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Fast Tracks in the Golden State: Symposia on California High-Speed Rail



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MTI REPORT S-02-02

**Fast Tracks in the Golden State:
Symposia on California High-Speed Rail**

Proceedings Summary

December 2003

a publication of the
Mineta Transportation Institute
College of Business
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16. Abstract Two educational symposia on the future of high-speed rail in California were co-sponsored by the Mineta Transportation Institute, The Commonwealth Club of California, Town Hall-Los Angeles, and the California State Automobile Association. The events were held on July 17, 2003, in San Francisco and on July 18, 2003, in Los Angeles, California, USA. The primary goal of the symposia was to introduce the general public to the California High-Speed Rail Project. A presentation on the project alternatives, costs, and revenues was followed by a panel discussion on the issues and questions from the audience. The Secretary of the California Business, Transportation and Housing Agency delivered the concluding keynote speech, which also was followed by questions from the audience. This publication is an abridged summary of those events.			
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To order this publication, please contact the following:

Mineta Transportation Institute
San José State University
San Jose, CA 95192-0219
Tel (408) 924-7560
Fax (408) 924-7565
E-mail: mti@mti.sjsu.edu
<http://transweb.sjsu.edu>

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The support and participation of M. Mehdi Morshed, Executive Director, California High-Speed Rail Authority, and Deputy Directors Dan Leavitt and Carrie Pourvahidi, were invaluable.

For their expertise, energy, and generosity with their time, we thank the panelists:

David Abel, L.A. Area Chamber of Commerce Executive Committee

Dr. John Holtzclaw, Chair, Sierra Club *Stopping Sprawl* campaign

William Lee, Senior Vice President, Economics Research Associates

Arthur Lloyd, board member Caltrain Joint Powers Board and Amtrak San Joaquins

Sunne McPeak, CEO, Bay Area Council

Richard Silver, Executive Director, Rail Passenger Association of California

Roger Snoble, CEO, Los Angeles County Metropolitan Transportation Authority

The following advisory committee members deserve special attention for helping set the agenda, sharing their expertise, and working to ensure that the discussions at these well-attended events were informative and constructive:

Dr. Gloria Duffy, CEO, and George Dobbins, Program Director, The Commonwealth Club of California, San Francisco, California

Adrienne Medawar, President, and Jennifer Demello, Director of Programs, Town Hall-Los Angeles, Los Angeles, California

Dr. David Lyon, President and CEO, Public Policy Institute of California, who also served as moderator for the panel sessions

Rod Diridon, Executive Director, and Trixie Johnson, Research Director, MTI

The guiding of the speakers and the audience through the presentations and questions was adeptly handled by our skilled moderators, who receive our thanks:

Rose Gilbault, Vice President of Corporate Affairs, California State Automobile Association, which was a co-sponsor of the San Francisco symposium

Dr. David Lyon, President, Public Policy Institute of California

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Gina Keel and Kimberly Zielinsky, Associate Program Directors, and Riki Rafner, Director of Public Relations, The Commonwealth Club of California

Amy Jaecker-Jones, Program Coordinator, and Deborah Weinberg, Director of Communications, Town Hall-Los Angeles

Trixie Johnson, Research Director, Leslee Hamilton, Communications Director, and James Swofford, Project Manager and Editor of this document, with logistics and technical support from Amy Yan and Tin Yeung, Mineta Transportation Institute

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FOREWORD

Presenting *Fast Tracks in the Golden State* was challenging on multiple levels. First, the issues are complex. California is growing at a rate that could double the state's population in 50 years. Infrastructure supporting the present population is already stressed, so developing additional capacity seems inevitable. How to do that in the current financial climate poses difficult questions of priorities and choices. Yet the state's electorate is being asked to decide those questions in a series of ballot measures, including \$9.95 billion in bonds to start constructing a high-speed rail system.


Addressing these complex issues requires expertise held by few, and fewer still have the ability to impart their knowledge in ways meaningful to the general public. We were highly favored to have knowledgeable and skilled participants as our speakers and panelists to begin the public discussion on how a high-speed rail system might effect the future of California.

The two great metropolitan areas in the state, centered around Los Angeles and San Francisco, are distinctively different. We felt it was important to conduct a symposium in each location. The logistics of staging two events, back to back, in different cities presented additional challenges. They were made possible through the assistance of the co-sponsors, The Commonwealth Club of California and Town Hall-Los Angeles, and through the cooperation of the dedicated participants who were willing to make the overnight trip (without the benefit of a high-speed train).

Events such as these are always the result of the contributions and efforts of many, including the California State Automobile Association (CSAA), co-sponsor of the symposia. I wish to personally thank CSAA, as well as all of the individuals and organizations referenced in the Acknowledgements.

The Mineta Transportation Institute has three primary functions: research, education, and information transfer. It is in the role of information transfer that we helped organize and present these symposia. This edited summary of those events is also available on the MTI website. The on-line version at <http://transweb.sjsu.edu> presents the illustrations in color and includes additional background material as electronic appendices.

We hope that this publication will contribute to an understanding of the issues and their possible solutions for those everywhere who are attempting to address the future transportation needs of our society.



Rod Diridon, Sr.
Executive Director
Mineta Transportation Institute

EXECUTIVE SUMMARY

Two educational symposia on the future of high-speed rail in California were co-sponsored by the Mineta Transportation Institute, The Commonwealth Club of California, Town Hall-Los Angeles, and the California State Automobile Association. The events were titled *Fast Tracks in the Golden State* and were held on July 17 in San Francisco and July 18, 2003, in Los Angeles. The purpose of these symposia was to introduce the California High-Speed Rail Project to the public.

The State Legislature created the California High-Speed Rail Authority in 1996 to prepare a plan for developing, constructing, and operating a statewide, intercity, high-speed passenger rail system. It would be a 700-mile, double-track, grade-separated, electrically powered, 220-mile-an-hour system connecting the metropolitan areas of the state. If built as proposed, it would be the largest single public works project in the nation's history, with potentially profound long-term economic and environmental benefits for the state.

The public is being asked to help make the plan a reality by commenting on the program Environmental Impact Report/Environmental Impact Study (EIR/EIS) and by being prepared to vote on a \$9.95 billion general obligation bond measure in November 2004. These symposia were intended to provide the public with an introduction to the California High-Speed Rail Project in preparation for the EIR/EIS comment period.

The executive director of the California High-Speed Rail Authority presented an overview of the project alternatives. A panel of experts who could evaluate the social, economic, and environmental implications of the project was convened. Its members represented transportation, commerce, the environment, and government. With the assistance of an independent moderator, the panel discussed how the project relates to regional and state objectives and answered questions from the audience. In a concluding keynote speech, the Secretary of California's Business, Transportation and Housing Agency, Maria Contreras-Sweet, discussed the proposal's significance for the state and the nation.

This document is a journal of those events. It is not a verbatim transcript. Several speakers and panel members made presentations at both sessions. Their comments are edited into a single description in this document to minimize redundancy. Also, some personal greetings, exchanges, and asides not directly related to the subject are removed for the sake of brevity. However, each question-and-answer period is described, separately and in context, in order to reflect the different character and style of the two sessions and their host organizations and communities.

PROCEEDINGS SUMMARY

Greetings and introductions were offered by the organizational hosts: Dr. Gloria Duffy, CEO of The Commonwealth Club of California at the San Francisco event; and Adrienne Medawar, President of Town Hall-Los Angeles at the Southern California event.

Joseph Petrillo, Chairman of the California High-Speed Rail Authority (CHSRA), introduced the subject to the Northern California audience. Rod Diridon, Chair Emeritus of the Authority, made the introduction in Los Angeles.

M. Mehdi Morshed, Executive Director of the High-Speed Rail Authority, gave a 20-minute briefing about the purpose and scope of the Authority's work and the California High-Speed Rail Project alternatives. The presentation answered several questions:

- What is the California High-Speed Rail Authority and what does it do?
- What is a high-speed train and why do we need it?
- Where would it go and what will it cost?
- What is the travel time and can it compete?
- Who are the riders and what is the distribution of those riders?
- What is the revenue?
- What are the stations going to look like; what are they going to be like?
- What is the economic impact?
- Where are we in the process?

Dr. David Lyon, President of the Public Policy Institute of California (PPIC) and panel moderator, introduced the panelists and presented to the audience the three questions that he had submitted to the panelists in advance of the events. The panelists were asked to address these questions at some time during the symposia:

1. Is the high-speed rail line that is being presented the most cost effective means for moving people between Northern and Southern California?
2. What else might be done with the money required to build high-speed rail, and how would those other alternatives stack up against this concept?
3. What are the economic, social, and environmental equity consequences of this investment that should be addressed in the course of its deliberation in the coming months – who will use it and who will benefit from a system this large and complex?

Each panelist gave a five minute presentation addressing either those three questions or subjects specific to their expertise.

For the environment, Dr. John Holzclaw described the effects of urban sprawl and stated the Sierra Club's goals for combating it and for planning future transportation systems.

For the economy, William Lee gave a summary of his firm's research findings for the California High-Speed Rail Commission (prior to creation of the current Authority).

For transportation users, Richard Silver spoke to the effects of interconnecting high-speed trains with other existing or planned transportation modes.

For commerce, Sunne McPeak in San Francisco addressed the challenges of trying to finance a high-speed rail system in the current economy. David Abel continued that discussion in Los Angeles and reported on the schism within the business community over the desire for the benefits of such a system, but apprehension over its costs.

For government, Arthur Lloyd in San Francisco spoke of the need for planning and improvements for existing regional transportation systems to successfully integrate them with high-speed trains. Roger Snoble added to that discussion in Los Angeles, and cited the limitations that planners face in expanding existing systems without adding new capacity through infrastructure improvements like high-speed rail.

Dr. David Lyon described the results of a July 2003 Public Policy Institute Survey that indicated Californians' lifestyle preferences for housing, personal transportation, and high-speed trains. Then, as moderator, Dr. Lyon opened the floor to questions from the panelists and the audience. In San Francisco, audience questions were submitted in writing to the podium, where the moderator summarized them for the panelists or CHSRA staff. In Los Angeles, questions were asked directly into a microphone in the audience. Those questions or statements are summarized in this document for brevity.

In the keynote address, the Honorable Maria Contreras-Sweet, Secretary of Business, Transportation and Housing for the State of California, explained the importance of the state's transportation systems to regional, national, and global economies. She challenged the audience to look ahead, to envision infrastructure options that would meet the needs of future generations, as did those who had planned for this generation. She concluded with an invitation to participate in the forthcoming California High-Speed Rail Project environmental review process and bond measure discussions in 2004.

A question-and-answer period followed the secretary's keynote speech. So that she could catch her flight to Los Angeles, CHSRA Executive Director Mehdi Morshed answered audience questions for Secretary Contreras-Sweet in San Francisco. Moderator for this session was Rose Gilbert, Vice President of Corporate Affairs for the California State Automobile Association, which was a co-sponsor of the event. Written questions were submitted to the dais, as had been

done earlier during the panel session. In Los Angeles, Secretary Contreras-Sweet took direct questions from the audience in the same manner as that locale's earlier panel discussion.

CONCLUSION

The experts conclude that the California High-Speed Rail Project portends potentially positive long-term economic and societal benefits for the state. Symposium participants expressed disparate views, however, on how those benefits might be made manifest and at what cost. There was consensus that additional transportation capacity, like that provided by the proposed system, would be necessary in the future. Inquiries from the public in attendance generally indicated a collectively positive attitude toward the project, with the desire for more detailed information. The declaration from the Secretary of Business, Transportation and Housing was that this project should be pursued sooner rather than later in the interest of the long-term economic health of the state and the nation.

This document is meant to give an impression of what it was like to be at these symposia. The reader might consider accepting the challenge that Moderator Dr. David Lyon presented to those who attended the events: become informed, become involved, and participate in this momentous process.

INTRODUCTION

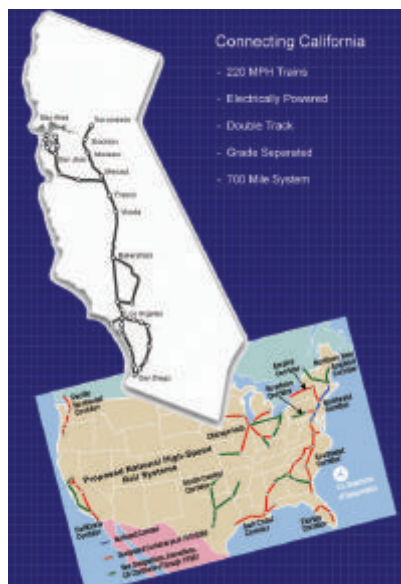
Californians are facing some decisions on infrastructure that will have long-term affects well into the twenty-first century. One of the issues at hand is the California High-Speed Rail Project, which is entering its environmental review process, followed shortly thereafter by a ballot measure to decide its funding. To help the public make informed decisions on these matters, the Mineta Transportation Institute, The Commonwealth Club of California, Town Hall-Los Angeles, and the California State Automobile Association presented two educational symposia on California high-speed rail titled *Fast Tracks in the Golden State*.

The Northern California symposium was held Thursday, July 17, 2003, at 4:30 p.m. in the auditorium of The Commonwealth Club of California in the organization's modern, steel-and-glass headquarters at 595 Market Street in San Francisco.

The Southern California symposium was convened as a Town Hall-Los Angeles meeting on Friday, July 18, 2003, at 9:30 a.m. in a stately columned and mirrored ballroom in the historic section of the Millennium Biltmore Hotel located in downtown Los Angeles at 506 South Grand Avenue.



Figure 1. Program front cover



The front cover of the program pamphlet presented a visual metaphor, merging the San Francisco and Los Angeles skylines with Central Valley fields and the state's most famous bridge. Inside it asked the question, "Will California's cities become as one, linked by a land bridge of high-speed trains?"

Attendees at each symposium had the opportunity to view some introductory information prior to their event. Posters supplied by the California High-Speed Rail Authority were on display to provide close-up views of some of the maps and data that were referenced later in the presentations. In San Francisco, a video monitor displayed brief scenes of high-speed trains in operation in Europe and Asia.

Figure 2. Program back cover

The audiences comprised diverse groups of men and women; seniors, middle-aged and youth; white-collar, blue-collar and no-collar. Many indicated they were confronting the subject for the first time; some said they were more knowledgeable of the issues.

Into these settings, the hosts from the sponsoring organizations made their opening remarks.

NORTHERN CALIFORNIA SESSION OPENING

Dr. Gloria Duffy:

Good afternoon, I'm Gloria Duffy, CEO of The Commonwealth Club, and I'd like to welcome you to today's symposium on high-speed rail in California titled *Fast Tracks in the Golden State*.

I'd like to start by thanking our underwriter for today's program, and that's the California State Automobile Association. A little bit later you're going to meet Rose Guilbault, Senior Vice President at Triple-A and head of public and community affairs; she will be handling and moderating the keynote address later on.

It's clear that California needs new transportation solutions. A visionary solution for long distance transportation is now on the table, the type of bullet train, or high-speed rail, that Japan and Western Europe have had in place for 39 years; and it would connect Sacramento and the Bay Area with Los Angeles. In November of 2004, on the state ballot, will be a \$9.95 billion bond issue to provide about the first one-third of funding for construction of the proposed system, to be completed over about a 10-year period. If this project goes forward, it will be the largest public works project in the history of the United States, and therefore probably in the world.

The Commonwealth Club has a long tradition of studying issues important for the future of California. In fact, that's why the Club was founded back in 1903, a hundred years ago this year. We have, over this 100-year period, presented information and analysis on these issues, so that you as citizens and voters could make the most informed decisions on issues that come before you. Ever since the Club endorsed and pushed for the initiative process in California almost a hundred years ago – sometimes we wonder what we have wrought – we have placed special emphasis in our education programs on ballot issues that are before us as voters.

In light of the tremendous sum of money involved, and the many issues – environmental, economic, land use, and fiscal, to mention just a few – involved in deciding whether high-speed rail has an appropriate place in California's future, we don't believe there are many more important issues for public education and debate than this one.

So thank you very much for coming today, and participating in the beginning of what is now going to be a statewide discussion in California about the system. The importance of this issue is

why The Commonwealth Club and several other partner organizations decided to hold this symposium, this afternoon here in San Francisco, with the discussion to continue tomorrow morning with another symposium in Los Angeles. Our main partner in this event is our counterpart as a public forum in Southern California, Town Hall-Los Angeles, who will be hosting the event tomorrow morning in L.A.

Both symposia will follow the same agenda. We will begin with a half-hour briefing by the High-Speed Rail Authority, which is the official state body charged with designing and building the system. That will give you the basic facts about the plan so everyone has a common base of information. Then we will move to a panel discussion, moderated by my esteemed colleague, Dr. David Lyon, President of the Public Policy Institute of California. Here I'd like to emphasize that The Commonwealth Club, the Public Policy Institute, and Town Hall-Los Angeles are all nonpartisan public policy organizations; we are not taking a position pro or con on the high-speed rail issue, or any aspect of the issue, nor will we at any point during this process. Our purpose is really to put the issues out and bring expertise and information to you to discuss them.

Dr. Lyon will introduce the panelists, who have been chosen for their knowledge related to the various issues concerning high-speed rail. What would its economic, environmental, and transportation impacts be? We've asked the panelists to address certain questions, but Dr. Lyon will talk to you further about this at the beginning of the panel. We have asked each panelist to make sure to present pros and cons in their area of expertise related to the questions. You will have an opportunity to question those panelists after their initial presentations. Also, we are taking written questions, both for the panel and for the later keynote speech.

Again, I emphasize this is not a debate, pro or con, on the high-speed rail issue, but a first step at basic education and discussion about the concept. It's highly likely that closer to the date of next year's bond election, we will sponsor a more focused debate on the issue.

Following the panel discussion, we welcome the California Secretary of Business, Transportation and Housing – the Honorable Maria Contreras-Sweet – who will make the keynote speech, both here and in Los Angeles, on the high-speed rail system. It falls into her area of authority in the state government.

