUE:**

The Waldorf Astoria,
301 Park Avenue,
New York, NY 10022-6897

Phone: (USA) +1 212 355 3000
Fax: (USA) +1 212 872 7272

**For all Accommodation please contact the reservations team at Banks Sadler on +44 (0) 1904 682639 or email euromoneyseminars@banks-sadler.co.uk. Banks Sadler have negotiated preferential room rates on behalf of all Euromoney delegates and look forward to assisting you with the best accommodation for your budget.**
AGENDA REPORT

TO: Members of the Orangeline Development Authority
FROM: Albert Perdon, Executive Director
DATE: August 81, 2007
SUBJECT: Approval of Warrant Register

RECOMMENDATION

That the Authority Board approves the Warrant Register for the period July 12, 2007 through August 8, 2007.

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AGENDA REPORT

TO: Members of the Orangeline Development Authority

FROM: Albert Perdon, Executive Director

DATE: August 8, 2007

SUBJECT: Communication Items to the Board

RECOMMENDATION

That the Authority Board reviews and discusses the information items and provides possible direction to staff.

INFORMATION ITEMS

Treasurer’s Report

The Finance Director’s July 2007 Report, and revised June 2007 Report is shown in Attachment 1.

News/Events

- **Cartozian to lead efforts at Securing Maglev.** Downey City Councilman Kirk Cartozian was elected Chair of the Orangeline Development Authority last week and will lead the agency’s efforts at bringing high-speed maglev service to Southern California, with potential shuttle service in Downey. The maglev, Cartozian said, will be privately funded and help ease traffic congestion throughout Southern California. Cartozian also said he anticipates trips to Wall Street to secure corporate investors. As chairman, Cartozian will oversee the recruitment of other cities to the Authority, as well as securing $200 million in private financing. Source: Eric Pierce, The Downey Patriot, July 27, 2007.

- **Over the next half-century, California’s population will explode by nearly 75% to the 60-million mark – about the same number of people as Italy has today, with Los Angeles and Orange County comprising 28.3% of the state’s population.** L.A. County alone will add 3.5 million to top 13 million by 2050. Orange County will add 1.1 million to top 4 million residents. USC Professor Genevieve Giuliano warned that if major problems like traffic congestion and housing costs aren’t addressed the middle class is going to exit California, leaving behind very high-income and very low-income residents. Source: Maria L. La Ganga and Sara Lin, Times Staff Writers, July 10, 2007.

- **“Subway to the Sea” plan still adrift – Despite some hopeful signs, a Wilshire line remains hung up on the question of who will foot the $5-billion price tag.** Los Angeles Mayor Antonio Villaraigosa called the “Subway to the Sea” crucial to the city's future and made it a top priority. “This is not
something that we can do quickly," said MTA Chief Roger Snoble. A telling moment will come later this year when the agency's board approves a long-range plan that prioritizes future projects. Villaraigosa and his appointees to the board are pushing for the subway to be at or near the top of the list. The MTA board approved a $5-million "alternatives" study of the Wilshire subway last month. Los Angeles County Supervisor Don Knabe, one of several MTA Board members who approved the study, pointedly raised questions about the project's viability, including who should be taxed. Source: ari.bloomekatz@latimes.com, steve.hymon@latimes.com and Rong-Gong Lin II, July 14, 2007.

Meetings

Authority Board Members and the Executive Director participated in or are scheduled to participate in the following meetings:

- **Governor's Office** – July 16, 2007; Executive Director conference call with David Crane, policy advisor to Governor Schwarzenegger on economic development and private investment. (See follow-up information provided to Mr. Crane in Attachment 2.)
- **City of Downey** – July 24, 2007; City Council approves Councilmember and Authority Chair Cartozian motions in support of Orangeline High Speed Maglev financial plan, Milestone 7 – station-area development policies, and Authority proposal to California Transportation Commission.
- **City of Glendale** – August 2, 2007; Chair Cartozian and Executive Director meeting with Glendale City Councilmember Frank Quintero.
- **League of California Cities** – August 2, 2007; Chair Cartozian and Executive Director attended Los Angeles Division League meeting in Santa Clarita and spoke with several state and local officials about the project, including Assemblymember Cameron Smythe and Billie Greer, Governor Schwarzenegger’s Los Angeles Office Director.
- **City of Los Angeles** – August 3, 2007; Executive Director meeting with City Planning Director Gail Goldberg and staff.
- **County of Los Angeles and Los Angeles County Metro** – August 8, 2007; Board Members and Executive Director meeting with LA County Supervisor and Metro Board Member Gloria Molina (rescheduled from July 11 and July 30, 2007).
- **Orange County Transportation Authority** – August 9, 2007; Vice Chair Edgar and Executive Director appearance before OCTA Board Transit Planning & Operations Committee to secure support for the Orangeline Maglev. (See OCTA staff report in Attachment 3.)
- **City of Palmdale** – August 15, 2007; Executive Director attendance at Palmdale City Council meeting. City Council will consider resolutions in support of Orangeline.
- **Los Angeles City Council** – August 15, 2007; Chair Cartozian and Executive Director meeting with City Councilmember Bernard Parks.
- **City of Santa Ana** – August 20, 2007; Vice Chair Edgar and Executive Director presentation to Santa Ana City Council to secure city membership in Authority.

ATTACHMENTS

1. Treasurer’s Reports June 2007 (Revised) and July 2007
2. Teleconference: David Crane – Al Perdon, July 16, 2007; Summary of Discussion Points
TREASURER'S REPORT
ORANGELINE DEVELOPMENT AUTHORITY

June 2007 (Revised)

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__________________________
Mike McCormick
Treasurer
Teleconference
David Crane – Al Perdon
July 16, 2007
Summary of Discussion Points

1. **Who is the Orangeline Development Authority and what is the Orangeline High Speed Maglev?**
   - The Authority is a joint powers agency currently composed of 14 cities organized to pursue development of the Orangeline High Speed Maglev project. The Authority has partnered with a private development team led by ARCADIS. The ARCADIS Team has invested $1.1 million in the project.
   - The Orangeline High Speed Maglev is a 108-mile ground transportation system for moving passengers and cargo that will extend from Palmdale to Irvine. It is unique from most other systems in that its $19bn construction cost and annual operating cost would be funded entirely from project revenues.

2. **Why Palmdale?**
   - The line goes to Palmdale because the City desires Orangeline High Speed Maglev service to support the city’s goals for improving mobility, growth and development.
   - The project would provide a fast connection to Palmdale Airport, which is a key component of the adopted regional strategy, and City of Los Angeles policy, for disbursing air travel demand in Southern California.

3. **Is the Orangeline High Speed Maglev project being developed for profit?**
   - Yes, the project is being pursued through a public private partnership in which it is anticipated that the project will generate a profit for public and private investors and for the private development partners.
   - There is also a potential for a project surplus for the public partners.

4. **What are we offering the State and what do we want from the State?**
   - The State is experiencing a number of pressing issues related to transportation, air quality and economic development. We are offering to partner with the State to bring forward a significant transportation, land development and economic development solution that is largely privately funded, while also providing air quality improvements.
   - We want the state to embrace the project, to make the project part of its vision for Southern California; we want the state to be an investor in the project; or if not an investor, we need the state to provide support, in the form of loan guarantees or other credit enhancements, in order to attract private investors; we want the state to provide specific rights-of-way for locating the elevated maglev guideway; we also want the state to help maintain a competitive operating environment for transportation services in the corridor so as not to risk the investment in the Orangeline High Speed Maglev project.

5. **Why maglev?**
   - Maglev technology has been under development for 30 years and is now the most advanced ground transportation technology available; it offers significant performance advantages and higher over-all value per dollar invested compared to other technologies in terms of speed, reliability, safety, environmental impacts, energy and cost-effectiveness.
   - Maglev is the best technology for achieving the growth, transportation and air quality goals of the project development corridor.