So without any further ado, let's get on to the briefing. I would now like to introduce Mr. Joseph Petrillo. He is the volunteer who, as an appointee of the governor, chairs the High-Speed Rail Authority. He is an attorney, a specialist in land use law practice, and he practices with Shepherd, Mullin, Richter and Hampton, a law firm in San Francisco. He is a very well-known land use and natural resources attorney who was one of the principal authors and administrators of California's coastline protection legislation. Chairman Petrillo will introduce the director of the High-Speed Rail Authority and also provide some overall comments about the panel and the topic of high-

speed rail. So welcome, have a great discussion this evening, and the best to everyone in forming your own views about what we should do about this high-speed rail issue.

Joseph Petrillo:

Thank you very much, Ms. Duffy. I want to thank The Commonwealth Club for inviting us and holding this panel discussion, because this is a most appropriate and auspicious time for such a discussion. We will soon begin the Environmental Impact Report review process. Therefore, we expect that the profile of California's program for high-speed rail will be much higher among the public throughout the state as a result of those hearings and the studies. It's also auspicious because, as Ms. Duffy mentioned, the vote on the bond act to fund the system is scheduled for November 2004. Before introducing Mehdi Morshed, I'd like to make a few comments about *my* thoughts about high-speed rail.

I'm a new chairman. I was just elected and started my term on the first of July. The invitation was issued to my predecessor, Mr. Rod Diridon, and I want to thank him for the work that he did during those two years in bringing this program to the state that it is today, on the verge of actual implementation.

Now, some of my thoughts on high-speed rail: First, what we're trying to do.

This is a statewide program. It's designed as an intercity program to transport people at high speeds between large population areas in Northern and Southern California. It is not a solution to short-haul commuter transportation problems. Sometimes we get confused and think that they're one and the same; they are not. To have high-speed rail, it could take as much as 40 miles to bring [a train] up to speed and slow it down. So, by the nature of it, the stations have to be long distances from one another in order to make the system work at the maximum efficiency. On the other hand, one of the most important things in any system like this, especially the high-speed system, is the location and the ability of the stations on the high-speed rail to connect with all of, or as many of, the regional and local transportation systems that exist so that ridership is increased, but basically so that people can go from car or commuter train or bus to the long-distance transportation provided by high-speed rail.

The high-speed rail system, in my opinion, when implemented will become the backbone of the future transportation system here in California, taking people long distances at very high speed to locations where they can transfer and travel around to regional and local destinations. I firmly believe high-speed rail transportation will change the face of California the way the California Water Project, the freeway projects, and even the initial railroads of the last century did.

But in addition to those vast economic changes and growth that will be generated by high-speed rail, the high-speed rail system that we're looking at here in California is one of the few public works projects, certainly that I know of, that has been designed from the beginning with environmental benefits as one of its core values. We believe – and I think our studies are beginning to show that and will be exposed more in the final Environmental Impact Report –

further residential and commercial development necessitated by the natural growth of population in California, which is slated to be much more than 50 percent over the next 35 years, that the high-speed rail system will use up less land to accommodate that growth than any of the transportation systems that we have studied.

Air quality obviously is one of the things that will be enhanced over what the air quality would be were we to continue the growth in traveling through these air and automobile transportation corridors at the same growth rate that we have seen in the past. These and other environmental benefits, as well as social benefits, will be detailed in the Environmental Impact Report.

These types of benefits are equally important, but often unappreciated benefits to a program such as this, and are often not calculated in the traditional cost/benefit analysis. For all of you that I assume will look at the high-speed rail Environmental Impact Report and the plans, please try to keep in mind that there are more than *local* cost benefits to a high-speed rail system; there are huge, subtle benefits to the state as a whole.

Again, I thank you for having me here, and now I'd like to introduce the Executive Director of the High-Speed Rail Authority, Mr. Mehdi Morshed.

Now Mehdi told me that he didn't want me to mention much about him, because it embarrasses him, but I'm an attorney. Although I promised my fellow Authority Board members that I would not talk too much, I didn't say that I wouldn't talk a lot at speeches and meetings, and so I will embarrass Mehdi to some extent.

I think of Mehdi as a Mr. California Transportation, because for the last 20 years in the Senate, everything, literally every policy change and direction in financing for transportation in California, passed through his experienced hands. Many of the initiatives that he worked on during that period really affect us today, from driving rules to vehicle safety and emission standards. He also has assisted in creating what we consider this state's major transportation agencies: the California Transportation Commission, which coordinates most of the transportation in the state, and the High-Speed Rail Authority, whose program you are going to be discussing today. Mehdi will give us a presentation on where we are today in the development of California's high-speed rail system.

SOUTHERN CALIFORNIA SESSION OPENING

Adrienne Medawar:

I want to welcome you all here. My name is Adrienne Medawar; I'm the President of Town Hall-Los Angeles.

Town Hall-Los Angeles recognizes that there are many important issues, which involve and which should have a dialogue between Northern and Southern California. Therefore, we have partnered with The Commonwealth Club of California and the Mineta Transportation Institute, and we're very pleased to have done so. It was a real privilege to work with both groups, and we hope that as new issues come up that we feel we need to tackle, this will happen again. But this is the first one; it brings our state together.

I want to also extend a special welcome to Sid Tyler, Council Member and Vice Mayor of the City of Pasadena.

And now, Rod Diridon, the Executive Director of the Mineta Transportation Institute, will have a few words for us.

Rod Diridon:

Thank you very much, Adrienne, and thank you to Town Hall-L.A. for being the sponsor of the program; and I send the same thanks to The Commonwealth Club of California for doing a similar program yesterday afternoon in the San Francisco area.

I'm Rod Diridon and I'm the Chair Emeritus of the California High-Speed Rail Authority Board. The new Chair, Joe Petrillo, introduced the program in San Francisco last night and he asked if I would take the trip down at 4:00 this morning – now, if we had high-speed rail, I could have cut about 2 hours off that – to be with you, and it is my pleasure to do that.

It's my duty to introduce the person who will provide the technical support for you today. I would like to thank Mehdi Morshed, who will be doing that, as well as Carrie Pourvahidi, who is here from the High-Speed Rail Authority staff, and all of the consultants who are here also, for their great work on this project.

Remember that high-speed rail is not new technology anymore. It's been in operation in Japan now for 39 years, without one fatality, That's, by the way, safer than walking on a sidewalk in terms of this, the safest mode of transportation ever devised. It's been in operation in Europe for 20 years, and it is proven technology. It's been tested at 320 miles an hour – we're going to be at 220 miles an hour capacity when the time comes, I believe. So this gives you an idea of what the program is about.

This is the largest construction project in the history of the United States – a 700-mile, double-track, grade-separated, grade-protected, electrically powered, 220-mile-an-hour train system – and it will change the face of California. Without question, it will have more impact environmentally and economically on California than anything that has been considered in recent history or is being considered for the future. And you're here; you're part of that historic process, and we appreciate it.

Mehdi Morshed is the Executive Director of the High-Speed Rail Authority. Mehdi has both a Bachelor's and a Master's in Civil Engineering, he practiced in that field for a time, and then became the consultant for the Senate Transportation Committee and served as chief consultant, chief of staff, for the Senate Transportation Committee for 19 years. He knows everything about transportation in the State of California. We are very pleased to have him as the Executive Director of the High-Speed Rail Authority, and he's here to give you the technical presentation on where we are at this point.

As he does that, let me stress that we're not here to argue about alignment variations, or about individual elements of the project. We're here to let you *know* about them. The time for you to make those points is during the public hearings on the High-Speed Rail Environmental Impact Report and Study, which is an alternatives analysis. That will be published and distributed to the public this year, and the High-Speed Rail Authority will conduct public hearings up and down the state in preparation for a decision on the alternatives. We will then certify the Draft Environmental Impact Report, and that is a very important moment, because it's not until it is certified that we can begin receiving the grant funds from the state and federal government for land acquisition and construction.

As you know, there are bonds on the November 2004 ballot – \$9.95 billion in general obligation bonds, with no tax increase, will go before the voters in November of 2004. Those [funds] would be matched by funding from the federal government out of a bill called RIDE 21, which was approved by the House Transportation Infrastructure Committee. RIDE 21 proposes \$60 billion in tax credits and bond guarantees that would be the matching funds for our California-generated funds. When you put those together, we have a project. The starter element, from San Francisco and San Jose to L.A., is affordable within that funding and can begin construction in the shortest possible time.

I would like to now defer to Mehdi Morshed, who will present the project to you. Thank you all for being here.

PRESENTATION: CALIFORNIA HIGH-SPEED RAIL PROJECT

Mehdi Morshed:

I'll start by introducing ourselves, by telling you who we are.

The High-Speed Rail Authority is an entity in state government that was created by legislation authored by Quentin Kopp, who was senator from San Francisco. The Authority was created by the California Legislature to have the sole authority for planning, designing, building, and operating a high-speed train system.¹ That high-speed train is defined by statute as anything over 125 miles per hour.

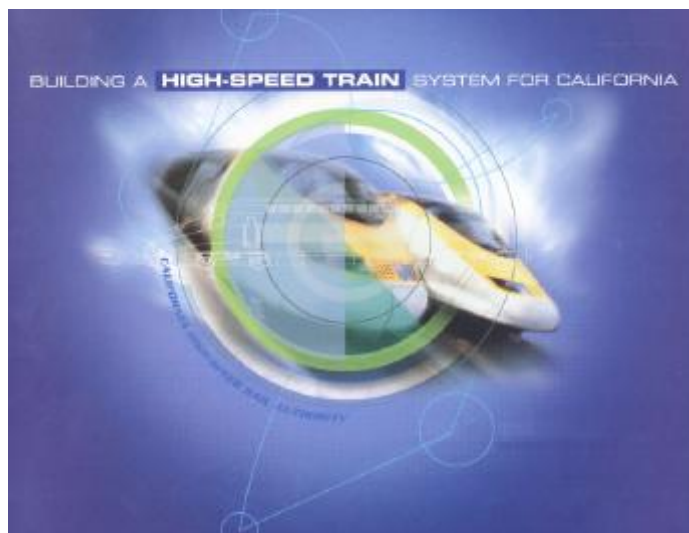


Figure 3. CHSRA staff presentation

The Authority has nine board members, five appointed by the governor, two appointed by the Senate Rules Committee, and two appointed by the Speaker of the Assembly. The board members are citizen volunteers who donate their time for the betterment of California, and we are very appreciative of that. The Authority has a small staff, and we've been doing most of our work through private consultants with the expertise and knowledge that we need to acquire, utilizing the resources that are available in the private sector.

The genesis of the High-Speed Rail Authority goes back to 1993 with a resolution – again by Senator Quentin Kopp – that commissioned a feasibility study into whether or not a high-speed train would make sense for California. Nine members were appointed to that effort; I was fortunate to be one of them. Essentially, we were a pretty skeptical nine members. We spent quite a bit of time reviewing the data and finally concluded that it is not only feasible, but is *essential* for the state. The commission recommended that the High-Speed Rail Authority be created, which the Legislature did in 1996. We became operational in 1997, and the first thing we did is put together a business plan,² which made a strong case for building a high-speed rail system and how to go about it. (See: http://www.cahighspeedrail.ca.gov/business_plan/default.asp).

I want to also point out that for the last five years, the Authority's work has really flourished because we have had very strong support from Governor Gray Davis. Since he became governor, he's been very helpful, very understanding, and he's been providing us with the resources we need to do the work we do. We are grateful for that. He's also very supportive of the bond measure. He's signed the legislation and indicated that he will be happy to work toward this campaign.

The Authority produced a business plan in the year 2000, and most of the information I'll be giving you is the information from the business plan. There will be additional information and maybe some modifications, some adjustment, to that information that will be coming up in our draft and final environmental reports. Until that time, we have to continue to use the information from the business plan. These are the data that come from the business plan, which are still valid.

Why Do We Need It?

The first thing I'm going to do is answer the question: "Why do we need the high-speed train?"

To do that, we need to look at the picture of what California is going to be like in the year 2020, 2040, and so forth. That's where our planning horizon is. Even 2040 is important, because when you think about the project, this is a large undertaking; it would take about 15, 20 years to build it, finish it, and that would be year 2020. Then it's essentially a brand new system just beginning to provide service. By 2040, it will be just half as old as Bay Area Rapid Transit is today, and we still consider that as being a new system. So, we're building something that's going to be far beyond our usual thinking and our normal horizon. It's much further than that. This is going to be here 50, 60 years from now; and that's the kind of thing we have to plan.

These population figures from the Department of Finance give you a picture of what will be happening to the State of California.

Our population is going to grow by about 10 million more people by the year 2020, and nearly doubled by 2040. That's a fact. We have to deal with that.

With that population growth will be growth in highway congestion and airport congestion.

I don't want to suggest that by building a high-speed train, we won't have those problems. Yes, we will. But the question is how we can moderate it and how we can make it better.

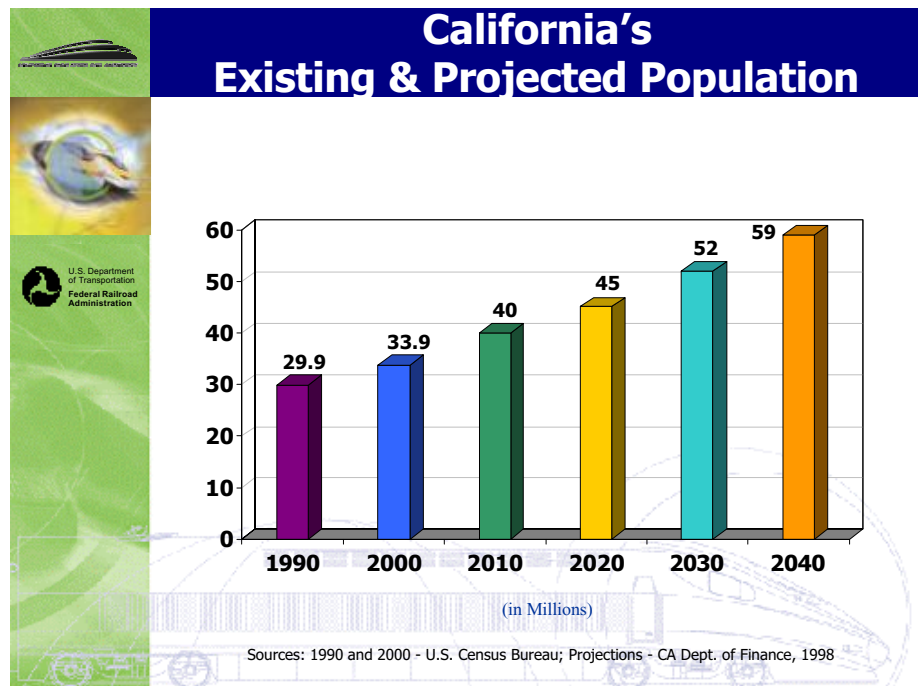


Figure 4. Fifty-year population projections

The other thing we also looked at is the urban and rural geography of California that shows where the population is currently.

Primarily, it's in the South and the Northern California Bay Area.

But as California grows, most of the growth is going to take place in the Central Valley. That's where people are locating; that's where the low-cost housing is.

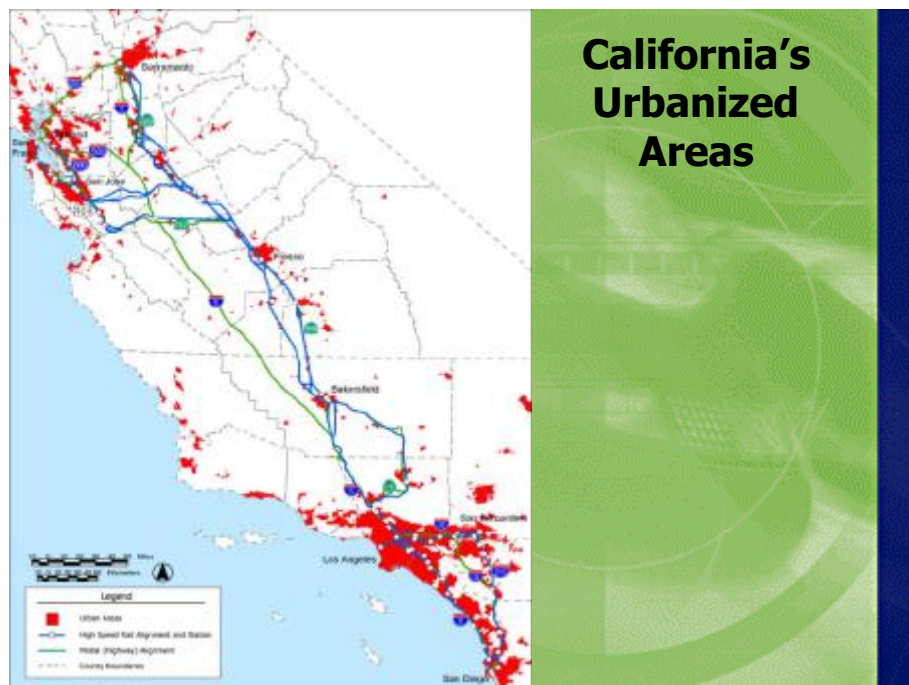


Figure 5. California population distribution

What will increase are our inter-regional trips – trips that we will make

between the Central Valley cities, Southern California, and the Bay Area. So what are we going to do about connecting the Central Valley to the other two population centers and do it efficiently? How do you do that in a way that you preserve land and you preserve the environment and you still provide mobility?

Do you rely on airplanes, or do you rely on automobiles? Yes, you can, but then are they the most appropriate way of handling these trips?

We believe that the high-speed train would actually be a better system to accommodate that growth and provide an alternative for people who want to travel.

Today, when we want to make a trip that is 150 to 200 miles, up to 400 miles, our only choice is by automobile. If it is around four or five hundred miles, our only choice is by airplane. It would be worthwhile to have a second option in both of those trips, and that's the reason for the high-speed train.

What Is It?

The next question is: “What is a high-speed train?”

The high-speed train we are talking about is a steel-wheel train that is very similar to the Japanese bullet train, the French TGV, or the German ICE.

It’s electrified, it’s totally grade-separated, and it has to be fast and frequent in order to be viable as a transportation mode. That’s what a high-speed train is.