6. **Why the difference in Orangeline High Speed Maglev and California High Speed Train Costs?**
   - The Orangeline High Speed Maglev offers a different type of service than that offered by the California High Speed Train – our service is aimed at the commuter market, as opposed to the longer-distance inter-city market.
   - Our system is mostly elevated, as opposed to the state High Speed Train which operates primarily at-grade. The Orangeline High Speed Maglev operates at a higher service frequency (every 5 minutes), thus requiring more vehicles; our stations are more closely spaced (every 6 miles on average), and the system operation is automated; these design and operating parameters add
capital costs, but greatly reduce operating costs and generate higher ridership and operating revenues.

7. **What is the pricing on the Orangeline High Speed Maglev?**
   - Pricing will vary depending on distance, time of day, advance purchase and other factors.
   - Our financial model tested different fares; at an average fare of $18 for the average 20-mile trip, the system would generate sufficient ridership and revenue to meet debt and operating fund requirements over the 50-year financial evaluation period. At the same time, the system would be competitive with the auto, providing a higher level of service at a lower cost.

8. **What is the projected ridership and is the projection reliable?**
   - An estimated 255,000 passenger trips per day would be made on the system in 2027, or about 77 million trips per year.
   - Adopted SCAG models were used to estimate the ridership; the Authority and ARCADIS have a high level of confidence in the ridership estimate.

9. **The proposed State contribution (investment/loan guarantees, rights-of-way, fair competition protection) provides value to the project; should the State not get a return on its investment in the project?**
   - The state has an opportunity to realize a return on its investment in the project.
   - Any possible return the state would realize on its investment in the project would be in addition to the public benefits the project will provide in terms of transportation capacity enhancement, economic development, air quality improvements, and so forth, at substantially less cost than by conventional project funding and delivery.

10. **How does the California High Speed Rail Authority view the Orangeline High Speed Maglev?**
    - Authority staff has expressed the position that they do not believe the Authority will be able to secure private investment in the project, and that the Orangeline High Speed Maglev would be in conflict with the state High Speed Train where it operates on the same alignment from Palmdale to Union Station.
    - Our meetings with Wall Street investment bankers revealed investor interest in the project; we believe that it is more likely for the Orangeline High Speed Maglev project to attract public or private construction financing backed by project revenues than it is for the state High Speed Train project to attract public funding through federal grants and yet-to-be-voter-approved General Obligation bond funds, especially if voters understand the extent of taxpayer subsidies associated with the High Speed Train system and the impact of those subsidies on the funding of other important priorities, particularly transportation priorities in Los Angeles and Orange Counties.
    - We believe that physical conflicts can be avoided where the two projects run along the same corridor, that the two projects serve different markets and that over a 50-year time frame we need several solutions; both projects would accommodate only a portion of total corridor demand.

11. **Does the Orangeline High Speed Maglev serve the City of Anaheim?**
    - Yes it does. The City of Anaheim has an opportunity to decide if it wants to locate an Orangeline High Speed Maglev station within the City boundaries or be served by a shuttle connection to one of the planned stations in its neighboring cities (Stanton, Garden Grove and Santa Ana).

12. **How do we know that the Orangeline High Speed Maglev is the best solution?**
    - The Authority's studies have led the Authority, its member agencies and its development partners to conclude that the Orangeline High Speed Maglev is a desirable solution for helping to achieve multiple local and state goals relating to current and future land use planning and development, housing, transportation, environment and economic improvement.
    - The Authority and ARCADIS have considered alternative solutions and conclude from the extensive analytical work undertaken during the past seven years that the Orangeline High Speed Maglev offers the public the greatest value of all practical alternatives.
I. Description of Orangeline High Speed Maglev and Orangeline Development Authority

The Orangeline High Speed Maglev project is aimed at implementing a $19 billion high speed maglev system, whose construction would be privately-funded, and associated station-area housing and other land development in order to improve mobility and support future growth. Public agency support is required to provide available rights-of-way for the elevated maglev monorail system and various project approvals. The project offers public and private investment opportunities as well as significant economic and environmental benefits.

High Speed Maglev is an advanced, high-speed ground transportation technology under development over the past 30 years, primarily in Germany and Japan. The first commercial maglev was placed into service in Shanghai, China in 2003, using German Transrapid technology developed by Siemens and ThyssenKrupp. The Shanghai Maglev was built in 3 years, operates at 99.9 percent schedule reliability and has carried over 11 million riders since going into operation. The Orangeline High Speed Maglev would use the same maglev technology that is currently operating in Shanghai.

Japan plans to place its maglev technology into operation in 2025, replacing the steel wheel-on-steel rail Shinkansen “Bullet Train” operating between Tokyo, Nagoya and Osaka. The Japanese government has made this decision based upon its determination that the Shinkansen steel wheel-on-steel rail technology has “reached its technology and capacity limits” and is not able to meet the future requirements for moving people in the corridor.

The Orangeline High Speed Maglev project is being pursued through a public private partnership consisting of the Orangeline Development Authority and its development partner, a consortium of 21 firms led by the Dutch infrastructure engineering firm ARCADIS. Background information on the project, the Authority and the ARCADIS team can be found at www.orangeline.calmaglev.org.

The Authority is a joint powers agency organized in 2003 and is currently comprised of 14 cities located along the 108-mile Orangeline High Speed Maglev corridor. The Orangeline High Speed Maglev directly serves a total of 28 cities located within the development corridor, which extends from Palmdale to Irvine. The Authority is currently in discussions with the non-member corridor cities to encourage their participation as members of the Authority.

The Authority is led by a Board of Directors comprised of mayors and council members from each of the Authority’s 14 member agencies. Downey City Council Member Kirk Cartozian serves as the Authority Board Chair and Los Alamitos City Council Member Troy Edgar serves as Vice Chair. Vernon City Council Member Mike McCormick serves as Secretary/Treasurer and Bellflower Mayor Scott A. Larsen is the Authority’s Auditor (Scott served as Chair for the past two and half years.) I serve as the Authority's Executive Director. Information on my background and experience can be found at www.albertperdon.com

The Authority and ARCADIS just completed Phase 1 preliminary engineering, environmental assessment and financial planning studies in which the ARCADIS team invested over $1 million. The Authority and ARCADIS have concluded from these studies that the Orangeline High Speed Maglev $19 billion construction and vehicle acquisition costs can be largely privately funded from system operating revenues.
2. Why Palmdale?

The City of Palmdale joined the Orangeline Development Authority as a result of its interest in seeing that the high speed maglev service come to its city. Palmdale is part of the growing Antelope Valley region of northern Los Angeles County. Palmdale and Lancaster are the fastest growing cities in Los Angeles County.

Orangeline High Speed Maglev service will bring the City of Palmdale and the highly-developed urban area south of the San Gabriel Mountain range closer together. It will facilitate economic development in Palmdale and the surrounding area and foster development of Palmdale Airport, which is seen as a major relief valve for LAX and alternative airport for millions of people in the San Gabriel, San Fernando, Simi, Santa Clarita and Antelope Valleys who now must drive long distances on congested freeways to reach LAX.

The development of a high speed maglev line to Palmdale is a priority in the Southern California Regional Transportation Plan. The City of Los Angeles City Council has given top priority to developing a high speed line from Union Station to Palmdale. The Orangeline High Speed Maglev will provide a cost-effective link for thousands of commuters traveling between the Antelope Valley and southern destinations and helps to alleviate traffic congestion in the SR-14 corridor.

3. Is the Orangeline High Speed Maglev project being developed for profit?

Yes, a profit is anticipated for the project investors and development partners; the project is also expected to provide an operating surplus for the public agency partners. The financial plan is described in the Milestone 10 - Orangeline High Speed Maglev Financial Plan report available for review at www.orangeline.calmaglev.org. The attached, recently-prepared supplement (Financial Plan 2h) shows the following potential economic benefits of the Orangeline High Speed Maglev project over its first 50 years of operation:

- Project Surplus - $23.3bn
- Station-area Improvements and Feeder Services - $21.1bn
- Investor Interest Earnings - $24.4bn
- User Cost Savings - $3.1bn
- User Travel Delay Savings - $36.3bn
- Emission Savings - $6.0bn
- Reduction in Gasoline Consumption - $2.5bn gallons
- Reduction in NOX and CO2 emissions in 2027 - 745,000 tons

Two key factors underlie the output of the financial model that produced the above results - ridership and borrowing costs. Lower ridership and higher cost of capital could have a significant impact on the financial results. Not taken into account in the financial model is the value of available public rights-of-way that are assumed to be used to locate the elevated maglev system, or the value of actions government agencies may take in support of the project.