Figure 6. Examples of high-speed trains

What Is the Route?

The next question I want to quickly go through is: “Where would it go?”

Here’s the outline of about a 700-mile system corridor that we are studying for the project. We’re looking at options within that corridor. There will be some variation, and that’s what the environmental review process is all about.

If you can think back to the pictures I showed you earlier with the population centers, this is the route that actually will connect about 90 percent of the population of the state of California through that mode of transportation.



Figure 7. California HSR route alternatives

It will have only a few stops. It's not going to have a stop at every city and every location, because if you do that, you don't have a high-speed train. Also, even with the few stops we have, you won't have the kind of speed and timetable that you would want, if the train stopped at every station. The operation plan is that we will have skip-stops. For example, for trains leaving L.A. Union Station, some of them will be nonstop all the way to downtown San Francisco. Others may stop in Fresno. Others may stop at San Jose. So you get a chance to serve those cities, but you're not going to stop at every one, otherwise you have a "milk run."

What is the Cost?

The next question I will try to address is: "What will it cost to build?"

The business plan we put together basically put the cost of the whole 700-mile system at about \$25 billion, and it's broken down into different segments. Obviously, that's going to be modified with the changing time and cost factors, and we don't know what they are.

SEGMENT	LENGTH (MILES)	CAPITAL COST (BILLIONS OF DOLLARS)	AVERAGE COST / MILE (MILLIONS OF DOLLARS)
San Diego - Riverside	92	4.1	44.5
Riverside - Los Angeles	59	2.7	45.7
Los Angeles - Bakersfield	110	4.4	40.0
Bakersfield - Merced	160	2.3	14.4
Merced - Sacramento	110	3.0	27.3
Merced - San Jose	129	4.5	34.8
San Jose - San Francisco	43	2.5	58.1
SUBTOTAL		23.5	
Vehicles & Support Facilities		1.5	
TOTAL	703	25.0	\$37.8

Figure 8. Capital investment costs

The bond issue for the November 2004 ballot would provide \$9 billion for the first segment. The legislature directed the Authority to build that first segment between downtown San Francisco and downtown L.A. That is about 442 miles long. In our cost estimate, that portion is about \$14 billion. It's a big number, and it's enough to scare us all. But I would also like to put that in the context of our overall investment in transportation over the next 20 years.

Over the next 20 years the state of California, using existing resources (state and local taxes), will be spending in excess of \$200 billion for transportation. We're not going to sit still and do nothing; we are going to make huge investments in our transportation system to provide mobility for our people. This \$25 billion for the high-speed train system is about 12 or 13 percent of that. It still is a big number, but it's important to put it in context.

How Long Will It Take?

The next thing is: "What is the travel time?"

We don't really care how fast the train goes, we want to know how long does it take me to get there. These are some examples of the travel time that it would take to go from one point to another.

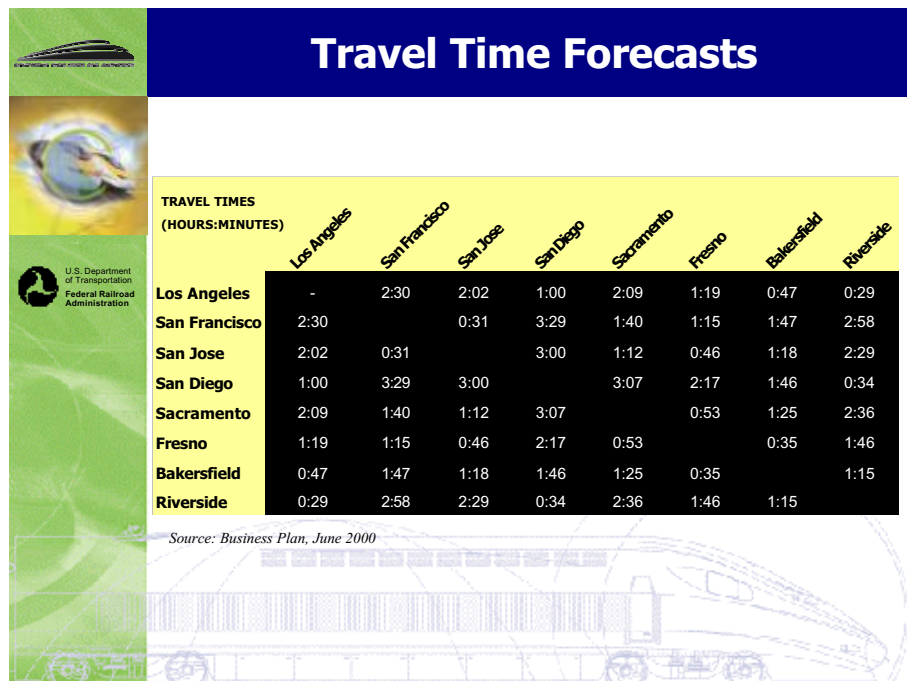


Figure 9. Proposed travel times

The benchmark for us is San Francisco to L.A., that's 2½ hours downtown to downtown; San Jose is 2 hours; and then you have the Central Valley cities. That's the other big benefit that you will see, the connecting of Central Valley cities. Most of the Central Valley regions would be within an hour, to an hour and fifteen minutes of either San Francisco or Los Angeles. That's one of the reasons that the high-speed train will be successful, and I'll show you some numbers in terms of ridership and revenue in that time period, because you have to compete with your major competitor, which is an airline.

Can It Compete?

So, the next question we’re going to address is: “Can it compete?”

Can it compete with automobile and air travel? Our study showed that yes, it can.

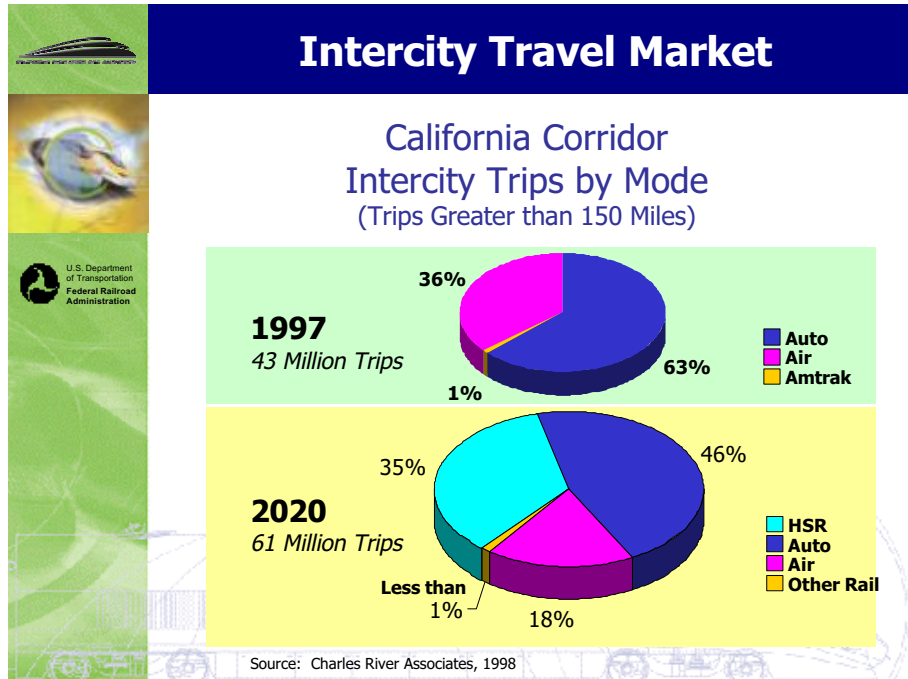


Figure 10. Corridor trips by mode

You have two pie charts; one shows you the 1997 trip breakdown is 36 percent air and 63 percent auto. If you don’t do any high-speed train, that pretty much will be the trip distribution in 2020, and beyond. But when you put the high-speed rail in there, that takes more than a third of the trips – not that it will eliminate *all* of the airplane and other rides, but it would take about a third of those – and then the others will be distributed between air and auto. High-speed rail can compete and you can take a major segment of the market, but also you can see that currently the existing rail system has about one percent of the market, and that’s where the distinction is.

We still will have trips in automobiles and we will still have trips on airplanes. But we will be able to compete equally and be able to relieve some of the congestion and some of the burden on our highways and airports. At the same time, we are not going to overtake the airlines; there will still be a need for those services and that will continue.

Who Will Use It?

The next question I want to address is: “Who are the riders, and what’s their distribution?”

Our conservative estimate is about 32 million riders statewide will use it; you see the percentages.

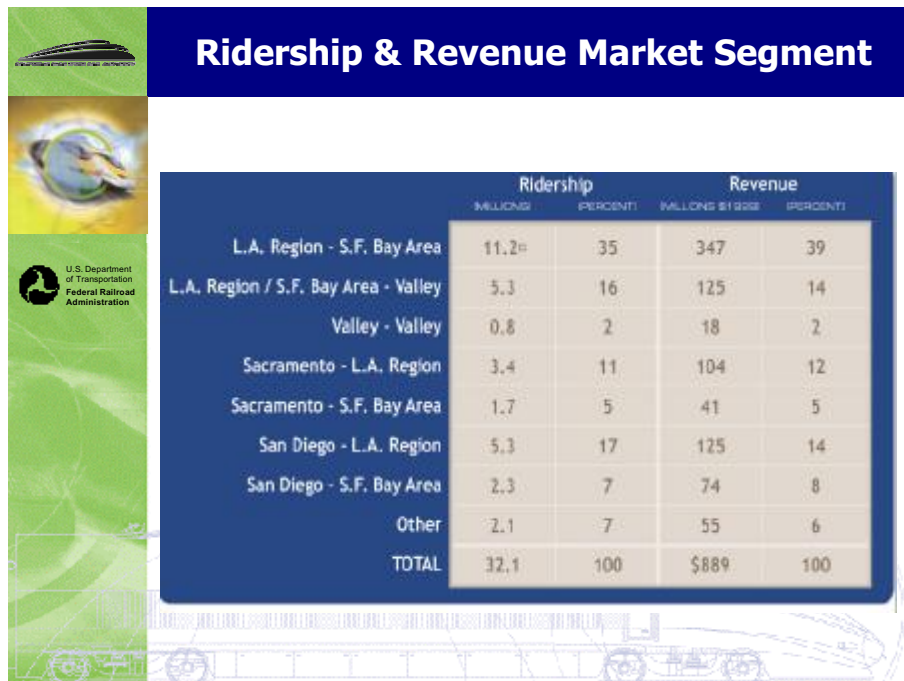


Figure 11. Projected ridership and ticket revenue

The San Francisco Bay Area to Los Angeles region is about 35 percent of the riders. About two-thirds of the riders are going to be related to the Central Valley, either at the beginning or ending in Central Valley cities. That’s a very important point to keep in mind; even though we talk about San Francisco to L.A., a large part of the market is in the Central Valley.

But you have to be able to beat the airline. We are not going to be able to convince people to take public transportation because it’s a public good. We have to convince them to take public transportation because it’s better for them. It gets them there quicker and it’s more convenient; not because it is good for you, because they won’t do it. I think David Lyon’s poll pretty much showed that.

I encourage you to all look at the PPIC poll, because they asked some very good, probing questions of people in California. Everybody thinks air quality is important and everybody thinks we ought to be doing something about it, but none of us want to do anything about it ourselves. We all want somebody else to do it, and that means that we’ve got to do things to make things better for people.

Our total ridership is estimated to be 32 million people. Now that is a fairly conservative estimate, because we asked our contractor who was doing the ridership and revenue estimate, Charles Rivers and Associates, to do an investment-grade ridership and revenue estimate. The Authority wanted to make sure that whatever revenue estimate came out of that ridership, that we could be selling revenue bonds in the bond market backed by those estimates. So, ridership is underestimated.

I want to point out for those of you who don't know, when we're doing our environmental document, you will see the ridership estimate of 58 million being used. That's the higher limit that we expect to have and is the one that we have to use in the environmental process. We have to use a more realistic estimate than the conservative estimate. Otherwise, we will be underestimating some of the adverse impact of the high-speed train system in the community and therefore won't be telling all the truth. So if you see that number, don't be surprised. We're not jacking up the number. We just simply have to do it, because that's one of the requirements.

Will It Make Money?

The other important question is: "What is the revenue?"

It would generate about \$900 million, nearly a billion dollars, in revenues for the project [refer back to Figure 11]. That is an important number because it exceeds the operating costs, and that revenue is based on a fare structure that was about 50 percent of the air ticket at the time we did this. It's about \$50 for a one-way ticket from L.A. Union Station to San Francisco; in betweeners will be cheaper.

What Kind of Stations?

The other thing I wanted to share with you is: "What are the stations going to be like?"

This next slide [Figure 12] gives you a distribution of what we anticipated annual ridership in each train station to be: 7 to 9 million; you'll notice Los Angeles at 9 million, San Francisco at about 8 million.

They will have impact on the downtown or wherever the stations are located, because they are major traffic centers, much like small airports. In Sacramento, our estimated ridership on high-speed trains in 2020 exceeds the number of people who use the airport today. They will require many of the same kind of facilities. You need to have taxi service. You need to have rental car service. All of these things that you have at the train station in the neighborhood, we need to know about. So, when we talk about stations, and we talk about the ground transportation and other facilities, we must keep in mind that these are very large facilities with a very large number of people coming and going from them.

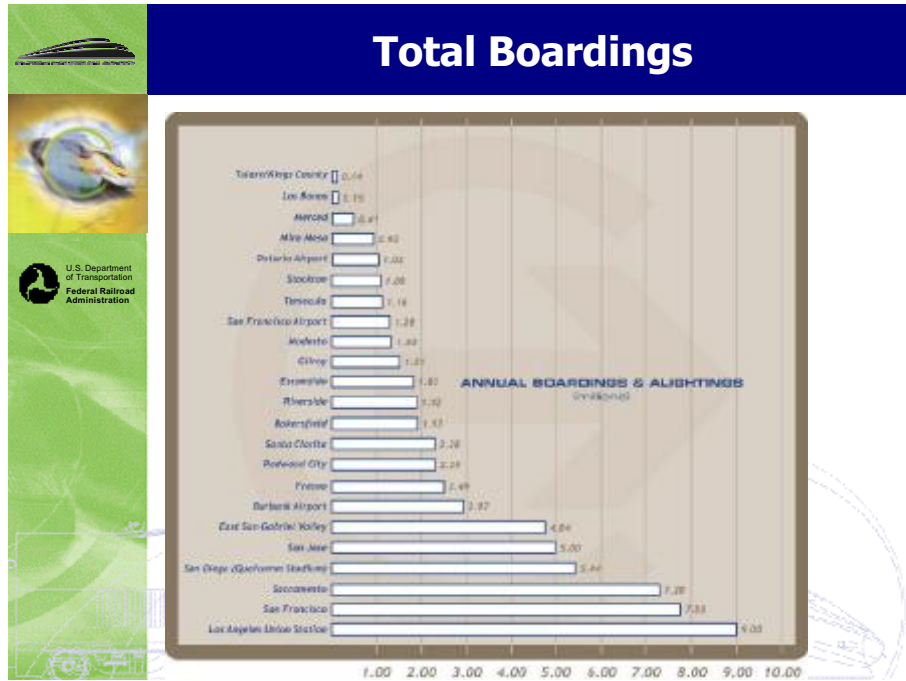


Figure 12. Estimated boardings by station

Who Will Benefit?

The benefit is not only to the people who use the high-speed train, but benefits also accrue to people who don't use it. People who have less congestion on their highways, will have less airport congestion. So its benefits will be distributed throughout the population and the community, and not just to the train riders.

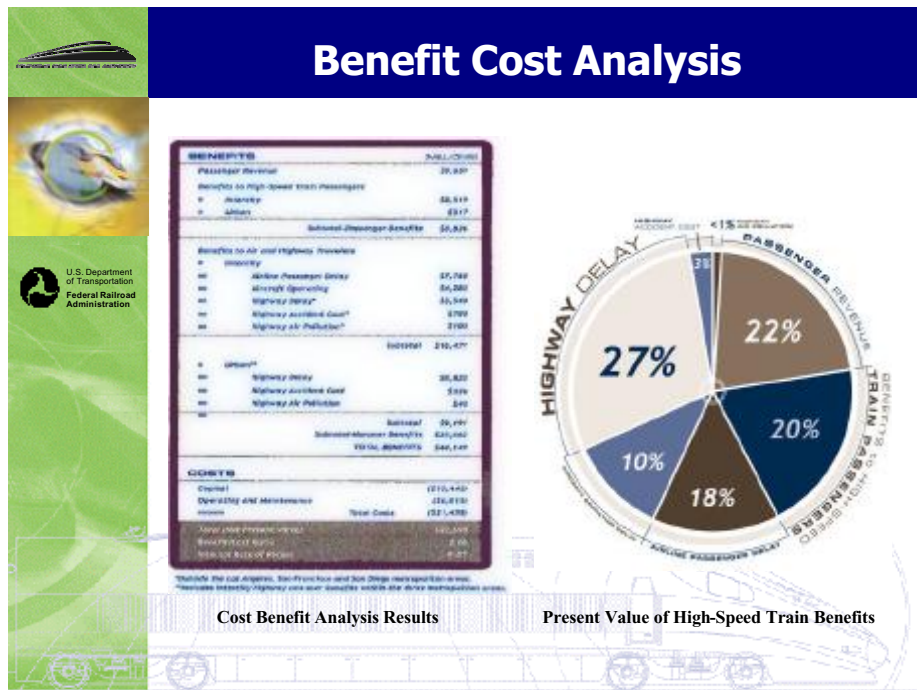


Figure 13. Benefits summary

What's the Economic Impact?

Here are some quick numbers about the job creations and so forth, and I'm sure Bill Lee will talk about that later, so I'll go quickly over that.

At the same time I have to be honest about it; if you spend \$25 billion on other transportation, you'd probably get the same numbers. So, I'm not claiming that we will generate more jobs than spending the money on other improvements in the region, not just high-speed rail.

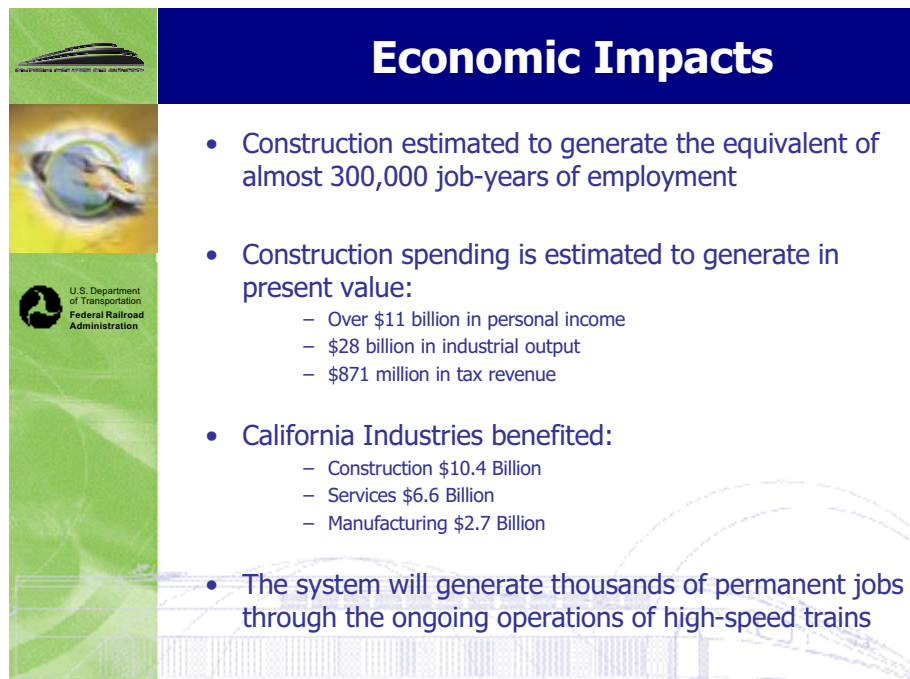


Figure 14. Economic impacts

What Happens Next?

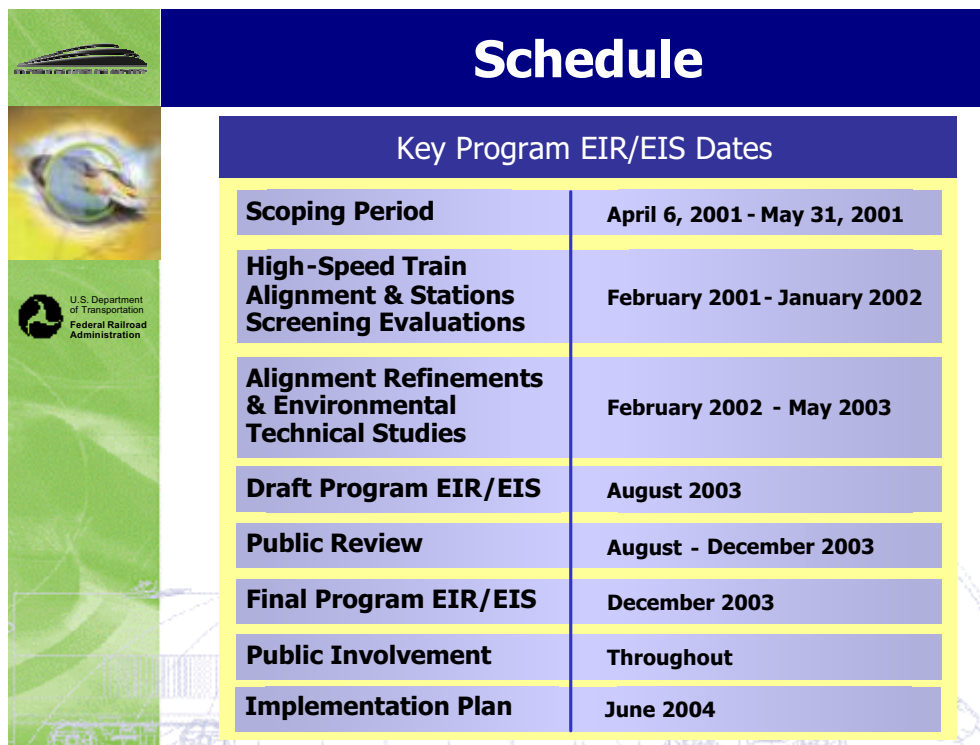
Finally the question is: "Where are we?"

I mentioned earlier that we started with the feasibility study that was completed in 1996. We did the business plan in 2000. We are doing the program EIR now that will be released later in the year, and then the final EIR will be released after that. Once the voters approve [the bond measure], then it goes into construction and of course, that takes a few years to do that. We will continue to go through the financing and once you construct it, then you go into operation.



Figure 15. HSR Project timeline

Also, it's important to note that in the part of the process we've done, I think, is that high-speed rail enjoys very strong public support and has some political support, both in the legislature and in the governor's office. This governor has been extremely helpful and supportive of the project; most of the work we've done has been under his leadership, with financing and support provided by the overnor since he became governor in 1999. From the business plan on down, that's been under Governor Davis's leadership. He's been providing us with all the funding that we requested and he continues to support it. He signed the legislation to put the \$9-plus billion bond measure on the ballot. As Joe pointed out earlier, even though we are in some very tight budget issues, they funded us fully for finishing the environmental work and we are very grateful for that.



Key Program EIR/EIS Dates	
Scoping Period	April 6, 2001 - May 31, 2001
High-Speed Train Alignment & Stations Screening Evaluations	February 2001 - January 2002
Alignment Refinements & Environmental Technical Studies	February 2002 - May 2003
Draft Program EIR/EIS	August 2003
Public Review	August - December 2003
Final Program EIR/EIS	December 2003
Public Involvement	Throughout
Implementation Plan	June 2004

Figure 16. Proposed EIR/EIS schedule

This is the schedule that we are working toward, and you'll see that we expect to have a final EIR by the end of this year or early next year. As I said, Governor Gray Davis has been very helpful. He's the one who had the vision and opportunity to proceed. He funded the environmental process that we are in.

We are going to be participating in considerable amounts of public outreach. We'll try to go to every corner of the state where the train is anticipated to go; try to hold public meetings; try to invite the public to give us comments. Because what we want most from you and the public is: learn about it, become familiar with it, know what it is, know what it's going to do for you, and know what it's not going to do for you. The best thing you can do for yourself and the state is to be an informed person within the state. Our job is to help provide that information and then the rest is up to you.



The slide features a vertical green sidebar on the left with three distinct sections: a top section with a stylized train icon, a middle section with a circular graphic of a hand holding a globe, and a bottom section with the U.S. Department of Transportation Federal Railroad Administration logo. The main content area has a dark blue header with the title 'Contact Information' in white. Below the header, the text is centered and presented in a blue font. At the bottom, a faint, light blue illustration of a high-speed train is visible, overlaid with the website URL.

Contact Information

California High-Speed Rail Authority
925 L Street, Suite 1425
Sacramento, CA 95814

Telephone (916) 324-1541
Fax (916) 322-0827

www.cahighspeedrail.ca.gov

Figure 17. CHSRA contact information

If you need to contact us, here is the contact information; and with that, thank you very much for your patience and for your attention and for coming here. I want to thank The Commonwealth Club and Town Hall-Los Angeles for providing us this opportunity. We are very privileged to have it, and we look forward to doing more of these in the future.

INTRODUCING THE PANEL

Dr. David Lyon, Moderator:

I'm David Lyon, the President and CEO of the Public Policy Institute of California, and I'm very honored to have this opportunity to be the moderator of this panel to discuss the issues that are raised by the presentation you just saw and the issues that will be facing you as voters, not only in 2004, but presumably in future bond issues that are brought before us to pay for the total package over the course of the years that we've discussed.

I would like to start this panel discussion by echoing what you heard from the chairman of the High-Speed Rail Authority: this is one of the key decisions that will be made in California in probably the next hundred years, a key investment in infrastructure. The decision is not just one to build, but it's also a decision to *not* build, so that either way, the consequences of where you come down on this are profound for public investment, private investment, consequences for the future development of the state in terms of urban growth, industrial growth, and it certainly has long-term consequences for the pattern and type of job quality in the state.

So, this is a big decision, and I applaud the sponsors, The Commonwealth Club, Town Hall-Los Angeles, and the Mineta Transportation Institute, for the fact that they've started this process. I'm sure there will be other groups like this, pulled together over the course of the next few months as this pending bond issue is presented to the voters.

I'd also like to add to the fact that I think that this is certainly in the same category in terms of scale, of the decisions that were made in the 1960s on water policy, on transportation as far as the building of the interstate highway system in California, and of course, the higher education system. All of these we look back at now as the golden years of public infrastructure investment.

This one is bigger; this one is more complicated and raises a lot of issues, and probably in some ways, we're going to debate the level of detail that was certainly not publicly debated in the '60s when those decisions were made on the three big examples I gave.

So the purpose of this panel today is quite straightforward, to inform the voters, to inform those who are interested in the details.

The panelists have been chosen on the basis of their knowledge in this area. Their backgrounds qualify them to discuss the issues that are raised by a high-speed rail line: questions of costs and benefits, of environmental impact, how you run a system like this, how do you separate capital costs from operating, and so forth. This is a chance for you in the audience to quiz them after they've made their comments.

A Starting Point: Three Questions

Before we started this session, I asked the two directors, Gloria Duffy and Adrienne Medawar, to address three questions that the panel would review, any one of which they can address or hopefully, collectively, they will address all three.

1. The first question is, whether or not the high-speed rail line that's being presented is the most cost-effective means for moving people from Northern to Southern California and vice versa – is it the best way to go? If you were to take other options, is this the most cost effective in a broader sense of that concept?
2. The second question I asked them is, what else might be done with the \$25 billion required to build the high-speed rail, and how these other alternatives stack up against this concept?
3. And third, I raised the general question about equity. There are economic, social, and environmental equity consequences of this investment that certainly should be addressed in the course of this deliberation in the coming months – questions of who will use it and who will benefit from a system this large and complex, a system that, once you put it in place, you're living with the consequences of that equity profile for some generations to come.

These are obviously big questions and will provide a context for some of the presentations today, but I suspect they'll remain not fully answered, at least at this early stage.

Now I want to say just a few words about each of the speakers. I'll try to pick as small a part of their biographies as possible, because we want to hear from *them*.

The Environmentalist

Let me start with John Holtzclaw, as a consultant in transportation, urban development, energy consumption, and air quality. His recent research for the National Resources Defense Council, the Center for Neighborhood Technology, and the Surface Transportation Policy Project has been into how residential density, transit service, and bicycle and pedestrian friendliness reduce automobile ownership and driving. He's currently a consultant to the National Resources Defense Council and Chair of the Sierra Club Transportation Committee. I think the most important thing on his résumé is that he says he hasn't owned a car since 1978, so I would immediately question his ability to discuss this topic in a rational way. But nevertheless, he's going to defend himself on that one.

The Economist

Next, Bill Lee, Senior Vice President of the Economic Research Associates, has been involved in land planning and development economics since 1969. He's been with Economics Research Associates since 1976. He served as a project manager for a major assignment for the State of California Intercity High-Speed Rail Commission, serving as prime contractor on this important assignment. I won't go into greater detail, but you can see that he's got the credentials to address some of these topics.

The Transportation Customer

Richard Silver is next in line. He has one of the most interesting résumés, as he has five points: he's Executive Director of the Rail Passenger Association of California, he must like trains; he's the Western Director of United Rail Passengers Association; a former member of the High-Speed Rail Authority Advisory Committee; former member of the San Joaquin Rail Commission; and former member of the CalTrain Citizens Advisory Committee. He has numerous involvements in rail passenger issues, and we're delighted to have Richard here.

Commerce

San Francisco – Sunne McPeak, President and CEO of the Bay Area Council since 1996, has had a major role to play over the years in public policy issues involving transportation, housing, sustainable economic development, water policy, telecommunications infrastructure, and education and task force preparation. I've known Sunne for many years, back when she was a supervisor in Contra Costa County. She's been appointed by Governor Davis to be involved with the director of the California Consumer Power and Conservation Finance Authority. [Ms. McPeak subsequently was nominated by Governor Schwarzenegger to head the Business, Transportation and Housing Agency.]

Los Angeles – David Abel, as most of you here in this room will know, is President of Abel, Incorporated. He publishes two statewide publications: one is called *Metro Investment Report*, and the other one is called *The Planning Report*. Both of these are documents that are extraordinarily useful to the people in the planning and development professions. David has a very active civic involvement here in California, and in Southern California particularly. He is Director of the Metro Forum project, the foundation that business and labor funded to engage citizen leaders in public policy deliberations. I know David has been involved in a number of commissions at the state level for the Speaker [of the Assembly] in the last few years.

Government

San Francisco – Arthur Lloyd is a long-time member of the Caltrain Policy Board. He's been awarded Amtrak's prestigious President's Service and Safety Award. He's been a leader in promoting passenger rail service and is being honored by Amtrak as a champion of the rails, so I guess we kind of know where he stands on this issue. But he's nonpartisan, objective, and independent on this, I'm sure.

Los Angeles – Roger Snoble is Chief Executive Officer of the Los Angeles Metropolitan Transportation Authority. He's in charge of the daily operations of the third largest public transportation agency in the United States. MTA is a multimodal transportation agency responsible for bus and rail operations, transportation planning and programming, and construction in L.A. County. I think the thing on his résumé that's intriguing to me, aside from that formidable job that he's got, is the number of different cities and the context in which he's been involved in mass transit – the Dallas, Texas area, San Diego, and earlier years in L.A. County – so he's got a vast background and experience in the area.

It's a terrific group to hear from, so I think we'll have the five-minute statements by the panelists. I will start with John Holtzclaw and have him talk to you about his perspective as somebody who doesn't own a car.

THE ENVIRONMENT

John Holtzclaw:

I'm here as a Sierra Club transportation leader. The Sierra Club has no position yet on the bond measure that will be on next year's ballot. We will not take a position on that until the Environmental Impact Report is out and we've had a chance to evaluate it. However, anyone who knows the Sierra Club knows that we have at least as many opinions as there are Sierra Club members, and maybe even more. I will be stating some of our concerns and hopes about high-speed rail.

One of our concerns is that this system *not* induce sprawl. And what's sprawl to the Sierra Club? Why do we have such a campaign? It's not only that sprawl usually occurs on agricultural lands, wetlands, and other natural areas, but also it takes so much more land for housing people.³

When I compare two areas – San Francisco's North Beach, Chinatown, Russian Hill, Nob Hill, Telegraph Hill area, at 100 households per residential acre, to typical sprawl, which is about three households per residential acre – the people who live in North Beach save 97 percent of the land that would be occupied by their housing if they lived in sprawl. That's 33 times as much land to house the same number of households in sprawl, and 33 times as much asphalt and concrete covering land for roads and sidewalks. So that is a tremendous difference.

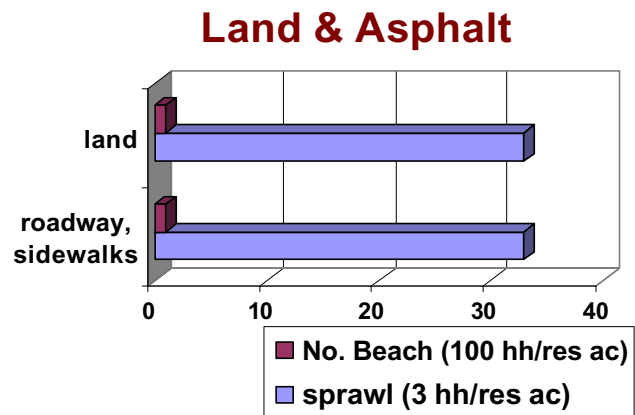
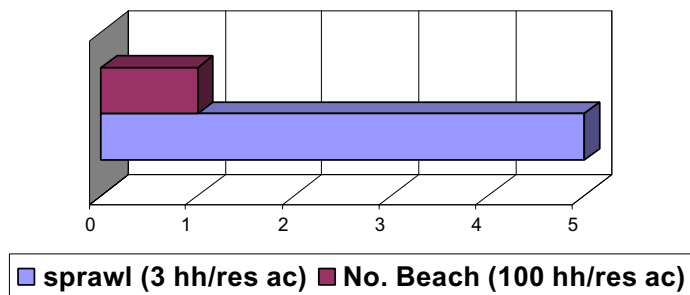


Figure 18. Cost of sprawl in land

Water



Let's look at water. The people who live in sprawl consume five times as much water per household: watering those lawns, washing the cars, which brings us to transportation.

Figure 19. Cost of sprawl in water

They drive. They own three times as many cars per household in sprawl, which means three times as many parking places – as you know, every car comes with five to eight parking places: at home, at work, at the shopping center, at recreation locations, at the curbside, and so on. Now people who live in sprawl drive three times as much; with that comes three times as much gasoline being consumed, three times as much pollution created.

Why do they have to drive so much?

People who live in North Beach and other compact mixed-use areas have a much more convenient neighborhood, so their trips are a lot shorter. For instance, North Beach has 50 times as much shopping nearby as people who live in sprawl – 50 times as much!

I live in the North Beach area, and I have over 700 restaurants within one mile. It's a very convenient area. You don't need a car because the trips are a lot shorter, people walk and they take transit a lot more. We have much better public transit. You can afford to provide good transit in an area like that, and you can't afford to provide good transit in a sprawling area. It's really difficult to supply good public transit to sprawl because the distances are so long; no one rides it. In an area like North Beach, many people ride.