Additionally, two potentially large sources of funds have not been included in the financial projections. The first is cargo revenues. A modest estimate of high-value small package freight revenue is included in the estimates, however the potential revenue from cargo containers and more substantial levels of freight/cargo volumes has been excluded, pending further study of the freight/cargo market potential and means for accommodating this market. A preliminary maglev freight study undertaken by the Authority and Transrapid confirmed the ability of the maglev system to carry container cargo. This study hinted at the potential container cargo revenue, which could be
equal to or greater than passenger revenue. Accommodating container cargo would add significant
cost to the maglev system.

A second funding source not included is station-area development fees. A projected $24 billion in
station-area housing and other development is projected to occur around the 18 stations located
along the 108-mile project corridor. A reduction in parking requirements enabled by the Orangeline
High Speed Maglev could generate $1 billion or more in revenue. Capturing a portion of the
increase in land value as a result of the project and increased development entitlements could
generate an additional $1 billion or more in revenue. The potential of these and other
revenue sources will be further explored in the next project development phase.

4. What are we offering the State and what do we want from the State?

We are offering the State an opportunity to partner with the Authority and its development team by
investing in and helping to bring forward an innovative and excitingly new approach to solving major
state and local issues. Our project would provide the State a means for effectively doubling the size
of the recently-approved Infrastructure Bond program – without a tax increase or sale of additional
General Obligation bonds.

State participation would facilitate the construction of a major transportation improvement with the
capacity of an 8-lane freeway extending 108 miles through one of the State’s most
densely developed and heavily congested corridors, without relying on tax revenues to fund its
construction. The project has strong local government support and is a true "Green" solution with
major GHG, energy and other environmental benefits. State support is necessary to implement the
project.

The State's role in the project would be as follows:

- Include the Orangeline High Speed Maglev project in the State's vision for future
transportation infrastructure development and encourage development of future projects that
are modeled after the Orangeline High Speed Maglev project.
- Provide state highway rights-of-way along the SR-14 corridor to locate the elevated
Orangeline High Speed Maglev system.
- Protect the public and private investment in the Orangeline High Speed Maglev by ensuring
fair competition for transportation services in the project corridor. If a similar service is
introduced within the corridor and the users of that service benefit from state subsidies for
system construction and operation, provide a comparable level of subsidy benefit to users of
the Orangeline High Speed Maglev, if necessary, to ensure a level playing field that ensures
a competitive market for transportation services.
- Invest in the project, beginning with $200 million to complete pre-deployment tasks
(preliminary engineering, environmental assessments and clearance, financial planning,
community outreach, government approvals) and continuing with investment in some or all
of the $19 billion in construction costs.
- If not a direct investor, provide credit enhancements or loan guarantees. (The Authority
submitted a proposal to the CTC for such investment using Infrastructure Bond funding but
was told that the Authority and the Orangeline High Speed Maglev project do not qualify for
Infrastructure Bond funding.)

We believe that the proposal to the CTC is a good offer that deserves serious consideration by the
State. The project could generate billions of dollars in interest earnings for the State, even at lower
interest charges than would be incurred with private investment options.
Our financial planning has assumed a significant cost for construction/operation financing. Financial model 2h assumes the following interest rates:

- Initial Planning Phase – 10%
- Construction Phase – 8%
- Initial Operating Phase – 6.5%
- Later Operating Phase – 5.5%

These rates were selected to reflect the perceived risks to investors of each development phase. They compare to current 30-year municipal bonds rates of 4.71%. Our research indicates that typical municipal bond funding is likely not available for the early project development phases, due in large part to the uncertainties of government approvals required to advance the project. This risk factor, and the resulting cost of borrowing, is something that the State can greatly influence.

State loan guarantees would help attract private financing, and enhance our ability to sell municipal tax-exempt bonds. Should the State be willing to provide loan guarantees that would reduce our borrowing costs to the current 4.71% rates for tax-exempt bonds, it could put a claim on the difference between non-guaranteed and guaranteed rates. The income to the State would be substantial.

Hedge funds and similar product options would likely be attracted to this investment opportunity, due to their tolerance for higher risks. Driving up the cost of initial project funding are the often gigantic fees paid to hedge-fund managers, which typically charge a 2% or more asset-based fee on top of a 20% or more performance-based fee. Wall Street is developing new products (referred to as “synthetic” or “clone” hedge funds) that are designed to mimic hedge-fund performance at much lower fees. Despite these newer and lower-cost options, they still retain a significant premium associated with the underlying loan risk to the private investor.

In addition to providing the State an investment opportunity, the project would provide tremendous economic benefit and transportation and air quality improvements. It brings local government and the state together as partners with the private sector to bring California to the forefront in innovation and "out-of-the-box" solutions to address serious issues that the State and local agencies are facing. In the past, California was looked to as a leader in transportation and technology. The Orangeline High Speed Maglev could help to restore that leadership position.

The project would give a significant boost to the State's leading role in air quality improvements and green house gas emission reductions by significantly reducing the 40% of carbon dioxide emissions from cars and trucks. The project could establish California as the center of a new transportation industry, and it would create hundreds of thousands of jobs.

Maglev projects in a number of other states are pursuing maglev projects, all of which require large funding grants. Las Vegas has been successful in securing a $45 million federal grant to advance its maglev project from Las Vegas to Primm (with future extensions planned to Anaheim), due in large part to the support of Senator Harry Reid. This project will require billions of dollars in federal support to fund construction costs. Other projects in Atlanta, Pittsburgh and Baltimore-Washington, D.C. are vying for multi-billion federal grants for their projects – federal grants that California taxpayers would help to fund. The Orangeline High Speed Maglev could help to set the model for federal support of other transportation projects and require greater private participation in those projects, thereby reducing the California taxpayer burden in support of transportation projects in other states.

5. **Why maglev?**

Maglev technology best meets the Authority's corridor development goals. Maglev was selected for this corridor development project because its performance and cost features are far superior to those
of any available alternative that currently exists or that is anticipated to be available in the future. High speed maglev provides higher value at a lower cost compared to other possible alternatives, such as high speed rail, freeway expansion, including toll lanes.

The Orangeline High Speed Maglev provides superior performance in the areas of average travel speed, safety, service frequency, schedule reliability, energy consumption and community impacts. The maglev system was designed specifically to be environment-friendly; noise levels are low and there are no direct emissions. A technology comparison of Orangeline High Speed Maglev and California High Speed Rail technologies is provided in Exhibit 1. A discussion of key differences in High Speed Train and High Speed Maglev funding and service concepts is described in Exhibit 2.

In some respects, Orangeline High Speed Maglev Service between Palmdale and Irvine, a travel distance comparable to the distance between L.A. and San Diego, is more like air travel than train travel. Even there, maglev service beats the performance of air travel in terms of comfort and service reliability. The Shanghai Maglev has been operating for three years at a schedule reliability of 99.9%. For the 30 million users of U.S. airlines in 2006, average delays exceeded 50 minutes and only 74% of flights arrived on time. In June 2007 10% of flights were delayed 45 minutes or more and cancelled flights almost doubled from 1.4% in June 2006 to 2.2% in June 2007. Perhaps the “airbus” is correctly named, operating much more to the performance standard of a bus than of a high speed maglev.

6. Why the difference in Orangeline High Speed Maglev and California High Speed Train Costs?

You indicated that the $19 billion capital cost of the Orangeline High Speed Maglev from Palmdale to Irvine is more than twice that of the projected cost of the California High Speed Train over the same distance.

A major reason for its higher cost per mile is the fact that the Orangeline High Speed Maglev will offer a much higher level of service than the High Speed Train can offer in terms of speed, service frequency and station access, which explains why the Orangeline High Speed Maglev attracts more riders and generates more operating revenue.

We have a reasonable level of confidence in our cost numbers. Orangeline High Speed Maglev cost estimates were developed by the ARCADIS Team using the results of cost estimates developed by various consulting teams (Parsons, URS, IBI Group, and others) for earlier Southern California Association of Governments (SCAG) maglev studies. The ARCADIS Team developed the cost projections from the bottom up using updated unit cost numbers from the prior studies and applying them to the requirements and conditions of the Palmdale-to-Irvine corridor.

The aerial maglev guideway is more costly to construct than an at-grade railroad based upon inherent design differences, but also because the maglev guideway includes the long-stator motor that powers the maglev vehicles. High Speed Train motors are in the train. While the maglev design results in a high infrastructure cost, since the motor is in the guideway and not in the vehicles, maglev vehicles are lighter and thus operating costs are reduced due to lower energy consumption.

The Orangeline High Speed Maglev cost estimate includes the cost of vehicles to provide 5-minute peak period service, which is about $3 billion of the $19 billion total project "construction" cost. The Orangeline High Speed Maglev cost estimate is based upon 18 stations compared to 7 stations for the state High Speed Train.

From Union Station to Irvine, the High Speed Train would operate at reduced speeds on the same track as Metrolink, AMTRAK and freight trains. A new dedicated alignment would cost $2 billion to $3 billion more to build than the proposed option and result in considerably more costs associated with the project’s environmental impacts on the communities the trains pass through. Thus, for this
section of the High Speed Train system, service would be considerably less than 200 miles per hour and more likely in the neighborhood of 50 to 60 miles per hour, with limited capacity and reduced service frequency, and thus less ridership and operating revenue.

International studies have shown maglev infrastructure costs to be relatively comparable to high speed rail (especially in urban areas). A new high speed rail corridor generally cannot be built for less than maglev in a metro area, unless it is simply using existing rail lines – but then of course, it wouldn’t really be high-speed at all.

Our cost-per-mile for the Orangeline High Speed Maglev is $176 million. The cost projection performed for the SCAG maglev project from West Los Angeles to Ontario Airport is about $150 million per mile. These numbers compare to freeway widening costs in Los Angeles County that are in the range of $250-300 million per mile, and the cost of extending the I-710 Freeway to Pasadena in subway configuration at a cost of $1 billion per mile. The freeway costs do not include the cost of vehicles.

7. What is the pricing on the Orangeline High Speed Maglev?

Different pricing options were reviewed in the financial models tested during the Phase 1 preliminary engineering and financial planning studies. The Milestone 10 Financial Plan arrived at a price of $18 for the average 20-mile trip, with longer distance trips costing more and shorter trips costing less. Subsequent planning, described in a Milestone 10 Supplement, considered alternate financial scenarios.

Financial Model 2h, attached, shows how the $18 price compares with auto ownership and operating costs for a comparable trip. Using the Orangeline High Speed Maglev for daily commuting could reduce transportation costs by as much as $3,000 per year, and by $8,000 or more when the value of reductions in travel delay and non-productive travel time are taken into account.

Consideration is being given by the Los Angeles County MTA to converting HOV lanes to toll lanes, similar to the 91 toll lanes in Orange County. The peak price of toll lane usage on the 10-mile 91 Expressway is $9.75, which is about $1.00 per mile. Should the region rely on toll lanes to meet future demand, the economics of travel will greatly favor the Orangeline High Speed Maglev. Orangeline High Speed Maglev cost saving would range from $10,000 to $20,000 per year compared to driving on a toll lane, while travel speeds could be about twice as fast on the Orangeline High Speed Maglev, depending on toll lane pricing.

These differences in the actual cost of transportation infrastructure options raise a significant policy issue for the State to ponder. Should the State, as well as local agencies, continue to focus public taxpayer dollars almost exclusively on transportation infrastructure that is inherently more costly and more damaging to the environment compared to a viable alternative – high speed maglev?

8. Ridership

The Orangeline High Speed Maglev is projected to carry 255,000 riders per day in 2027, which equates to about 77 million riders per year and about 5-7% of the total market in the corridor. The ridership demand is influenced by several key factors:

- High population in the corridor (4 million) and high population density (4,000/sq mi). About half the population is located in communities along the corridor with an average population density of 11,000/sq mi.
- Station-area transit-oriented development that increases the population within walk access of the 18 stations.
• The high speed, safety, reliability and frequent service of the Orangeline High Speed Maglev (90mph, 5-minute service frequency)

• A network of feeder services, including the urban metro rail network (currently at 73 miles and carrying over 280,000 riders per day) thereby expanding the reach of the Orangeline High Speed Maglev to many important destinations throughout the region.

• Congested roadways and higher cost and unpredictability of travel by auto. (For example, Caltrans estimates that within 17 years after completion of the Infrastructure Bond-funded I-5 widening project between the Orange County/Los Angeles County line and the I-605 Freeway, traffic conditions will be worse than they were before the freeway was widened - operating at Level of Service F for 15 hours of the day.)

These factors help to explain why ridership on the Orangeline High Speed Maglev is so much higher compared to the state High Speed Train system. High Speed Train stations are planned for Fresno and Bakersfield, 108 miles apart, equal to the distance between Palmdale and Irvine. The low population along this segment of the High Speed Train system generates insufficient ridership to produce the revenues required to cover the capital and operating cost of this segment of the High Speed Train system. As a result, the project requires the support of Southern California taxpayers and system users to cover the $15 billion cost of building the High Speed Train system through the Central Valley.

9. The proposed State contribution (investment/loan guarantees, rights-of-way, fair competition protection) provides value to the project; should the State not get a return on its investment in the project?

Yes, these items represent significant value to the project and this value should be taken into account in the partnership agreement between the Authority and the State. The value of each contribution element has not been calculated but the total could well be in the billions of dollars. At the same time, the State's contribution to the project should be considered in the context of its contribution to other transportation projects.

If the State, meaning taxpayers in general, is subsidizing travel on the state highway system and on other transportation systems, such as the proposed state High Speed Train, should the State not also support the Orangeline High Speed Maglev to the same degree? A key issue for the Orangeline Development Authority and its member cities, and for others as well, is to ensure that users of the Orangeline High Speed Maglev are not unfairly discriminated against. Orangeline High Speed Maglev users should not have to carry the full cost burden of the service provided by the maglev system, while at the same time being burdened with the cost of subsidies to users of other systems.

The State could argue that the state's taxpayers deserve to be compensated for their contribution to the project. But what would the State do with the revenue derived from the users of the Orangeline High Speed Maglev? Would it fund the state High Speed Train, fund freeway widening projects within the same corridor or in some other location, or fund the construction of new prisons or schools? Taxpayers from throughout the state will subsidize the billion-dollar improvements to SR-99 in the Central Valley that are being funded by Infrastructure Bond funds. Would "excess profits" from Orangeline High Speed Maglev riders be used to subsidize similar projects in other parts of the state? Or should they be made available to improve or extend the Orangeline High Speed Maglev system and attract additional riders, or to provide price discounts to lower income users of the system? Or should there be no "excess profits" so that the price of riding on the maglev is kept to a minimum for all users (say $7.50 versus $18)?