Autos & Pollution

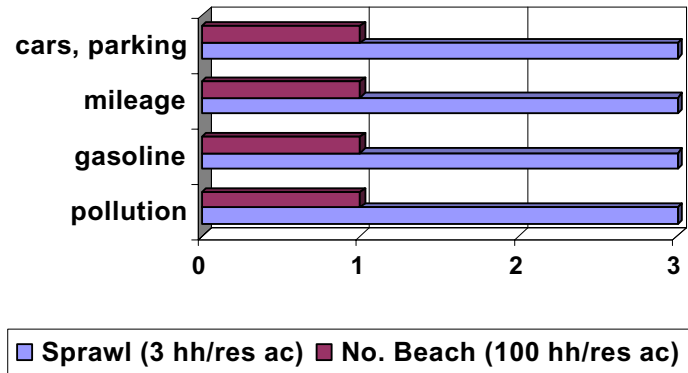


Figure 20. Cost of sprawl in automobile use

Public Transit & Shopping

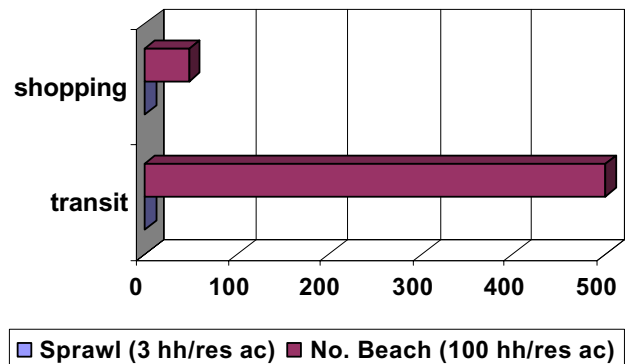


Figure 21. Cost of sprawl in personal conveniences

So we're concerned that the high-speed rail system should not induce more sprawl, which means that the stations should be located in city centers and major airports, not on greenfields. There should be smart growth around the stations with commerce and housing, not big parking lots like was traditional with the BART system. There should be a limited amount of parking nearby and that should be paid parking, charged at market rate. We want good public transit to the station so people can walk, bicycle, and take transit.

Another concern that we have is that it not fragment habitat, wildlife habitat, which means you avoid running the trains through natural areas, including Henry Coe and other parks. Second, it should provide frequent wildlife corridors over or under the tracks so that wildlife that doesn't fly, that swims or walks, can get from one side to the other.

Our third concern is that this system be done in a way that encourages smart growth, that it's environmentally sound, and that it's done relatively quickly, as quickly as possible. We want the main routing north of L.A. to be through the Grapevine to avoid adding sprawl around Palmdale.

High-speed rail itself encourages smart growth. It encourages people to take the train rather than driving. High-speed rail uses less energy and causes less pollution than driving or flying, so we want it not only for the smart growth aspect, but also for getting from destination to destination. We support high-speed rail because it consumes less energy and pollutes a lot less than flying or driving. It could be extended from California to elsewhere in the country.

ECONOMICS

Bill Lee:

Our firm, Economics Research Associates, had the opportunity to examine the economic implications of high-speed rail in some detail.⁴ We finished our assignment in 1996. The project has evolved some, but the general impact considerations really have not changed very much. I would just like to give you sort of a summary of some of our findings, first by economic sector, by geographic area, and then wrap up with some highlights and try to respond to Dr. Lyon's issues.

First of all, the construction and operation of high-speed rail will tend to accelerate the growth of the California economy. The extent of that acceleration is going to be offset by any new tax burden we have to take on in order to build a system. The system, as you've heard from Mehdi Morshed, operates profitably. But construction at the front end needs a public funding effort. To the extent we can do it with bonds, rather than new taxes, the overall impact is going to be quite favorable on the California economy, particularly if we can induce an injection of outside funding: federal funding, private funding, etc.

Clearly, any time you build a \$25-billion system, the construction sector is going to benefit. We're talking about 300,000, maybe 400,000 person-years of construction employment if you say it's a 10-year construction period – you know the additional construction employment in California is 30- or 40,000 a year.

The manufacturing sector really isn't impacted terribly dramatically. These trains are not likely to be produced in California. We considered policy to require that they be assembled in California and decided that was actually counterproductive. It's a mature industry; California would not necessarily benefit by creating this industry again.

We also looked at the agricultural sector, primarily in the Central Valley, and what the system is likely to do is accelerate the growth in the Central Valley and put additional pressures on land conversion in the Central Valley. With good planning policy, good local government, city and county leadership, the additional 3 or 5 percent growth certainly can be accommodated in a more smart growth pattern and not intensify the encroachment on agricultural areas. But local policy leaders have to be able to act in the face of economic pressure, to promote these policies and stick with them.

The finance and insurance sector will benefit; the real estate players in and around the system, around the stations, probably will prosper. The financiers participating in the construction and operations of the system should do quite well.

One sector of the California economy that should benefit from the construction and operations of the high-speed rail is the services sector. When you think about system development implementation, the engineering and EIR consulting firms are going to do well. Once the system is up and running, the major urban centers within California that will have stations will benefit substantially – Los Angeles, San Francisco, San Diego, Sacramento, maybe Fresno. They benefit in several ways. Professional firms, service firms, will find that it's more convenient to serve markets that weren't so convenient to service before. Professional service firms in cities like Los Angeles, San Francisco, and San Diego can serve clients better in the Central Valley. L.A. firms can serve San Diego better, or San Francisco firms can serve Fresno, etc., so those firms will have more reach.

The tourism sector will also benefit. You get tourist destinations being able to attract people from further away more efficiently. Disneyland or Knotts Berry Farm can get day trippers from Bakersfield. People from L.A., the east side of the L.A. basin, can get down to San Diego's waterfront probably as fast as they can to Santa Monica. You can come to San Francisco from Modesto, Merced, take in a Giants game, have dinner, and go home the same night if the train is scheduled properly. Cultural attractions in the urban centers will have more draw; so tourists and recreation destinations in the central cities serviced by the train will benefit.

The government sector will expand with the system.

Another key beneficiary will be the Central Valley. The Central Valley clearly does not have regular air service. Driving in the winter in the Tule fog is dangerous and not very easy. This will change the entire travel dynamics of the Central Valley. If you looked at Mehdi's chart, Fresno to L.A., Fresno to San Francisco is a little over an hour. Very different than today. By serving the Central Valley, you tie its economy into the very affluent, very dynamic urban economies of San Francisco-San Jose and Los Angeles.

The equity issue here is that the Central Valley traditionally has a higher proportion of low-income population and much higher unemployment rates than the L.A. or San Francisco areas. By serving the Central Valley, you drive that economy forward into the twenty-first century and you address that social equity issue.

When talking to some of the technology firms in San Jose, they were concerned about the quality of the labor force in the Central Valley in being able to serve their needs. So the rail system by itself is not going to do it, you need the educational institutions to augment that. But with UC Merced coming online, high-speed rail serving Merced is probably 45 minutes from San Jose. This really changes the dynamics of Merced, Modesto, and that area. They become satellite facilities to Silicon Valley, rather than having those firm's manufacturing facilities move out to Tempe [Arizona] or to China.

Another issue is that by linking these major employment centers to areas of lower-cost land and housing, you make California, overall, more competitive with its neighboring states. Clearly our biggest disadvantage as a statewide economy is our high housing costs, and this project tends to soften that just so slightly.

Dr. Lyon raised the issue of alternatives. What are the alternatives to high-speed rail? It's probably more lanes of freeway and more airports, bigger airports, and more service to decentralize airport locations. Those other alternatives of more lanes of freeway and more airports consumes much more land and fosters a continuation of our past development patterns,—more sprawl basically—where a fixed-guideway, high-speed rail system will have a tendency to consolidate development around the stations, around the alignment.

The primary concern on the downside of the economics is a new tax. If we have to tax ourselves to build the entire system, the tax that takes away income from households will tend to offset the benefits. If we're able to use bonds, given the existing tax structure, if we're able to attract additional federal monies to help us build the system, then our economy as a whole will clearly benefit.

In summary, the high-speed rail system probably will enhance the growth of the California economy. The extent of that enhancement will depend on how it's funded. If we have to tax ourselves completely, the enhancement is modest. If we can get substantial outside funding, the enhancement is substantial. Central cities, because of the professional firms and service firms, will benefit. The greatest benefit is probably to the economics of the Central Valley, where unemployment typically has been twice as high as the urban areas of California. So in terms of driving the economy forward, we believe high-speed rail is favorable in terms of addressing some of the economic equity issues in California.

TRANSPORTATION

Richard Silver:

My name is Richard Silver, and I'm the Executive Director of the Rail Passenger Association of California. We are a statewide organization that actively promotes the expansion and improvement of passenger rail service in California.

That includes everything with metal wheels on metal track that operates on a regularly scheduled fare-for-travel basis. It's MetroLink and MetroRail in Southern California, but it's also Amtrak, BART, the cable cars, and the Skunk Line in Northern California, which are regularly scheduled fare-for-ride services – many people see the latter two more as amusement rides, particularly tourists, but they are bona fide forms of transportation within California.

Each day in California, slightly more than 1 million people use some form of rail transportation. Based on the formulas that different transit agencies use, that means we have roughly 2½ million people in California who use rail on a regular basis, which is generally defined as three or four times a month.

That ridership number is up almost 50 percent in the last 12 years. We have seen a tremendous increase in passenger rail here in California. Just with the things that are in the pipeline, despite the economy as bad as it is and cutbacks on the state level, we have a healthy probability of an expansion within the next two or three years of about another 200,000 people a day on rail. The point that I'm trying to make is that people are familiar with rail in the state. We've seen a big growth in passenger rail service. The [Department of Transportation] State Division of Rail and Amtrak have done a good job in expanding the intercity lines, and we've seen the ridership grow in those areas.

So the network is growing; the problem really is the speed.

One of the things that we need to do is recognize that we pretty well have reached our limit in the already existing infrastructure. There is some potential growth, but by and large the next level is to get the trains operating faster, particularly the heavy-rail trains. The average heavy-rail train, the commuters in inner-city trains, operate about 35 to 40 miles average speed an hour. I once told Rod Diridon, when he was chair of the High-Speed Rail Authority, to me high-speed rail is getting the trains to operate at 60 miles an hour on average. Certainly, getting high-speed rail in here would be a greatly improved situation to the ridership.

In comparison to Europe, we are a Third-World country in transportation. The average speed of a train in California is about 35 miles an hour; I'm not talking about light rail like MUNI, but I'm

talking about Amtrak, Caltrain, those kinds of trains. The heavy-rail services average about 35 miles an hour. I said to the chairman once, when we first met, high-speed rail to me is 55 miles an hour average speed, *over* 35 miles an hour. Quite honestly, if we got the trains up to 55 miles an hour, we'd have a substantial improvement, both in utilization and probably in ridership.

California is very much two states. If you look at the topography of the state, it's very difficult for highways, let alone rail, to go between Northern and Southern California. There's Highway 101 and then there's Interstate 5 through the valley. The trains that operate in the north stay in the north, and the trains in the south stay in the south.

There's only one exception, and that's the Coast Route passenger rail line over which Amtrak operates the Starlight. This is a very successful train. It is a fare-for-service, operates on a regular schedule, but is more of a pleasure trip than it is a form of transportation. It's almost in the cruise ship category; it's a deluxe train, operates once a day, and is a pleasant ride. It's also usually booked out. Simply because of the fact that it's such a popular train, it's a flagship of the line. But if you really have to go somewhere quickly, that's not the way to do it.

Now, high-speed rail will do many different things, and one of the things it will do is bring the northern part of the state and the southern part of the state together for the first time since the early days of the railroad when there was more frequent service to the valley and the coast.

Included in the bond act that will be on the ballot next year is an additional \$900 million that can be used by the various intercity trains, and more particularly the commuter services, to beef up, improve, expand, and increase the running times and speeds for their various trains. To serve the high-speed trains, each of those are important; for example, MetroLink will be a very important provider of passengers to the high-speed operation in Southern California. And vice versa, the high-speed rail passengers riding into Union Station will get off those trains and get onto MetroLink.

The ballot measure that the High-Speed Rail Authority is putting together, we all hope, is going to be a good plan, and every indication seems to be that they're going in that direction. Like the Sierra Club, we haven't formally endorsed anything except the concept, because the plan is not there to endorse at this point.

Now, we get one chance at this. Because if this is defeated at the polls next year, it's going to be a good 15 or 20 years before it can come up again. The opponents can simply say, we voted on that two, three, four, five, eight years ago. So, we need to have the best plan possible to present to the voters next year.

We have enthusiastically supported the concept, but until the product is presented, we really can't make a presentation of support – the plan has to be sure to tie the major urban areas together over the period of time that it's built in stages. The first phase has to meet the original mandate of

connecting the San Francisco Bay Area, particularly San Francisco, and Southern California, particularly Los Angeles. To the extent that we can provide benefit to the people in Bakersfield, Fresno, and the other cities in the valley, that's all well and fine, but that's almost a secondary benefit to the system. As it grows, it can extend on to San Diego, Riverside, San Bernardino, Sacramento, all areas that need to have service, both to and from the north and south.

The moderator asked about the economic justice issue of service. Ride on the train sometime, and look at the people that ride on the trains. They're not the rich people, by any imagination. I ride trains at least a couple, three times a week, mostly in the Bay Area but also throughout the state on a regular basis. It is people who generally don't own cars – who are economically not able to own a car, or too old or infirm, or like John and myself who don't own cars as a choice – that's who's riding it. As for the issue of the economic aspect of it, I think this is a form of economic justice. We're bringing transportation to people who, in many cases, aren't able to afford to have their own cars or afford the price of an airplane ticket.

High-speed rail has to be *high speed*. It has to be frequent, efficient, and economically beneficial to the state, both in the operational cost and the service that it provides.

In the next few months as this goes around the state, carefully follow what the issues are, because we only get one chance at this next year.

From our perspective, we need to at least rally behind the ballot measure, because if it fails, it's not going to be something that you can come back to in a couple of years, or three or five years. We'd really be finished with high-speed rail in California for a good 10 or, more likely, 20 years. We really can't go any longer without addressing this crucial problem that is of such vital importance to California, to the people that travel, our economy, the whole network of subsidiary beneficiaries such as the intercity and commuter rail services, and the great potential of employment and job opportunities that it will provide to the state.

COMMERCE

NORTHERN CALIFORNIA

San Francisco

Sunne McPeak:

I'm Sunne McPeak, with the Bay Area Council. The Bay Area Council is an organization established in 1945, representing major employers focused on quality of life and economic prosperity in the region.

We spent a lot of time looking at transportation and mobility issues. For 23 years we have conducted the Bay Area Poll, and so we had the longest continuous running monitoring of public opinion in the region. For 20 of those 23 years, the single most important issue cited by the residents of this region has been transportation. We need a better transportation system. We also, as a representative of major employers, are very concerned about what the forecast is for mobility into the future. It is extraordinarily sobering.

Let me also say to you that the Bay Area Council does not have a position on high-speed rail. We too will be looking at the Environmental Impact Report and studying the ballot issue. I personally love trains. For the last eight years, while I do own an automobile, I use only public transit and don't drive, and you're all safer because of it. I do so out of choice. I don't know demographically if I'm exactly like John and Richard, but I very much embrace public transit because I love it.

Having said that, the Bay Area Council, along with 15 other business-based organizations, has been collaborating on a regional transportation initiative to look at how we actually will improve mobility in the future. I want to share with you what I called "sobering" statistics for the Bay Area.

We expect in the next 20 to 25 years, that there will be about another million jobs, that the housing needed for that workforce is about 637,000 housing units. With the land-use pattern and the planning of today, among the 110 jurisdictions, we will accommodate only about 420,000 of those houses. Therefore, we're going to end up in 20 years with another 200,000-unit deficit, longer and longer commutes, and an increase in congestion, if we do nothing to alter current patterns.

So think about the congestion that you experience today, or at the height of the economy a couple of years ago, and think about that increasing 152 percent. That's totally unacceptable for either the economy or quality of life.

The high-speed rail proposal will do very little to impact that reduction in congestion. Now why do I say that? It's because that congestion is mostly related to the trips within this region, and the fact that we are not using land efficiently within the Bay Area. We're in massive default in terms of providing enough housing for the region. We're forcing people to live outside this region – mostly moving east, a little bit to the south into the Monterey Bay area, and also to the north out of this region.

So, the Regional Transportation Initiative⁵ that the Bay Area Council and other major organizations has put forward says you have to do about five things, and then also spend a whole lot of money.

First, change the land use pattern. There is absolutely no way to improve mobility, no matter what you build, unless we change the land use pattern.

Second, we have to use market-based solutions, be a lot more innovative about how we price congestion.

Third, we have to use existing capacity much more efficiently.

Fourth, we've got to deploy all the smart technology we can think of that's born out of this region.

And fifth, you've got to probably spend about \$10-billion-plus in this region alone, that's our placeholder.

So in answer to the question, "Where else would you spend money?" It would be in this region. It would be, for example, the high-speed water transit system that the Bay Area Council conceived of, at the direction of the legislature, using only \$1.5 billion in capital, moving 20 million passengers annually.

Now having said that, I want to tell you why we still are in a neutral position and suggest that there be continuous study of the high-speed rail proposal. It's because if you reflect just a moment on history, great things happen because people have bold visions and they take very deliberate action. Had the original BART plan and concept actually been embraced, when it was put forward 40 years ago, it would have been around the bay. Thirty, forty years later, San Mateo and Santa Clara [counties] decide it was a pretty good idea.

So I commend to you a quote that we came across when we did the Bay Area Water Transit Initiative,⁶ from Daniel Burnham about a hundred years ago, which says: "Make no small plans, they do not have the power to fire man's imagination."⁷

SOUTHERN CALIFORNIA

Los Angeles

David Abel:

I chair the L.A. Chamber of Commerce Transportation, Water and Infrastructure Committee, and I've co-chaired the Los Angeles Economic Development Corporation's Critical Infrastructure Committee. I'm here to report there's a split in those jurisdictions.

What's to happen after the Environmental Impact Report is released is critically important to all of our deliberations and how we go about reckoning with the challenges and the implications of this bold new vision that, as has been said, will change the face of California.

To prepare for my remarks, I brought out my favorite book, *The Power Broker*,⁸ about Robert Moses' experiences in New York, and I reread some of our own interviews in *Metro Investment Report* with Mehdi Morshed,⁹ whose hair was all dark when we did our first interviews; for the radio audience, it's silver now.

So, it's true this may be a century-long process, and Mehdi is reflecting the length of time it takes to do bold ideas. But let me begin by saying, it's fair to say that the potential for having high-speed rail that is fully integrated with the existing mass-transit network in California has peaked the interest of the business community. Obviously, the issues of economic growth, mobility, investment, and infrastructure are choice items for the business community's typical support. The initial response to the proposal has mostly, but not universally, been positive.

At the conceptual level, it's a public works proposal so visionary and so big that it makes one think back in the days before Proposition 13, when California could do things like build the best water system, road system, and even the best university system in the world. But timing is everything, and for much of the business community this is the question. Is this the time for such a bold idea to be advanced? What are the infrastructure trade-offs that must necessarily be made?

Of course, if Kevin Starr were here today he would argue that the City of Los Angeles, in the depths of the depression in the 1930s, voted a bond measure that, I guess in inflationary terms, would be the equivalent of this [high-speed rail project]. That bond measure built the system that brings the water to California that allows us to be a county of almost 11 million people.¹⁰

The L.A. Area Chamber has already endorsed the legislation to place this high-speed rail project on the ballot. One consideration motivating that endorsement is that, in L.A. alone, the visitor economy supports more than 250,000 jobs and brings into this market, even in a bad year like 2002, almost \$12 billion in direct, unmultiplied dollars. High-speed rail, linking the major metros of California, could be seen as a new reason for visitors, especially international visitors, to say yes to a visit to our fair state.

Moreover, international visitors spend about three times more than their domestic counterparts and are presently intimidated by the prospects of navigating our state's freeways. A high-speed, inter-regional rail system would make California more accessible to these highly regarded bearers of wallets, and at the same time give them the fun of an E-ticket ride. More specifically, high-speed rail would allow for a Euro-rail kind of pass that would permit visitors to truly enjoy California as they want to experience it, as a collection of attractions spread a thousand miles along the Pacific Coast.

The Los Angeles Economic Development Corporation (LAEDC), L.A.'s other major regional business organization, on the other hand has expressed its opposition to the high-speed rail project. Since I sit on that Board, I need to explain why.

LAEDC's CEO, Lee Harrington, has argued that "California cannot afford the diversion of necessary infrastructure money for a high-cost, high-speed rail system which duplicates existing relatively low-cost airline service within the state."¹¹

The issue for Mr. Harrington and the LAEDC relates to timing as well. It's whether high-speed rail is affordable, given all of our other pressing infrastructure needs. "Shouldn't available money," they argue, "be spent on our bus and rail systems now, and shouldn't it be more productively spent revisiting the high-speed rail funding? Shouldn't we look at this again when the state's budget crisis is clearly behind us?"

Again, quoting Lee Harrington: "With the state's basic infrastructure deficit growing daily, we need to carefully prioritize our infrastructure needs and spending. California's budget crisis has made it all the more clear that available funding will be far short of our total infrastructure needs."

Harrington also says: "The success of international trade and logistics will also continue to require infrastructure support for the movement of goods and the related jobs in this business."

"We need to add new regional transportation infrastructure," he argues, "such as bus and light rail systems to serve commuters and lessen the congestion in our intracity freeways."

So, there's the split in the jurisdiction.

Now obviously this conversation is taking place *before* the Environment Impact Report is out and before the larger public conversation takes place. But I have to note is that we're asking – and maybe the PPIC survey made this even more clear – if the public wants these problems of congestion, infrastructure, and a strong economy to be dealt with at the same time that it's drastically cutting back the resources and its faith in the public service to respond.

I'm personally inclined to be open to this bold idea by very professional people in our public sector. I think if we don't take this idea on now, we'll regret this in 10 or 20 years when we're faced with the kinds of congestion and stagnated economy that frustrate the dreams that all of us who came to California, or grew up in California, cherish. We're open to the challenge that there's a split in the jurisdictions and I look forward to a continued conversation.

GOVERNMENT

NORTHERN CALIFORNIA

San Francisco

Arthur Lloyd:

Thank you very much for the opportunity to be here. I guess in baseball parlance, I'm not only the clean-up, but I'm a pinch hitter. My good friend, Mike Nevin, called me at 5 o'clock last night, and said, "Help, I've got a family commitment, can you fill in for me at this?" I said I'd be delighted to, because I'm a strong proponent of high-speed rail, and look at it as an answer to our transportation problems.

Rick stole one of my favorite lines, that we're a "Third-World country" when it comes to transportation. I have ridden on every continent and ridden all high-speed lines that were shown up here, as well as Acela high-speed line. The finest train in the world is in a Third-World country; it's called the Blue Train of South Africa, and it's exceptional. We need to go a long way to emulate that. A friend of mine said North America is second only to Antarctica in having the least efficient transportation.

Rick, we *average* 35 miles an hour, but we go a lot faster. The CalTrain is 79 [mph], as are the Capitals and the San Joaquins. I'm on the San Joaquin Valley Rail Committee and we're doing well down in the valley *and* at 79 miles an hour. We average here on the Peninsula 35 [mph]. What Mike [Nevin] emphasized, however, is that we at Caltrain, the Caltrain Board of Directors, approved a memo of understanding at its meeting two weeks ago to have high-speed rail utilize our corridor.

This former Southern Pacific 47-mile corridor is being upgraded as we speak. We're going to have the Baby Bullet train in March of next year. We'll have our weekend service back so that I can go to ball games on the train. We want our line improved; we are doing it. As I said earlier, [upgrade to] the high-speed rail and get rid of the grade crossings with full electrification. We need electrification – again, our continent is next to only Antarctica on mainline railroad electrification – it's efficient.

I was born here in this city, and I commuted right behind us here on the K Line for many years. My office was at 526 Mission Street. I was with the Western Pacific Railroad at that time.

So, rail transportation, steel wheel on steel rail, is *still* the most efficient.

In the Northeast corridor, I had the pleasure of riding the Acela train a few months ago from Washington, D.C., to Boston. I'm retired from Amtrak, so I exercised a few privileges and rode up in the head end, in the cab. There's not a grade crossing for that whole distance. It was six hours, top speed of 150 miles per hour. We still don't have the 187 and 200 miles [per hour on the Acela service] that we're talking about here [in California], but it was an experience. At six hours – what a comparison to the six hours on the 757 coming home from Boston, seats, everything.

That brings up another point, high-speed rail will make it so much easier to go between our area and Southern California and to the valley – Fresno, Bakersfield, intermediate points. Mehdi's chart showed that intermediate points will be very important.

Think to yourself as you sit on the aircraft, as it pushes back – you have gone through security, taken your shoes off, gotten your shoes back on again – by the time you've pushed back at SFO or LAX, that train would be in Bakersfield. Think about it. Yes, it's going to be expensive, but it's a tremendous investment. In 1958, President Eisenhower signed the Interstate Highway Act and we invested in it. Friends have told me that they drive to L.A. because they don't like the hassle of the airport. I wouldn't think of it. But they hate Interstate 5 now because it's solid trucks. A friend of mine said he uses [Highway] 99. I said, "Why don't you use the San Joaquins?" They're faster, it goes 79 miles an hour, and it's a lot less hassle. Think to yourself, [as you're] pushed back in the airplane next time you go, on a high-speed train, by now you'd be in Bakersfield or maybe in the Grapevine.

SOUTHERN CALIFORNIA

Los Angeles

Roger Snoble:

I'm a happy guy today and I'll tell you why. Next weekend we'll be opening the Gold Line, our newest rail line in California. I know it's going to be successful, it's going to be a great day and I hope you have an opportunity to come down and take a ride from Pasadena to the Union Station over the weekend, and then of course, at other times as well.

The other reason I'm so happy is I just got back from vacation, two weeks of it was in Europe. You know, it's just really amazing to me how well things are done in Europe. I grew up thinking the United States had the highest quality of life in the world, and when I was on the cruise ship and had lots of time, I did a lot of reading. I saw a survey and it listed countries by quality-of-life ranking for all kinds of different things. The United States was way down the list. There were a lot of countries that I was in that really have much higher quality of life. I could be there and experience it, and I started to really think about how much smarter they are about doing things.

When I was early in my transit career, I had the opportunity to go to England and study in a British Transport Staff College, back in 1979. That was when they were rolling out the 125-mile-an-hour British Rail train – revolutionary, 125 miles an hour. I rode on that train and thought, wow, this is pretty cool. You know, we'll have those in the United States pretty quickly. They'll be all over. There are all kinds of opportunities in the United States and I figured it wouldn't be that long before we would start to see some of those kinds of things.

Well, in the meantime, Europe has gone way beyond that. Now, 125 miles an hour is just a regular. In fact, there probably aren't a whole lot of them that go that *slow* in Europe. I rode in one in Germany that was 200-and-something miles an hour – really fast and very pleasant.

Then we got in a plane leaving Amsterdam to come to London. We sat on the tarmac for 20 minutes because the pilot had to get clearance from air traffic control; some of the most congested air space in the world is in Europe, the second I think is in California, by the way. The air system is very, very touchy there. The airports are extremely crowded. We landed in London, at Heathrow, and didn't even have a gate. We walked down the stairway like you do in Third-World countries. A bus met us and took us to where we needed to go. Air traffic there is really horrendous.

In Germany I noticed that there was a big accident, a car collided at 130 miles an hour on the Autobahn. I said, well, you know, here they have crowded airspace, but their freeways are able to operate at 130 miles an hour and they have wonderful trains. So we were on a train, going into Berlin, and it was fabulous service; it was just really great. They're doing some things right there.

In Europe, there are a lot of different needs for people to travel from one country to the next. There's a big need here in California too, and you can see that. But right now the choice that you have for traveling to other cities in California is taking your car. I used to drive from San Diego to Hollister in Northern California. We used to drive up and down Interstate 5 all the time to visit my in-laws. I'd go 80 miles an hour – there's nobody here from the CHP is there? It was a piece of cake, after we got through L.A., of course. Today, you can't do that. We drove to San Francisco not too long ago and it took forever on I-5; it's no longer an open highway.

The other choice then is to fly. Well, you've got to get to the airport, and then you've got the same kinds of difficulties getting around because, of course, you go to the airport by car. When you get to your destination airport, you have to have a taxi or rent a car, so everything is just totally auto-dependent.

What we really need to be able to look at is how we can, like Europe, balance that out and put in another modal choice. If we had that modal choice and we were actually able to save people time and money over what it would take to fly or to drive, you'd get a huge market share of people using that choice.

The other advantages I see are that you would tie it into a whole different mind set, a whole different way of operating, because it doesn't require huge amounts of space, like an airport does. It doesn't require that you drive your car to get to it, because most of the areas that these trains will be leaving from will have tremendous transit systems.

For instance, Los Angeles' Union Station has access from a five-county area by MetroLink, so you don't necessarily have to take your car. You can ride a bike. You can take a bus. You can take a train. You can take MetroLink. There are all kinds of access to it.

With the new system you could move at the other end too, where you also would have transit systems that are able to get you to where you want to go. You wouldn't have to get a taxi. You wouldn't have to rent a car. You would not be auto-dependent. That's the problem that we all have today is that we're so auto-dependent, because we have to be; we don't have any choices.

This proposal gives us another way of having a choice.

I'm a very big proponent of expanding our rail systems in a meaningful way. I think that the kind of investment that it would take to do something like this enhances and makes even more important the local transit systems. Because we're going to have to invest a lot of money to feed passengers to these things and to distribute people once the [high-speed] trains come in.

We already have an infrastructure in place. At midday, we probably even have some capacity for it. We will have to build additional *peak* capacity, as demand for high-speed rail comes in, but I think that gives us a whole lot of impetus to be able to build that higher demand within our own transit system. So, I think [high-speed rail] is a catalyst to allow us to do that.

But overall, I really think we have to look hard at the way we live and the way we travel, and understand that the conventional ways of doing things aren't going to be available to us in the future, even if we want them. You're not going to be able to build additional highways. It's just not going to happen; even if you have the money, you still have all kinds of other environmental concerns and problems. Even if you have the money to expand the airports, to really do it practically in Southern California is pretty much an impossibility.

So, what is the only tool really left to us? It is certainly one I think that is available and one that will work, and one that will really be a pleasant alternative for many people. It's a bold move, as we've said, but it's an important move that we make if we are going to get back to being at least in the top part of that quality-of-life list. These are the kinds of things we're going to have to start thinking about and start doing; otherwise, we're going to continue to drop down that list.

PPIC SURVEY RESULTS

Dr. David Lyon:

Before I turn to the discussion and questions, the PPIC Statewide Survey has been alluded to a number of times. I just want to factually lay out what is going on here with respect to the conflicts that have been raised by that survey. As some of you know, this is a survey that we do monthly. Statewide, 2,000 Californians are interviewed every month, and have been since 1998. We have a huge file of questions at this point.

What we have found out in that survey, and the most recent one on the environment reinforces it, is that what the high-speed rail line faces is a state that is still dominated by extraordinary preference for detached housing. This is the style of life preference that we get. In the last survey we did on this, more than eight in ten people we interviewed statewide [86 percent] in all the income groups, racial groups and locations that we measured said they wanted to live in detached housing.¹² And they said they're willing to pay the time cost to do so: the longer commute, the transactions cost.

At the same time, in that November 2002 survey, which is a different survey question that didn't link directly into the first question, 82 percent of the people said they either are very pleased, or they're satisfied, with being in their car, with using their car as a means of transportation.¹³

So, this is the factual underpinning of the way California works. This is the preference system, the preference map, that people have to face as you look to the future of public investments. Now having said that, there is good news from the point of view of the High-Speed Rail Authority and those who have been looking at our recent survey on the environment more carefully. On our web site in July, we released a finding that showed that over 65 percent of the people we interviewed were in favor of a concept like a high-speed rail line between Los Angeles and San Francisco.¹⁴

Now what that says to me is, this is the way I want to live my life, let's get everybody else on that train, and I'm willing to spend \$10 billion to do it. The survey question asked if they would be willing to vote yes on a bond for \$10 billion to build a high-speed rail line.

Where you can find all that is at <http://www.ppic.org> on the Internet.

You'll see a reference to the Statewide Survey on the home page. Click on that and you will get a list of surveys where these November 2002 and July 2003 findings are summarized for you.

PANEL QUESTIONS & ANSWERS

NORTHERN CALIFORNIA Q & A SESSION

Dr. David Lyon:

I have so many questions here that I'm struggling like mad to try to put them in categories; and so bear with me, your question will get absorbed here, one way or another.

Let me start out with one that I think is common at this stage when you're talking about developing something as big as this high-speed rail. Is it common for estimates supporting high-speed and other fixed-rail systems to be inflated to build the public support for the system; usually ridership is overestimated and total cost of construction is underestimated? What has been done to avoid this type of best-case scenario and planning for the HSR?

Mehdi Morshed:

As far as the cost estimate is concerned, we used the private sector engineers, people with experience in planning and building a high-speed train system for other parts of the world.

We also ran our estimates by three entities in the world that currently have high-speed train systems: Germany, France, and Japan. We actually hired them as our peer review and had them review our cost estimates and our engineering assumptions to verify that we are not being overly optimistic.

As far as ridership is concerned, I briefly mentioned earlier the fact that the commission that I served on, the Intercity High-Speed Rail Commission, consisted of a group of skeptics. I want to emphasize that they were truly skeptics.

They were people who actually were appointed to that commission to be highly critical of the idea of building a high-speed train. It consisted of a person named Ed Jordan, who was the head of Conrail, who had strongly felt that passenger rail didn't have any future in the state. There was Dean Dunfrey, who was the Secretary of the Business, Transportation and Housing Agency under [Governor] Wilson, who was very much against the whole concept of looking at high-speed rail. It was Michael Tannenbaum, investment banker and member of the Reason Foundation, who believed that it's the kind of investment that the state can't afford and shouldn't participate in. It included myself as staff to a legislature that was highly critical or concerned about the fact that we were talking about spending that kind of money on this adventure. So we went through that process, with those kinds of critical eyes.

Because of that, we hired Charles River and Associates, which is a renowned firm in the world used by the airlines and other transportation industries who were doing investment-grade estimates, to do our ridership and revenue estimate. The instruction to them was that the ridership/revenue estimate had to be investment grade. In other words, the estimate had to be in the sense that it could be used in the bond market in New York to finance bonds against it. We actually were quite often criticized for having underestimated the ridership. But that was the criteria we used. Because of that, I'm very confident, personally, that our ridership/revenue estimates are much lower than they're going to be in real life.

Our construction costs, obviously, are going to go up. Because every time you do a construction estimate, if nothing else, there is 5 percent or so inflation every year. So by the time we go to construction, the prices are going to be inflated. As we go through the environmental process, and we come up with some mitigation, some of those costs probably will go up. So I can't tell you that our cost estimates won't go up, because I suspect that there will be some cost increase.

At the same time I can tell you, based on my experience, that I think our ridership is going to be considerably higher than what's laid out in the business plan. In fact, for our environmental review – and I'm making this long, because I think this is an important question – usually you have to look at the *consequences* of the train, and because of that, you have to be more realistic. Because of that, we actually are using our other ridership estimate, which is about 58 million, which was the higher end of the ridership for doing our economic analysis. For the impact of the traffic, impact of the noise, and all the other things that are going to be involved in the neighborhood, those [higher ridership estimates] are the numbers we used, because if we use the lower numbers, I'm sure we would be sued because we underestimated those impacts. That's how the line-up is, and we are pretty confident that those things are very, very accurate. Thank you.

Sunne McPeak:

David and Mehdi, may I ask a question? What additional costs have you put into the planning for security in a post-9/11 world?

Mehdi Morshed:

We are not yet at the stage where we can actually address the security, so we have not cranked in additional costs for that. I'm sure it will be included in the final analysis when we do that, but it is not, in my judgment, going to be a major factor in the total cost. I think that most of the cost is going to be the construction costs and then the operating costs. I think also another thing that we haven't cranked in, as the technology improves every day, we're going to be more efficient in some of those operating costs. For example, the Spanish system, which is a state-of-the-art 220-mile-an-hour system, I believe their operating cost is going to be lower than [those for] the Japanese or the Germans, whose systems are 15, 20 years old. So, there's a balance in there, and as we get further into it, those things will come into play, but it's not going to be a major factor.

Richard Silver:

I would like to comment about going over the cost of construction and time.