The Authority's Financial Plan 2h, described above, includes a steep cost to system users for interest payments and for station area improvements and feeder services, as well as for a sizable project surplus. By reducing the average fare from $18 to $7.50, reducing the project surplus and
reducing the interest cost to 3% (inflation rate), and not accounting for the anticipated ridership increase, the financial results, as compared to the (prior numbers) provided in the answer to Question 3, are as follows:

- Project Surplus - $7.3bn ($23.4bn)
- Station-area Improvements and Feeder Services - $0.2bn ($21.1bn)
- Investor Interest Earnings - $15.6bn ($23.4bn)
- User Cost Savings - $47.5bn ($3.1bn)

Should the State's interest in the Orangeline High Speed Maglev be to secure a revenue source to fund other state programs, or should it be to enable realization of the benefits the project will provide, without the necessity of relying on taxpayer support? Will the State see the Orangeline High Speed Maglev as a model for the future in which system users, versus taxpayers, pay for the service provided, or will the State see it as a variation of current practice in which one group is assessed a cost for the benefit of another group, at the first group's expense? Will the State see the Orangeline High Speed Maglev as an opportunity to improve mobility and make a buck at the same time, or as an opportunity to improve mobility and avoid an expense at the same time? Perhaps the answer lies somewhere in between.

10. How does the California High Speed Rail Authority view the Orangeline High Speed Maglev?

The California High Speed Rail Authority has opposed the regional maglev program since 2000, which is when the Authority opposed SCAG’s competitive maglev proposal to the Federal Railroad Administration. The Authority refused to endorse the proposal until the Agency Secretary gave instructions to allow the proposal to go forward.

We have participated in several more recent discussions and meetings attended by California High Speed Rail Authority staff and we have received feedback from various sources regarding Authority staff comments on the Orangeline High Speed Maglev and other maglev projects.

Authority staff has expressed the position that they do not believe the Authority will be able to secure private investment in the project. A second concern is that the Orangeline High Speed Maglev would be in conflict with the state High Speed Train where it operates on the same alignment from Palmdale to Union Station.

We believe that physical conflicts can be avoided where the two projects run along the same corridor, that the two projects serve different markets and that over a 50-year time frame both projects would accommodate only a portion of the total demand in the corridor.

Our meetings with Wall Street investment bankers revealed investor interest in the project; we believe that it is more likely for the Orangeline High Speed Maglev project to attract public or private construction financing backed by project revenues than it is for the state High Speed Train project to attract public funding through federal grants and the sale of voter-approved General Obligation bonds, especially if voters understand the extent of taxpayer subsidies associated with the High Speed Train system and the impact of those subsidies on the funding of other important priorities, particularly transportation priorities in Los Angeles and Orange Counties.

We are interested in organizing a meeting with the Governor and potential investors that will convince the Governor of private investor interest in the project and potential for attracting the investment needed to build the project. Assembly Member De La Torre has indicated that Cabinet Secretary Dunmoyer would like to see evidence of private interest and has specifically asked us to have the private investors tell us that they will do “x” if the state will do “y”. We have initiated the process to respond to the Secretary’s request.
11. Does the Orangeline High Speed Maglev serve the City of Anaheim?

Yes it does. The City of Anaheim has an opportunity to decide if it wants to locate an Orangeline High Speed Maglev station within the City boundaries or be served by a shuttle connection to one of the planned stations in its neighboring cities (Stanton, Garden Grove and Santa Ana). The City of Anaheim is also an active participant and supporter of the maglev system proposed to run from Anaheim to Las Vegas, and of the state High Speed Train system. The City is developing a new inter-modal transit center to accommodate high speed trains, maglev, Metrolink, AMTRAK and bus modes. Exhibit 3 shows the state High speed Train alignment. Exhibit 4 shows a comparison of the High Speed Maglev and state High Speed Train alignments.

12. How do we know that the Orangeline High Speed Maglev is the best solution?

The Authority's studies have led the Authority and its member agencies to conclude that the Orangeline High Speed Maglev is a desirable solution for helping to achieve multiple goals relating to current and future land use planning and development, housing, transportation, environment and economic improvement. The Authority's member cities are reviewing their General Plans and incorporating Authority recommendations that make the Orangeline High Speed Maglev and station-area transit-oriented development an integral part of their vision and goals for the future. The Authority believes that the project also offers a desirable solution for meeting similar state goals.

The Authority has considered alternative solutions and has concluded from its extensive analytical work that the Orangeline High Speed Maglev is able to achieve positive results not possible with other alternatives. The analysis leading to this conclusion is documented in a series of "Milestone Reports" available for viewing and downloading at www.orangeline.calmaglev.org. These reports represent over $10 million dollars and 7 years of investment in searching for the "best solution" to meeting critical needs.

The Authority's Board of Directors has met on a monthly basis since March 2003 to guide and oversee the studies and provide policy direction. Our member cities have considered recommendations presented by the Authority and have adopted there own resolutions in support of Authority actions.

These efforts, as well as the funds invested in these studies, represent a major commitment of local elected officials toward the successful development of the Orangeline High Speed Maglev project. The Authority's development partner, the ARCADIS Team, has likewise made a sizable investment in the project, demonstrating its confidence in the viability of the project and in its public agency partners.

13. Thanks

We appreciate your interest in the Orangeline High Speed Maglev and your commitment to review the information provided. Please contact me if you have any further questions about the project. We are very interested in knowing how you feel about the project after you complete your review. We are hopeful that your review will lead to a partnership between the State and Authority that will advance the Orangeline High Speed Maglev and make it a reality in California.

Al Perdon
310.871.1113
The Orangeline High Speed Maglev will differ in many respects from conventional steel wheel-on-steel rail High Speed Train technology adopted for the state-wide project by the California High Speed Rail Authority. The state project involves building a high speed train from Sacramento and the Bay Area to San Diego. That project is planning to use steel wheel-on-steel rail technology, such as Unites States “Acela”, Japanese Shinkansen “Bullet Train”, French TGV, German ICE and other European inter-city high-speed rail systems. Each project is serving different travel markets.

- The California High Speed Train is proposed to serve primarily longer-distance inter-city travelers between northern and southern California.
- The Orangeline High Speed Maglev would serve primarily shorter-distance intra-regional commuter, airport access and other non-work trips within Los Angeles and Orange Counties.