In Los Angeles this week is the kickoff for the Gold Line. It's a light-rail system between Los Angeles and Pasadena. It's a rail system, but it's completely different from high-speed rail because it's a light-rail system. It only cost about a half a billion dollars to build – *only* a half a billion dollars – but they've come in early and under budget. I was talking to the executive director and I said, "Gee that's wonderful! How great you did." And he has done a very, very good job, there's no question about it, but we never hear about the situations where they come in under budget or ahead of schedule.

I know that Caltrain, for example, is upgrading; they are ahead of schedule. I don't know if I'm supposed to tell that, Art, but they are ahead of schedule, and every expectation is that they're going to come in under budget. Again, it's much smaller than the \$25 billion high-speed rail. With things that you do on a regular basis, you get closer to the proximity of the cost and the time.

High-speed rail, with all due respect to Mehdi and the board, in many ways is a shot in the dark on the cost, because it's so mammoth. It's the largest public works project in the history of the United States, probably in the world, going back to the pyramids maybe. It's something that's never really been done on this scale. It dwarfs anything that France and Germany have done in their situations. So, in fairness, if it does run over a billion dollars and does take a year longer – I mean, you're starting from the beginning, from scratch – I think we have to be fair and factor that stuff in 15 years from now when the first trains operate.

Dr. David Lyon:

Let me use that opening to segue into the next question. I want to try to get three or four questions that have come together here, which basically relate to the difference between the capital costs and the operating costs, and the distinction between floating a bond for the sake of building the system and then making the system pay for itself. There are some skeptics in these questions, who seem to think that in order to get a price low enough to keep those low-income workers on this train you're going to have to subsidize it. So the question that I've condensed this down to is: What would be the likely cost of a full-fare ticket between San Francisco and Los Angeles? Secondly, what would be the likely level of subsidy required to be able to charge that price?

Mehdi Morshed:

The revenues that we estimated for the system used the fare structure that, at the time, was about 50 percent of the cost of a one-way ticket from San Francisco to L.A. by the airlines. That came to about \$50 per one-way trip San Francisco to L.A.

Using that cost number, we estimated that our revenues will be nearly a billion dollars, about \$900 million a year, and our operating costs, including maintenance, including setting aside money for the future rehab of the system (in other words, deferred maintenance, etc.), would be about a half-a-billion dollars a year. The system will start generating surplus revenues from the first year it starts. There isn't going to be a subsidy. There are going to be actual surplus revenues that will be used either to bond toward the initial construction of the system, or for the expansion of the system. It is going to be based on the fact that it's going to generate revenues.

Frankly, I know most people would not support a system if that system would require a subsidy after you build it, myself included. I know we're all skeptics and we don't know any public transportation system in the country perhaps, or at least in the state, that is supporting its own operating costs, but that's comparing apples and oranges. You know the other transit systems, BART and others, they're competing with automobiles that have subsidized parking and other facilities – you've already paid for the insurance, etc. – so if you have to compete with the automobile, that's hard to do.

High-speed transit is going to compete with airplanes, and even though airplanes are subsidized, it's a very expensive form of transportation. It's not going to be that difficult to beat the airplane when it comes to commercial success and that's proven in the rest of the world, in France and other places, where they're having substantial surplus revenues. I'm not claiming we'll be like France, but we can learn from their experience. Their experience with the urban transit system is not much different than ours; it's highly subsidized. Their long-range high-speed train system is profitable, and we expect the same thing here.

Sunne McPeak:

May I comment on that? I was actually very impressed when I went through those numbers to see that. I think everyone here realizes that within the region, we do have subsidies, and BART has the best ratio of fare box recovery at about 62 percent. But when I saw all of those revenues, those excess revenues, my first question was, so why aren't we doing this with revenue bonds as opposed to G-O [general obligation] bonds? Can you comment on that?

Mehdi Morshed:

Yes, and I think that, as I said, the surplus revenues in our estimation would cover about 25 to 30 percent of the total costs of the construction. So if you wanted to use revenue bonds only, you're still short, you won't have enough money. Even though we will have surplus revenues, it isn't enough to finance the entire project.

Sunne McPeak:

On the capital?

Mehdi Morshed:

It does require public subsidy for the construction. Public subsidy for the construction is going to be anywhere from 50 percent to probably about 75 percent of the original costs.

Sunne McPeak:

So, are you thinking a combination of G-O and revenue bonds for capital?

Mehdi Morshed:

Yes, definitely. We're talking about a combination because 25 to 50% of the surplus revenue definitely will be used to finance the construction. As I said earlier, the policy question for the legislature and governor to decide in the future is, do you use that surplus revenue ahead of time to bond against it for the construction? Or do you go ahead and use your general obligation bond, build the entire San Francisco-to-L.A. segment, and then use the revenue bond to build the next piece so you won't have to ask for bonds. That's a question that will have to be debated some time in the future.

Dr. David Lyon:

Okay, there are a number of questions here relating to route location. Why can't you get directly from San Francisco to Sacramento on this thing? I think the generic question is how much of this route planning is up for grabs and how much of it is pretty much dependent upon geography and such?

Richard Silver:

Can I briefly answer that?

Certainly San Francisco to Sacramento, and San Francisco to San Diego, L.A. to Sacramento, all of these pairs are important. My understanding though is the initial [segment] – we're not building the whole thing all at once unless something's changed in the last couple of months – is to get from San Francisco to Los Angeles.

Okay, to the extent that you service other cities along the way, that's fine. Phases 2 and 3 and 9 and 12 are to go into more cities along the route and/or to other areas, Riverside, San Bernardino, and those areas. Every meeting that I go to in the valley, I get somebody in Wasco – and I love Wasco, it's a nice little town – can't understand why they're not getting a station. Well, there are only 3,000 people there. In the grand scheme of things 20 years from now, when that population goes to 12,000 or 15,000, you might very well put a station there, where 2 of the 27 trains a day

that go through would stop at that station. But that's not part of the initial plan, and so often we get off on these tangents of, should it stop at Redwood City, or Palo Alto, or Millbrae. I have my favorites because I live in Redwood City. Obviously I can give you an argument why that's the best place to stop the train, because it's near my house. But as a practical matter, we have to look at what we're trying to achieve, and that is to get people from Southern California to Northern California; presumably to the major population, economic, and cultural places, and they are San Francisco and Los Angeles.

Arthur Lloyd:

That's why you have the feeder San Joaquins to serve Wasco and those cities, and that's why in the bond issue, you have money to bring the San Joaquins, as an example.

Richard Silver:

That's true. There's \$900 million in the bonds for other projects, such as the San Joaquins, Capital Corridor, the Surfliner train that runs from Santa Barbara to San Diego, and the commuter services. I think the way the formula works out, even though the majority of the train ridership tends to be in Southern California, a majority of that money will be used up here in the northern part of the state. That's because we have a wider network and more potential by using the money here in Northern California. You'll see improvements to Caltrain, ACE, Capital Corridor, and the San Joaquins here in Northern California, and proposed extensions on those that will benefit and feed in. The whole idea is that those have to feed in to the high-speed rail.

Dr. David Lyon:

Okay, the next set of questions has to do with the airline industry. There's a generic group of questions: Are they supporting or are they resisting? Wouldn't it just be cheaper to build some smaller airports servicing Los Angeles and San Francisco at a fraction of the cost? You can do it fairly rapidly; these are profitable enterprises and this is one of the most heavily traveled corridors in the world, so presumably if you located these airports in the right location, this would be a faster and more efficient way of getting the people moved back and forth.

John Holtzclaw:

The recent airports that have been built are not small. The Denver airport, the most recent, is bigger than the city of San Francisco. They consume a huge amount of land.

Something like 30 percent of the flights – not the passengers but the flights, out of SFO are to Central Valley cities. So you have to build more airports to take people to where they could get to much faster on high-speed rail. What was the first part of the question?

Dr. David Lyon:

Will the airline industry be supportive of this, or are they going to fight it because they could see it eating into its profitability?

John Holtzclaw:

Well, some of the airline industry will support it and some won't. As of a year ago, and I think it's still true, United Airlines supported high-speed rail.

Richard Silver:

That's right, John.

John Holtzclaw:

And the airport, SFO in general, supports high-speed rail. United Airlines doesn't like the competition from Southwest and the others for landing spaces to go to the Central Valley or locations like that carrying only 30 or 40 people. They'd rather put 250, 300 people on an airplane; it uses the airport and the runways much more efficiently.

Bill Lee:

Yes, for the long-haul air carriers, high-speed rail is viewed as a feeder system. For Southwest Airlines, it's probably viewed much more as a direct competitor.

Arthur Lloyd:

Well, United came to us at SAMCEDA [the San Mateo County Economic Development Agency] and indicated just what you're saying, John. They would rather take that plane and go to Chicago.

Dr. David Lyon:

Let me segue then to a question that relates to the oil and automotive interests in the state. They've historically resisted transportation systems that don't involve the automobile and freeways. Is there any reading at this point? Of course, I think one of the sponsors of this event today is Triple-A. I guess that may or may not be meaningful.

Richard Silver:

I know from talking to folks in Sacramento, not so much the oil companies, but the auto dealers and auto manufacturers, they're not going to say it publicly, but I know in visiting with them, speaking with them, they clearly don't see this as a positive to their industry. Triple-A though, in fairness to them, is supportive of this and rail. Triple-A is more than just the American Automobile Association; they are the second-largest seller of Amtrak tickets in the United States. They have the travel agency and the insurance and all that. We always think of it as the place you call when you get a flat tire; it's a lot more than just that. They have been very positive and supportive in Sacramento. I know some anti-auto people don't like to hear that, but they have been very good on at least high-speed rail issues.

Arthur Lloyd:

I was Amtrak's original manager of Travel Agent Sales. Yes, American Express and Triple-A are the two largest producers.

Dr. David Lyon:

Okay, this is a question having to do with the design of the train. Why is the steel on steel preferable to maglev? Somebody's got to explain the difference between these two.

John Holtzclaw:

Steel wheel on steel rail is a proven, commercially viable technology. Maglev is magnetic levitation where the train actually floats over the guideway and there's no weight on the rail bed as such. The Germans have developed that and have not been able to successfully use it commercially. Shanghai has built a maglev system from its new airport into the western suburb of Shanghai. I think it's a 19-mile run; it takes 8 minutes or something like that. Had it proven successful, they were going to take that on to Beijing. But, as I understand from Mr. Diridon, because of the high cost they decided against that system expansion. So our people have basically decided that a proven technology is much more reliable and much more likely to be successful financially.

Dr. David Lyon:

I have one here for Arthur Lloyd that's addressed directly to you. The questioner wants to know, will not the price of this means of transportation change the mix of riders that have traditionally been using railroads?

Arthur Lloyd:

I believe it will change the mix as far as the San Joaquin Valley and that area, perhaps affect the San Joaquins. But presently the San Joaquin's ridership does not include business travel and I believe that high-speed rail will be very attractive for business travel. As far as the fares, we talked about that earlier, yield management would take over. Yield management is what the airlines as well as Amtrak are using. It means that if you travel on a Tuesday or Saturday, it's going to be cheaper than if you travel on a Friday or a Sunday. I don't think it will affect the other rail transportation. As I said earlier, the San Joaquins will be a feeder, the Capital Corridor will be a feeder.

We feel that the BART opening in Millbrae – everybody says, oh, you're going to lose ridership in Caltrain – no, we expect perhaps by the time we get to another year we think we'll have as many as 10,000 additional riders on Caltrain. This is going to be a new group of riders. We're going to get the business travel as Amtrak has found out between New York and Washington, New York and Boston. The business traveler will go downtown to downtown. No, I don't think it's going to negatively affect the other rail, I think they're going to improve.

Sunne McPeak:

David, one of the questions you asked was about equity, and part of equity is the affordability to have mobility. I think that what Arthur is saying is right. The numbers that have been running the business plan suggest that there's actually going to be more opportunity for a broader spectrum of incomes to take advantage of this system as you attract the increased riders who will bring more revenue into the system. I think that is a pretty important point, and we would concur with that analysis.

Richard Silver:

Every new addition of a rail service that we've had in the state has seen a corresponding increase for the other trains that have connected to it. The MetroRail in Southern California is the best example. When they extended the Red Line – they didn't even build a new one, they just extended an already existing line – it trickled all the way down to the Green Line, which is two transfers away. It's hard to explain. Nobody could understand why that ridership went up. They're expecting with the Gold Line in Southern California to see the Red Line ridership go up at least 5,000 and perhaps as much as 15,000 new riders.

Sunne McPeak:

Connectivity.

Richard Silver:

One and one equal three. That's the same way with buses or ferryboats, when you improve transportation, more people use it.

Bill Lee:

That's another reason for steel wheel versus Mag Lev, because of the connectivity of the existing rail system with the steel wheel system.

Arthur Lloyd:

We have found, especially along the Caltrain line but also along the BART lines, that we're developing smart growth around the stations, more and more transit-oriented design. In fact, Caltrans, our highway builders, has a web site now on transit-oriented design and they, on this web site, show you some examples from all around the state.

Dr. David Lyon:

Okay, I've got a little time left here. It seems that this is a highly relevant question. It says, Who are the opponents of this idea? So far, the way the panel is speaking, this is such a good idea that there would be no reason why we shouldn't build it tomorrow. Is there going to be somebody out there who says, this is a really horrible idea? Sunne?

Sunne McPeak:

I think I was really candid about the issues in terms of the imperative for mobility in this region and the competition for an investment dollar when you're looking at what's most important for the economy, if you're going to improve mobility. But I think that while not knowing who might emerge as opponents, we can pretty well bet there will be some. When you talk about \$9 billion at a whack on a ballot, general obligation, and we're out there \$25 billion with a school system that is incredibly important to the future of this state; another \$13 billion, which we support, will be on the ballot next year for investment in the schools; housing investment; think about the water system that everyone talked about today as being so transforming for the state of California, that is probably as I count it, \$2 billion, that's a relatively small public investment, because most of what we advocate will be funded from revenue bonds.

But the point being, there is a limit to debt capacity in a state that is damn broke. So, you know, there's going to be a debate over return-on-investment and how much money do we have? We would say that it is not how much you spend, it's what you get in return. The business community, by and large, is going to be trying to elevate the discussion around these choices of bond measures, or dollars that we spend, and even, dare I say, new revenues, i.e., taxes, based on "What do you get in return?"

This is not the time for California to be timid. If we intend to continue to have a golden future, I would suggest it's going to require some gold to be invested. It requires us to be stewards of a future that we inherited. We need to go away thinking about the return-on-investment as much as how much it will add up. But there is a limit to what California can go to Wall Street and get ratings on if we're this much in debt. That's what the genesis of the opposition is likely to turn on.

Dr. David Lyon:

Okay, we have only a minute left and I think I'll get off the stage with this one for the panel. It's quite well formulated, because this is basically developing an option. The questioner says: "Since it will take many years to complete the construction of the full system, what is the possibility of incremental speed improvements in parts of the line that might currently exist. Why not go that way as an interim strategy rather than try to build this whole system from scratch?"

Arthur Lloyd:

We're working on that now. For the Peninsula, we're working on going to 90 miles an hour, and for the San Joaquin Valley line, we are working on going to 90 miles an hour to improve the running time. Yes, incremental is going to be an answer, but again, it's a capital investment.

Richard Silver:

I'd like to get a plug in for something that I've harassed poor Mehdi about, and the former chair, and Mr. Chairman, for the first time you'll hear this. If you do only one thing, and you do it the first thing, do the Grapevine.

That one thing will benefit all other rail in the state and that will be the best selling-tool for the rest of the operation. You'll connect the North with the South, to begin with, okay. More importantly, you'll probably have some advantage to freight traffic and get some revenues off of it. It's the one point on which that I don't think anybody disagrees. It's going to make it easier later down the line to do the others; and then, the first phase obviously is San Francisco to L.A., but if you could just focus on one thing, that Grapevine, and quite honestly, if you never did anything else, that would be a major improvement to rail traffic in the state of California.

Dr. David Lyon:

Okay, my apologies. There were certainly questions I didn't get to. I tried to lump them into categories, but there were a couple I didn't quite touch on. My apologies to those whose questions I didn't get to. I also would like to express my appreciation to a terrific panel: John Holtzclaw, Bill Lee, Richard Silver, Sunne McPeak, and Arthur Lloyd. I enjoyed your comments and I appreciate the audience's attentiveness.

SOUTHERN CALIFORNIA Q & A SESSION**Dr. David Lyon:**

So, we're now open to questions and discussion. Who's first?

Roger Christiansen:

My name is Roger Christiansen. I'm a local transit advocate and I'm on the MTA's Citizen Advisory Council. The bond measure includes \$900 million for connecting service. What does this mean for Los Angeles and L.A. County? How much money are we going to get out of that, and who will choose what those projects will be; or have they already been chosen?

Richard Silver:

My general understanding is that the money is going to be doled out throughout the state based on the opportunities: your already existing services and how they benefit high-speed rail.

The beneficiaries are going to be MetroLink and the Coaster in Southern California, and in Northern California, Caltrain and ACE (the Altamont Commuter Express), and the intercity trains, Amtrak. In fact, Warren Weber is here from the state Department of Transportation. He's the one that runs the intercity trains and does a very good job at it. His agency would presumably benefit, depending on what projects they put forward or what they were interested in.

It's clearly going to be a major improvement to the already existing operators and services.

The high-speed rail is clearly the more important thing, but [the bond measure] is a very good benefit to a lot of these outlying areas like Santa Barbara and other areas that aren't going to get high-speed rail service in the first phase. They will benefit in the long run, because their local commuter or intercity trains will be beefed up, improved, run more frequently, and feed into the high-speed rail service.

Ross Anderson:

I'm Ross Anderson, a local investment banker. Whatever happened to the Mag Lev concept? You seem to say it's a given that we're going to use steel wheels on steel rails.