### Characteristics of California High Speed Train and Orangeline High Speed Maglev

<table>
<thead>
<tr>
<th>General Project Characteristics</th>
<th>California High Speed Rail*</th>
<th>Orangeline High Speed Maglev</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Sacramento to San Diego</td>
<td>Palmdale to Irvine</td>
</tr>
<tr>
<td></td>
<td>703 miles – 33 stations</td>
<td>108 miles</td>
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<tr>
<td></td>
<td>6 stations</td>
<td>18 stations</td>
</tr>
<tr>
<td></td>
<td>(Palmdale to Anaheim)</td>
<td></td>
</tr>
<tr>
<td><strong>Service</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Hours</td>
<td>Limited Hours</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>Less Frequent Service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6:00 a.m. – 8:00 p.m.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 min. – 30 min.</td>
<td></td>
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<tr>
<td><strong>Station Spacing</strong></td>
<td>Distant Stations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50 miles (rural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 miles (urban)</td>
<td></td>
</tr>
<tr>
<td>In Southern California, the</td>
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<tr>
<td>High Speed Train relies on</td>
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<tr>
<td>Metrolink to provide access at</td>
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<tr>
<td>intermediate stations, which</td>
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</tr>
<tr>
<td>requires many passengers to</td>
<td></td>
<td></td>
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<tr>
<td>transfer from one mode to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>another.</td>
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<tr>
<td>“Additional or more closely</td>
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<tr>
<td>spaced stations would</td>
<td></td>
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</tr>
<tr>
<td>negatively impact travel</td>
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<tr>
<td>times and the ability to</td>
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<tr>
<td>operate both express and local</td>
<td></td>
<td></td>
</tr>
<tr>
<td>services.” - CHSRA</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Speed Rail has achieved</td>
<td></td>
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<tr>
<td>test speeds in excess of</td>
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<tr>
<td>200 mph but is not operated</td>
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<tr>
<td>routinely at this speed due to</td>
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<tr>
<td>economic reasons.</td>
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<tr>
<td>The Shanghai Maglev has</td>
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<tr>
<td>achieved a test speed of 315</td>
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<td>mph but operates at a routine</td>
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<tr>
<td>top speed of 267 mph because of</td>
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<td>the short length of the current</td>
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<tr>
<td>line.</td>
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<tr>
<td><strong>Current Top Operating Speeds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of Proposed Technology</td>
<td>Fast</td>
<td></td>
</tr>
<tr>
<td>185 – 200 mph (rural)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 mph (urban)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acceleration</strong></td>
<td>Moderate Acceleration</td>
<td></td>
</tr>
<tr>
<td>From 0 to 185 mph</td>
<td>5 min – 11.0 miles</td>
<td></td>
</tr>
<tr>
<td>Longer station spacing is</td>
<td></td>
<td></td>
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<tr>
<td>required to maintain high</td>
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<td>speeds</td>
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<tr>
<td><strong>Technology</strong></td>
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<tr>
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<td>the short length of the current</td>
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<td>line.</td>
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<td><strong>Current Top Operating Speeds</strong></td>
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<td></td>
</tr>
<tr>
<td>of Proposed Technology</td>
<td>Fast</td>
<td></td>
</tr>
<tr>
<td>267 mph (rural)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>155 (urban)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acceleration</strong></td>
<td>Faster</td>
<td></td>
</tr>
<tr>
<td>From 0 to 185 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.8 min – 2.9 miles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closer station spacing has</td>
<td></td>
<td></td>
</tr>
<tr>
<td>little impact on maintaining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>high speed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Project Characteristics</td>
<td>California High Speed Rail*</td>
<td>Orangeline High Speed Maglev</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Operating Experience</td>
<td>There is no operating experience and there are no performance data for high speed rail in normal commercial service with sustained operating speeds above 185 mph</td>
<td>The Shanghai Maglev has carried 11 million passengers and traveled 2.4 million miles at a normal, top operating speed of 267 mph</td>
</tr>
<tr>
<td>Noise</td>
<td>Loud</td>
<td>Half as Loud</td>
</tr>
<tr>
<td>at 155 mph</td>
<td>88 db(A)</td>
<td>75 db(A)</td>
</tr>
<tr>
<td>at 125 mph</td>
<td>84 db(A)</td>
<td>72 db(A)</td>
</tr>
<tr>
<td></td>
<td>(Data for ICE1)</td>
<td>10 db(A) reduction = 1/2 noise level</td>
</tr>
<tr>
<td>Climbing Ability</td>
<td>Flatter Grade</td>
<td>Steeper Grade = Less Tunneling</td>
</tr>
<tr>
<td>Maximum grade</td>
<td>4% grade</td>
<td>10% grade</td>
</tr>
<tr>
<td>Alignment Capabilities</td>
<td>Longer-radius Curves</td>
<td>Tighter Curves</td>
</tr>
<tr>
<td>Superelevation/Banking</td>
<td>5-7 degrees</td>
<td>Faster Speed Around Curves</td>
</tr>
<tr>
<td></td>
<td>12 degrees</td>
<td>12 degrees</td>
</tr>
<tr>
<td>Energy (at 185 mph)</td>
<td>Energy Efficient</td>
<td>More Energy Efficient</td>
</tr>
<tr>
<td></td>
<td>58 Wh/Pkm</td>
<td>44 Wh/Pkm</td>
</tr>
<tr>
<td></td>
<td>(Data for ICE3)</td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td>Safe</td>
<td>Safer</td>
</tr>
<tr>
<td>Maglev takes the safest form of transportation to an even higher level of safety.</td>
<td>Orangeline High Speed Maglev will operate on a dedicated elevated guideway with no grade crossings.</td>
<td>The state High Speed Train will operate in mixed-flow south of Union Station, sharing track with freight, AMTRAK and Metrolink trains operating at lower speeds.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maglev does not rely on overhead power contact wires for power; instead, the power is obtained through an inductive power transfer between the vehicle and the long stator motor mounted in the monorail guideway.</td>
<td>Overhead electrical wires Aesthetically pleasing</td>
<td></td>
</tr>
<tr>
<td>Ridership (Prelim. Estimates)</td>
<td>42-68 million/yr</td>
<td>77 million/yr (2027)</td>
</tr>
<tr>
<td>Capital Cost</td>
<td>$40+ Billion</td>
<td>$19 Billion</td>
</tr>
<tr>
<td>Funding Source</td>
<td>State and Federal Taxes</td>
<td>System Revenues</td>
</tr>
<tr>
<td></td>
<td>Plus System Revenues</td>
<td>Public Rights of Way</td>
</tr>
</tbody>
</table>

Orangeline Development Authority
Key Differences in High Speed Train and High Speed Maglev
Funding and Service Concepts*

Funding Plan

The proposed California High Speed Train project is relying primarily on tax funding from state and federal sources, including a General Revenue bond measure scheduled for November 2008, enabled with passage of SB 1856 (Costa D-Fresno) – the “Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century”.

SB 1856 provides that:

- Nine billion dollars ($9,000,000,000) of the proceeds of (General Revenue Obligations) bonds authorized pursuant to this chapter, as well as federal funds and other revenues made available to the authority, to the extent consistent with federal and other fund source conditions, shall be used for planning and eligible capital costs, as defined in subdivision (c), for the segment of the high-speed train system between San Francisco Transbay Terminal and Los Angeles Union Station. (Future taxpayers will bear the burden of paying back the bonds over the next 30 to 40 years; current and future taxpayers would carry the burden of paying additional federal tax dollars assumed in the financial plan to fully fund the $20 billion cost of this segment of the project.)

- After the initial investment from the state, operating revenues from (users riding on) the initial segments and funds from the federal government (taxpayers) and the private sector will be used to pay for expansion of the system. (It is understood that Federal funds comprise about 50% of project funding, State funds comprise about 25%, and user revenues comprise most of the balance. Thus, future taxpayers would bear the burden of additional federal tax support for project extensions.)

Cost data obtained from the High Speed Rail Authority’s website indicate that the initial 344-mile San Francisco to Los Angeles Union Station segment will cost about $19 billion. The funding plan relies on as much as $10 billion in federal taxpayer funds to complete the initial segment. Future extensions rely on additional federal taxpayer funds and operating revenues from users of the initial segment. Reliance on federal taxpayer funds would impact the ability of Southern California to secure $8-10 billion in federal funds for local transit projects, such as the Metro Red Line extension to Santa Monica, the Exposition Light Rail Line to Santa Monica and additional funds for other rail and bus improvements contained in the MTA and OCTA Long Range Transportation Plans.

The Orangeline High Speed Maglev is relying on the sale of project revenue bonds (repaid by system users) to finance its $19 billion construction program. The financial plan assumes that existing rail and highway corridor rights-of-way will be provided at no cost to the project (since taxpayers have already paid for those rights-of-way). Direct State investment in the project could generate interest earnings for the state’s taxpayers. Alternatively, state and federal credit enhancements/loans/loan guarantees could be provided to help attract private investment and reduce finance costs. No new general or special tax revenues are anticipated.
Service Plan

The California High Speed Train is aimed at longer distance, intra-state trips. However, the greatest demand for better alternatives to increase capacity and improve mobility in Southern California is not long-distance inter-city trips to the Central Valley, Sacramento or San Francisco. Rather, it is the shorter distance commuter trips that contribute most to the heavy congestion on local freeways and arterials. The Orangeline High Speed Maglev is aimed at these intra-regional commuter trips. With stations generally spaced at average 6-mile intervals surrounded by high-density housing and other mixed-use developments, and 5-minute peak period service frequency at 90 mph average speed, including station stops, the Orangeline High Speed Maglev offers many commuters a superior service and a more convenient and less costly alternative to driving. The Orangeline High Speed Maglev provides an immediate and significant solution for avoiding commuter traffic congestion and delays, and to the problem of air pollution in Los Angeles and Orange Counties.

A limited number of commuters in Southern California would be able to use the California High Speed Train for daily commuting to work or other local destinations within the Orangeline High Speed Maglev corridor and in the greater area of Los Angeles and Orange Counties. Many inter-city travelers wanting to use the state High Speed Train will rely on other travel modes (such as Metrolink) to get to Union Station or to one of the other three stations (Palmdale, Sylmar, Burbank Airport) planned for the bond-funded system, to transfer to the High Speed Train. With station spacing at more than 20 miles apart, according to initial plans presented in the High speed Train Program EIR, many travelers will rely on an auto to get to one of the four stations along the route. The Orangeline High Speed Maglev would provide seven stations along this segment of the route. From Union Station to Anaheim, the High Speed Train system includes two additional stations (Norwalk and Anaheim) while the Orangeline Maglev provides seven additional stations on a different alignment (to Stanton, just west of the Anaheim station).

State High Speed Train passengers destined to Irvine may be required to transfer from the state High Speed Train system to Metrolink, AMTRAK or some other mode at the Anaheim station. It appears that state High Speed Train service will not be provided to Santa Ana, the government seat of Orange County and the County’s most populous city. The Orangeline High Speed Maglev will offer high speed service all the way to Irvine, with through-service to Santa Ana and with stations spaced at less than 6 miles apart for easy access to the system. The Orangeline High Speed Maglev would have 8 common stations with Metrolink, which has a total of 20 stations from Palmdale to Irvine.

The proposed route of the California High Speed Train is shown on the California High Speed Rail Authority map on the following page. The map has been refined to more clearly depict the fact that the bond measure scheduled to appear on the November 2008 ballot will only fund the line to Union Station (with additional federal funding yet to be approved). Also, the map shows the High Speed Train possibly ending at Anaheim, not Irvine. “LOSSAN” stands for existing Los Angeles – San Diego rail services, which include state tax payer-subsidized AMTRAK service and Los Angeles and Orange County taxpayer-subsidized Metrolink service. Between Union Station and Anaheim, High Speed Trains will run in a shared operation mode with Metrolink, AMTRAK and freight trains at reduced speeds (perhaps as slow as 50-60 mph).

The different functions of the state High Speed Train and the Orangeline High Speed Maglev suggest that there is minimal competition between the services provided by the two systems as they are generally aimed at serving different travel markets and, over a portion of the route, they serve different communities. Because they plan to use different funding sources, the two projects also do not compete for funds, although the state High Speed
Train does compete with other local transit projects for public funds. Growth projections over the next 50 years suggest that even if both systems were operating, the potential demand for high speed services is greater than both systems could readily handle. A possible issue that needs to be addressed is the design concept for accommodating both High Speed Train and High Speed Maglev within the shared corridor segments from Palmdale to Union Station.
Proposed California High Speed Train

While the California High Speed Rail Authority map shown in Figure 1 below appears to show the proposed High Speed Train system extending to Irvine in Orange County, in fact the proposed bond can only be used to build the line to Union Station. Additional revenues would have to be obtained to extend the line to Anaheim. Beyond Anaheim, train riders would either experience slower service or have to transfer to “LOSSAN” rail service or some other mode to get to Irvine or beyond. To travel to San Diego on the High Speed Train, Orange County residents would first have to travel north on the High Speed Train and then transfer at Union Station to travel through the Inland Empire and south along the I-15 corridor to reach their San Diego destination. The map below has been modified to show where the bond-funded High Speed Train ends (at Union Station) and where the future extension would appear to end at Anaheim.

Figure 1
The proposed state High Speed Train follows a portion of the Orangeline High Speed Maglev, which allows for interconnection at several of the High Speed Train stations. It is anticipated that the state High Speed Train will operate at-grade, while the Orangeline High Speed Maglev will operate on an aerial monorail guideway.

Most of the state High Speed Train system will operate on a different alignment from the Orangeline High Speed Maglev in the Southern California region. From Union Station south to San Diego, the state system will follow a path through the Inland Empire and south along the I-215/I-15 corridor. Thus, the Orangeline High Speed Maglev and state High Speed Train can be seen to complement each other, providing high speed service to different communities, including a number of communities that do not now have direct rail service.

The Southern California Association of Governments is conducting advanced planning on an east-west maglev line extending from West Los Angeles to March Air Reserve Base in Riverside County. This high speed maglev line, like the Orangeline, is part of the network of high speed maglev lines included in the adopted Southern California Regional Transportation Plan. The California High Speed Rail Authority is proposing to use the same corridor, and possibly the same alignment, SCAG is planning to use for the east-west maglev line.
AGENDA
Transit Planning and Operations Committee Meeting

Committee Members
Gregory T. Winterbottom, Chair
Richard Dixon, Vice Chair
Arthur C. Brown
Cathy Green
John Moorlach
Janet Nguyen
Chris Norby
Miguel Pulido

Orange County Transportation Authority Headquarters
600 South Main Street, First Floor - Room 154
Orange, California

Thursday, July 26, 2007, at 9:00 a.m.

Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the OCTA Clerk of the Board, telephone (714) 560-5676, no less than two (2) business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

Agenda descriptions are intended to give members of the public a general summary of items of business to be transacted or discussed. The posting of the recommended actions does not indicate what action will be taken. The Committee may take any action which it deems to be appropriate on the agenda item and is not limited in any way by the notice of the recommended action.

Call to Order
1. Public Comments

Special Calendar

There are no Special Calendar matters.

Consent Calendar  (Items 2 through 4)

All items on the Consent Calendar are to be approved in one motion unless a Committee Member or a member of the public requests separate action or discussion on a specific item.

2. Approval of Minutes

Of the July 12, 2007, Transit Planning and Operations Committee meeting.
3. **ACCESS Performance Measurements Update**  
   Curt Burlingame/Beth McCormick

   **Overview**

   At the June 25, 2007, Board of Directors meeting, staff provided the final report of Veolia's 90-day evaluation period. The report indicated that ACCESS service quality has stabilized and is continuing to improve. At that time, the Board of Directors approved continuing the contract with Veolia and directed staff to continue to provide monthly reports on ACCESS service performance measurements to the Board of Directors. The following report provides updated performance measurement data for ACCESS service.

   **Recommendation**

   Receive and file as an information item.

4. **Agreement for Maintenance Services for Landscape Improvement Projects Along the Former Pacific Electric Railroad Right-of-Way**  
   Bill Mock/Kia Mortazavi

   **Overview**

   The Orange County Transportation Authority provides contracted maintenance services for landscape improvements along the former Pacific Electric Railroad right-of-way. Bids have been solicited for continuing those services.

   **Recommendation**

   Authorize the Chief Executive Officer to execute Agreement C-7-0517 between the Orange County Transportation Authority and U.P. Landscape Maintenance, Inc., in an amount not to exceed $143,000, for maintenance services for landscape improvements along the former Pacific Electric Railroad right-of-way.
Regular Calendar

5. **Metrolink Ridership and On-Time Performance Report**  
   Abbe McClenahan/Kia Mortazavi

   **Overview**

   Staff is providing a fiscal year end report on Metrolink commuter rail ridership and on-time performance in Orange County. Weekday ridership continues to grow in part due to strong on-time performance. Year-round weekend service completed its first year of service and is entering its peak ridership months.

   **Recommendation**

   Receive and file as an information item.

6. **2006 Long-Range Transportation Plan Overview**  
   Kurt Brotcke/Kia Mortazavi

   **Overview**

   An overview of the 2006 Long-Range Transportation Plan projects, performance, and funding is provided for Transit Planning and Operations Committee review.

   **Recommendation**

   Receive and file as an information item.

7. **Orangeline Magnetic Levitation Project**  
   Michael A. Litschi/Kia Mortazavi

   **Overview**

   The Orangeline Development Authority is pursuing a high-speed, magnetic levitation transit system stretching 108 miles, from Palmdale to Irvine via downtown Los Angeles. Officials from that agency have proposed routing the system down the Pacific Electric Railroad right-of-way, which is owned by the Orange County Transportation Authority. Staff is requesting that the Board of Directors provide direction on the Orangeline Magnetic Levitation Project proposal.
7. (Continued)

Recommendations

A. Continue with implementation of the transit projects defined in the Orange County Transportation Authority's 2006 Long-Range Transportation Plan, which does not include the Orangeline Magnetic Levitation Project proposal.

B. Work with the Los Angeles County Metropolitan Transportation Authority to examine transit alternatives on the Pacific Electric Railroad right-of-way as part of the Orange County/Los Angeles Intercounty Transportation Study.

Other Matters

8. Chief Executive Officer's Report

9. Committee Members' Reports

10. Closed Session

There is no Closed Session scheduled.

11. Adjournment

The next regularly scheduled meeting of this Committee will be held at 9:00 a.m. on Thursday, August 9, 2007, at the OCTA Headquarters.
July 26, 2007

To: Transit Planning and Operations Committee

From: Arthur T. Leahy, Chief Executive Officer

Subject: Orangeline Magnetic Levitation Project

Overview

The Orangeline Development Authority is pursuing a high-speed, magnetic levitation transit system stretching 108 miles, from Palmdale to Irvine via downtown Los Angeles. Officials from that agency have proposed routing the system down the Pacific Electric Railroad right-of-way, which is owned by the Orange County Transportation Authority. Staff is requesting that the Board of Directors provide direction on the Orangeline Magnetic Levitation Project proposal.

Recommendations

A. Continue with implementation of the transit projects defined in the Orange County Transportation Authority's 2006 Long-Range Transportation Plan, which does not include the Orangeline Magnetic Levitation Project proposal.

B. Work with the Los Angeles County Metropolitan Transportation Authority to examine transit alternatives on the Pacific Electric Railroad right-of-way as part of the Orange County/Los Angeles Intercounty Transportation Study.

Background

The Orangeline Development Authority (Orangeline) is a joint powers authority formed in 2003 to develop plans for a privately funded high-speed magnetic levitation (Maglev) system stretching from Palmdale to Irvine via downtown Los Angeles.

As currently planned, the Orangeline Maglev Project (Orangeline Maglev) would travel on an elevated guideway above existing highway or railroad corridors at up to 240 miles per hour (mph), with an average speed of 90 mph
in urban areas. Orangeline officials estimate that trains would cover the 108 miles between Palmdale and Irvine in approximately one hour, making 18 station stops along the way. They believe the system could be in revenue service by 2013 and would provide 255,000 trips per day by 2027. The Orangeline Maglev is discussed in Southern California Association of Governments’ 2004 Regional Transportation Plan as one component of a proposed regional Maglev system.

The Orange County Transportation Authority’s (OCTA) current transit priorities, as defined in the 2006 Long-Range Transportation Plan (LRTP), include implementing high-frequency Metrolink service, establishing new transit connections to Metrolink stations, and creating new bus rapid transit and community bus routes. The Orangeline Maglev was not included in OCTA’s 2006 LRTP.

Orangeline officials have proposed running Maglev service down the Pacific Electric (PE) Railroad right-of-way on much of the route between Los Angeles and Orange County. The Los Angeles County Metropolitan Transportation Authority (Metro) owns approximately seven miles of the PE Railroad right-of-way between the cities of Paramount and Cerritos, while OCTA owns a little more than 11 miles between the cities of La Palma and Santa Ana. Per OCTA Board of Directors’ (Board) direction, a 65-foot-wide corridor within the 100-foot-wide PE Railroad right-of-way has been reserved for future transit use.

In an information packet being shared with elected officials, potential private sector investors, and the public, the Orangeline reports, “the public has acquired about 17 miles of railroad right-of-way the Authority plans to use for the Orangeline high-speed Maglev, with an estimated value of over $150 million.” However, neither Metro nor OCTA has committed to making the PE Railroad right-of-way available for use by the Orangeline.

During a presentation regarding the PE Railroad right-of-way at the March 5, 2007, meeting of the Regional Planning and Highways Committee, several Board Members requested that staff return to the Board with a position on the Orangeline Maglev. On May 10, 2007, Orangeline representatives made a presentation to the Transit Planning and Operations Committee regarding the proposed Maglev project.

**Discussion**

Though studies of Maglev service down the PE Railroad right-of-way have been underway for nearly a decade, a number of important issues have yet to be resolved and require further analysis. These issues are presented below.
Financial Plan

The Orangeline’s proposed financial plan appears extremely optimistic. Orangeline officials expect to secure at least $19 billion in private capital to construct the Orangeline Maglev and an additional $24 billion for real estate development near proposed Orangeline Maglev stations. In addition, the Orangeline is seeking $200 million for preliminary design and engineering, environmental reviews, and project financing. OCTA staff is not aware of any privately-funded transit lines in the United States on such a scale.

Orangeline officials are assuming an $18 fare for a 20-mile trip, and believe passenger fares and cargo fees will cover all operating and capital costs, with debt payoff estimated by 2046. They predict that surplus revenue will reach $25 billion by 2062, and expect $10.2 billion in project surpluses to be distributed to Orange County member cities.

In March 2007, Orangeline officials met with potential private sector investors to gauge their interest in the Orangeline Maglev. Though the officials reported that their presentations were favorably received, investors expressed concern about the Orangeline’s ability to secure right-of-way for the project and to receive the necessary environmental approvals. Orangeline officials also reported that investors were wary of any factors that could jeopardize the Orangeline’s ridership projections, such as a competing, publicly subsidized transit service. Funding commitments for the environmental and construction phases of the Orangeline Maglev have not been secured.

Redundant Corridors

The Orangeline Maglev could duplicate existing and planned transit services between Orange County and Los Angeles. The proposed Orangeline Maglev alignment between Los Angeles and Irvine is roughly parallel to the Los Angeles – San Diego (LOSSAN) rail corridor, which currently hosts up to 60 Metrolink and Amtrak passenger trains each weekday. The OCTA Board has approved a plan to nearly double the amount of Metrolink commuter rail service on the LOSSAN corridor by 2009, providing service every 30 minutes between Fullerton and Laguna Niguel/Mission Viejo.

The Orangeline Maglev route also would mirror the California High-Speed Rail Authority’s proposed alignment between Anaheim, Los Angeles, and Palmdale, a project which is primarily publicly funded. OCTA has endorsed the California High-Speed Rail Authority’s proposal for high-speed train service between Anaheim and Los Angeles, continuing to the Bay Area, and has pledged $7 million for project-level environmental studies on the
Anaheim to Los Angeles segment. OCTA staff believes the Orangeline Maglev would provide redundant service if the state’s high-speed rail system is also built as planned.

Local Support

Political and community support for the Orangeline Maglev in Orange County is uncertain. Only one of the Orangeline’s 14-member cities, Los Alamitos, is located in Orange County, and none of the seven Orange County cities directly bordering the PE Railroad right-of-way has joined the Orangeline.

The Orangeline lists the cities of Garden Grove, Huntington Beach, and Stanton as “supporting agencies” on its letterhead; however, these cities have not participated in Orangeline activities during the past several years and have not committed funding to the Orangeline Maglev. In March 2007, the La Palma City Council adopted a resolution explicitly opposing the use of the PE Railroad right-of-way for any future transit project, including the Orangeline Maglev.

Technology Selection

The Orangeline is proceeding on the assumption that Maglev is the best technology for transit service along the PE Railroad right-of-way; however, a high-speed, elevated Maglev system may not be the ideal technology for shorter-range commuter trips in the corridor. OCTA believes other transit options, including rubber tire and steel wheel on steel rail technologies, should be evaluated further before any decisions are made about future uses of the PE Railroad right-of-way. Transit options on the PE Railroad right-of-way will be analyzed as part of the joint Orange County/Los Angeles Intercounty Transportation Study.

Summary

Based on the Orangeline’s financial plan and right-of-way assumptions, redundancy with other transit corridors, lack of local support, and technology preference, OCTA staff believes it would be premature to commit the PE Railroad right-of-way to the Orangeline Maglev. Staff recommends proceeding with the transit priorities defined in the 2006 LRTP and working with Metro to explore other transit alternatives on the PE Railroad right-of-way.
Attachment

None.

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