Mehdi Morshed:

Mag Lev is still there, and obviously it's a new system. It has some potential in some applications. When we investigated the high-speed rail needs for California, we looked at both Mag Lev and steel wheel. We continued that investigation all the way through our environmental studies. About a year into the environmental studies, we came to the conclusion that in order for us to provide the San Francisco-L.A. service, there was a problem between San Francisco and San Jose. There was no opportunity, short of tunneling 45 miles under people's houses and shops, to create a corridor for a totally separate guideway for high-speed service. We had to share track with the existing train service, which is Caltrain. In order to do that, we had to go to the steel wheel. Otherwise we would have to transfer at San Jose, because we couldn't take Mag Lev, or any totally exclusive guideway that was only for our train, from San Jose into San Francisco.

This is exactly the same reason that Germany, which invested billions of dollars in the Mag Lev system, repeatedly comes to the same conclusion – for every corridor, they look at it and they want to use it – then they switch to the steel wheel because they have the same problem. They run into certain urban areas and they find out they have to share the track at the station, or getting to the station, or somewhere along the line since that existing infrastructure is already there.

There's very little opportunity in this state where you can totally create a straight-line, 100-mile-long corridor to be able to run that service, and that's what Mag Lev takes.

Sid Tyler:

Sid Tyler, Pasadena [City Council Member and Vice Mayor].

I'm concerned about how you're going to sell this to the electorate of California; notwithstanding the fact that the surveys evidently show that 60 percent of the public are in favor of the concept of high-speed rail linking long-distance cities.

My perception is that there are many local government elected officials who are either unaware of the project at this point, or if they are aware, have a certain degree of skepticism about it. Primarily this is for the reasons mentioned having to do with the perceived shift of transportation infrastructure capital and the shortage of transportation capital dollars, over the next few years anyway. Therefore, it could be taking away monies that are needed, or perceived to be needed, by local governments for roads and highways, truck lanes, or freeways in their local jurisdictions.

So the question really is how are you going to overcome this? To what extent can the public be assured that if this goes ahead, we will not be, at some point, digging into the state General Fund to take care of operating deficits? What are the long-term financial implications on the taxpayer?

Mehdi Morshed:

I already addressed the question of capital costs, which is the large portion that has to come from the public sector. Is that going to compete with other resources for transportation and other things? Yes, it will. Because every time you spend public dollars, you are competing with something else. So this is a classic example of how every time we have taken on transportation infrastructure, we face that. When you in L.A. decided that you wanted to make the investment in the Red Line or the Blue Line or the Green Line or the Gold Line, every one of those decisions involved investing public funds into that infrastructure. Those public funds were competing with other needs, be it highway or airport or other things. These are choices we have to make. That's why it's before you [on the 2004 ballot] to make that choice.

From the operating point of view, we can assure you that the high-speed train, once you build it, is going to have an operating surplus, not an operating deficit like other transit. Our conservative estimate is, as I showed you earlier in the chart, that high-speed rail in 2020 will have about \$900 million a year in revenue. The operating costs for the system, including a sinking fund for future maintenance, rehab of the tracks, and to buy new vehicles, is between \$500 million and \$600 million. So you are actually looking at about a \$300-million-plus operating surplus. We anticipate using that surplus for either completing the first segment, or for expansion of the system. The train *will* generate enough in surplus.

I know this question comes up, and I think it's a very important question. We are used to thinking that transit operations in this country require operating subsidy, and that's true, and so it is the case in Europe. Roger Snoble was talking about Europe. Their transit also requires operating subsidy.

When you go to the high-speed train mode, where the train is competing with the airplane, you shift. You create operating surpluses, because you're competing with a high-cost, very inefficient transportation system. An airplane, yes, it's a wonderful thing. We use it, but it's very high cost. So when we compete with that, then high-speed trains can do very well commercially.

If we can use an example in the public sector, I think high-speed rail is going to be very much like our airport investments. Airports, once the public invested and built them, are no longer a burden to the community. In fact, they generate surplus, like at LAX or San Francisco.

So that's the answer to your question. From an operating point of view, we will have a substantial operating surplus, not operating deficit.

Carl Dickerson:

My name is Carl Dickerson, Dickerson Employee Benefits. We have in America a graying of our population. More and more of our citizens will become 65 and older in the next 10 or 15 years, unlike most of the other G7 countries in Europe and other places. My question is, what special

accommodations are being considered for more disabled riders and for emergency medical episodes that may occur with this unusually high number of riders that we're considering.

My follow-up question is that when I looked at your charts earlier, they indicated that the population bordering Ontario Airport would be substantially lower than some of the others. I couldn't match that up with San Bernardino, which is one of the fastest-growing areas in the country. I was wondering whether or not that was an oversight.

Richard Silver:

I might be able to answer the second half of the first question, and that's about the usefulness to seniors and disabled. Almost by definition, all forms of public transportation are beneficial to seniors and the disabled. For the disabled and seniors, public transportation is becoming more and more the common thing for them to use. This is the friendly way to do it.

High-speed rail is going to open up vast quantities of locations and places to go for somebody in Los Angeles that wants to go to see their kids in Fresno, Bakersfield, or someplace in Northern California, something that they can't do now. So it's actually a step in the right direction for people that find themselves in that category, that otherwise weren't able to do that in the past.

Also, our transit facilities are built today to be disabled friendly. The car entries will be flush with the platform, similar to the MetroLink trains. A wheelchair can roll onto the train.

The long answer to a short question is that this is a step in the right direction for those folks who, in the past, couldn't get someplace, simply because there was no way to get there for them. It wasn't until about 12 or 14 years ago, that Greyhound, for example, even allowed somebody in a wheelchair to use their bus. Then once that was allowed, you had to reserve two days in advance and pay \$3 extra. In some cases you had to have a caretaker to come along with you. Now you can pretty well go wherever you want to go on public transportation.

Bill Lee:

The patron adjustments, by station, were done by Charles Rivers Associates about six years ago. They are preliminary in nature for each station, because the station sites are not specific yet. It will also depend on what type of access we provide to the station. They were done for systemwide planning purposes, so the actual patronage, depending on the year, might be a little different than the forecast.

Richard Marcus:

I'm Richard Marcus, I'm a manager of long-range planning from the Orange County Transportation Authority, and I have a question for Mehdi.

There are some Mag Lev studies or proposals going on in Southern California. I know there's one from Anaheim, through Ontario, to Las Vegas. There's also a Southern California Association of Governments (SCAG) proposal to have lower-speed Mag Lev throughout Southern California. There's also something called the Orange Line that's being looked at.

I was wondering, are there any planned links between the California High-Speed Rail Authority stops and some of these proposed Mag Lev stations or stops? Even though that is still being developed, is it something that you're working on with them, or in contact with them, or is it too early to start developing those links, even though it's different technology?

Roger Snoble:

Whether SCAG is working on the coordination and interface between this high-speed rail and their high-speed rail, I think they've considered it. But it's such a low level of design at this point, from the SCAG standpoint, that I'm not sure that there are strong interfaces in all of the places that probably there should be.

We think it's important that if Mag Lev does happen according to the SCAG plan, it comes into Union Station so that it could take advantage of the high-speed rail line. But I think it's a long way off before we're going to have more definition of a magnetic levitation system.

I think actually the high-speed rail probably has a better chance at this point than seeing if something happens with Mag Lev.

Richard Silver:

Mag Lev is an untested and inexperienced mode of transportation. Don't hold your breath on this. It's going to be a long way off, if it ever happens. By then, high-speed rail will be in its second or third generation.

People in rail advocacy generally are open to new technologies, but this is something way down the line. I don't see Mag Lev, if it ever happens, happening within the next 40 or 50 years in California. It's very, very expensive, and it's still in the untested category.

Why isn't it all over Germany? They're the ones that, while they didn't invent it, essentially created it. They're the ones that spent all the money, so that you would think that they would want to have that thing crisscrossing Germany. And what's happened? They're getting out of it. So don't hold your breath on Mag Lev.

Roger Snoble:

Let me make a point about it too. That's just the technology argument.

What we're really talking about is something that has carrying capacity, large enough capacity at a high enough speed. It's irrelevant what kind of propulsion. What we're talking about is some new conveyance that can take a large number of people and move them someplace really fast; if Mag Lev ends up being a good proposition, then that's the technology that will be used.

But I think we need to really focus on what it is we're trying to do. We're trying to move large numbers of people in vehicles on the surface, and right now the tried and true tested technology is in high-speed rail.

Mehdi Morshed:

I also wanted to address your question as far as the planning stage. Yes, we are planning our system knowing that those things are also in the planning stage.

There are three stations in Southern California where there are opportunities for interface. They are Union Station, Ontario, and Anaheim. At each one of those places, we plan to have a station. We are going through the environmental process to pick a location and move ahead with it, working with the communities about all the various plans that they have, including Mag Lev and other things that may be coming to those stations later on as SCAG or anybody else plans to do.

Mag Lev, as Roger said, is basically another form of public transportation that brings large numbers of people in. They will be able to accommodate, and those three places are ideal locations for the interface, in order to make the system work for both the intercity as well as inter-regional trips.

Gerry Past:

My name is Gerry Past. I'm from the Friends for Expo Transit. I just wanted to make one small comment about the untestedness of Mag Lev.

It may or may not apply to the high-speed rail in California, but it is being tested in China. It will be available to the general public in Shanghai six months from now; anybody can ride it. It's about an 18- or 20-mile trip from downtown to the airport and back, and I intend to try riding it myself when it will be available. I don't know anything about why Germany is not developing it, but they did develop it, on behalf of at least the government in Shanghai and China. I think that it's going to expand there, if nowhere else, so it can be tested out soon enough.

Dr. Lyon:

Okay, I think we've got the Mag Lev issue identified as something that will have to be dealt with later on, or as your environmental statement comes out.

Patsy Flannigan:

I'm Patsy Flannigan, a businessperson in the Los Angeles area.

It becomes obvious that for this to be successful, we have to have a good infrastructure to feed into it. We do have some infrastructure at the moment; however, there are a limited number of trains and there is limited service, often none on weekends.

In the decisions to make what service we have, which comes first, the ridership or the train? If the train is there, the service needs to be there. I just would like to address that: to increase our infrastructure's ability to serve the public, and then high-speed rail can be successful.

Richard Silver:

In the bond is \$900 million to do that. Part of the high-speed rail project is to spend \$900 million beefing up the associated conventional and heavy-rail commuter services. That's part of the mix.

Roger Snoble:

That was the part that the MTA and other transit providers really worked hard to be able to include into the bill. Because obviously it does provide a tremendous strain on our types of services, when a train carrying a couple thousand people pulls into Union Station, we've got to be able to handle that crowd and handle it pretty efficiently. So we asked for the money: we actually asked for more, but we got quite a bit.

Is it enough that we're going to be able to serve every single person in Los Angeles County, to get him or her to the high-speed rail? No, that's not going to happen. But we can get a large majority of people to the facility easily. We can actually do that today. Union Station is very strategically located; we can get people there quickly. We obviously need to have additional rail capacity on MetroLink and some of our light-rail systems to be able to carry more capacity, and we could use that capacity today. As you have an additional reason to add capacity, that is additional demand, then we're going to have to meet that demand.

Tony Lee:

Hi, my name is Tony Lee. I'm with Dickerson Employee Benefits. My mother is the congresswoman from Oakland, and obviously a station in Oakland would just do wonders for that economy there. It would be great.

Dr. Lyon:

Is that an objective statement or what?

Tony Lee:

The idea of being able to hop on a train and go to Oakland in 2 hours is just an amazing thing, but only if the price is right. It would be a great experience for the family, and that's how I see your customers, as a family thing to do. Is your pricing going to remain competitive with the airlines or is your pricing going to be undercut by the airline cost? Because it only makes sense if I can hop on this train with my family if it would be cheaper than hopping on Southwest.

David Lyon:

I don't know whether somebody on the panel wants to address that, but this came up last night when there was a related question of what it would cost to go from Los Angeles to San Francisco. The answer we got last night was that the cost would be competitive with the airlines – and I'm giving these answers, now I'm getting to be an expert. I've only been on top of this topic for about an hour and a half, so I feel I can give a speech.

What I heard last night was that this would be competitive with the airline, and it has been stated here again, and I think it's a gutsy position that they're taking, that this thing is going to pay for itself. The operating part of this is going to pay for itself. That is the official findings, and I think that's going to be the view of the Authority as you go into this bond phase.

I've been concerned about that myself from the point of view of a research institution. What are the issues here that need to be addressed? Certainly one of them is price, competitive with the airlines, not necessarily going to make it awfully easy for somebody. Low-income families are going to have trouble getting on that train. Somebody here I was interviewing, somebody from the Voice of America here earlier said he lived in Japan, not too far out of Tokyo, and it cost \$90 for a round trip to go into the city and come back on the Shinkansen – whereas, if he took a local slow train, the fare was the equivalent of \$18. I think that's still going to be an issue in California; I don't think that's going to go away.

Roger Snoble:

If I might, I think a lot of it is just how you look at this. We highly subsidize the bus system because you're going to give up a huge time penalty. You can almost beat the bus on a bicycle, so it's highly subsidized. As you start to be more competitive with all the other modes, then you can be more competitive in your pricing, because people will pay for the value. So, as you give people an advantage through speed, they see that time is money to them – if they can save an hour or two hours, that's a pretty valuable thing to them. In this kind of service, you're saving huge amounts of time, huge amounts of hassle, over traveling on an airline, for example. So, you can charge a much more competitive rate and cover more of the actual operating costs of that service.

Bill Lee:

Also, demand congestion comes at your peak periods. The advantage of a train is that you can just add a couple more cars, where with an airplane, you've got to bring in another airplane.

David Lyon:

The experts here in the front, which I am not, say that the assumptions they're using, at this point, are a one-way ticket is \$50; a round-trip ticket \$100. Boy oh boy, that's pretty impressive.

Richard Silver:

Every week I look at United and Southwest Air. They're about \$140, \$130 sometimes, round-trip from San Francisco to the L.A. area on airplanes. United is always a little higher than Southwest. By train it's never more than \$80 round trip, but that's the slow train bumping along in 12 hours. If you're lucky, it gets in on time at Union Station. The point is, I would expect high-speed rail to be above the current train prices, but below the current airline prices, so someplace in between. A \$100 round trip probably, by today's dollars, seems to be the logical amount. But, you know, it's going to be higher in the holiday season, and less in the "off" time.

Al Wiedsig:

I'm Al Wiedsig, I'm a transit planner with Jim Harris.

I recognize that everybody realizes how daunting this project will be to construct and to finance. But I also wanted to point out that daunting is also what's happening for what we're talking about for traditional transportation investments. The LAX Master Plan is more on security and nothing on capacity. El Toro Airport has more or less disappeared for awhile. SFO is talking about a second runway in the Bay. I'm not holding my breath for that. For freeway investments, we talked about Sherman Oaks to Thousand Oaks for one more lane, and that seems to have gone away rather quickly too. So, as we're looking at the relative difficulty of providing for people who are coming and making trips anyhow, I think we can take some heart in this particular plan.

David Lyon:

So there's no question there, just a statement about how hard it is to delineate.

David Abel:

Let me pick up on that if I could, because the LAX proposal by Mayor Hahn is quoted at \$9 billion, but some estimate it at \$12 billion for, as the gentleman said, mostly security and no increase in capacity. So relatively speaking, what's being proposed here of an L.A.-San Francisco

line for \$14 billion, if we're going to talk either/or and apples and oranges, we ought to compare those kinds of investments. Quite clearly, there's an assumption in the LAX debate that it's a reasonable thing to do. I guess because the burden falls on the airlines.

I want to ask Roger Snoble the questions that the business community will eventually ask on this project in terms of either/or. You've done an incredible job here in the basin, in *Mobility 21*, of trying to focus the civic and political leadership on a set of high-priority objectives to maximize the receipt of federal and state resources for infrastructure and transportation. Is this project a diversion, or a plus? How do you evaluate it against the competing proposals for the attention and resources of this region and the state?

Roger Snoble:

I really think that the heart of the question is, can we spend our money someplace else and do more? Here again, I think we really have to look at the overall investment. There's a lot of money coming into the state. Maybe some of that money isn't really being spent the way it should be spent. Maybe there are better options for us.

Most of the things that we build in MTA require a 100 percent subsidy to build, and then a subsidy to operate. So when we do our 20-year financial plan, we've got to plan to say, okay, it's going to cost this much to build, and then we're going to have to be able to operate it for at least the next 20 years, and that's an additional cost.

The advantage of this particular system is, you build it, and hopefully you really don't have that operating cost. You have a one-time investment. Much of that will be absorbed by the private sector, so there is some advantage to that because of the nature of it probably saving time.

The other piece of it is, we really have to take a look at our priorities in how this money that is coming in is being spent. Of course, we're doing a lot of that at the MTA right now. We now are diverting some of those dollars that were going to go other places into the really meaningful projects because there's such a precious short supply of dollars. I think we really have to stop and think about it. Are these megahighway projects something we can really do, or are they just dreams nowadays? Or, is there a better way to go about doing even those projects?

For example, in many of our projects we look at building a big freeway extension or a big freeway improvement. Bringing a freeway up to Caltrans and FHWA standards is a \$4- to \$5 billion project. So we work on that for 30 or 40 years and nothing ever happens. As opposed to, maybe we could do some things incrementally, and in that 30 or 40 years we could have improved the rest of the situation a lot, as opposed to not at all.

I think at the state level, we're having these discussions with Caltrans about how we approach these big projects. As we approach them in the traditional ways – that really is smart to do – maybe we could do them more incrementally.

I think the High-Speed Rail Authority has looked at that too. Unfortunately, the first really workable segment, to make the thing really work, is big – between Los Angeles and San Francisco. After that, I think the rest of them kind of fall in really easily, and that's the unfortunate part. We might look and say, well, let's just do a shorter one. We know San Diego and Los Angeles would be very popular. It's already the second-largest Amtrak corridor in the country. If you could do it in an hour, I'd be in it every weekend. So you could maybe do something in that regard. But to make the High-Speed Rail Project work, you need to have that really big first segment.

I think the way they're approaching it, involving much more of the private sector, involving a lot less dependence on operating funds in the future, really is a smart way to do it.

Again, it has to be part of our overall system. It's got to be a comprehensive program. We haven't built a balanced transportation system and we need to *start* building a balanced transportation system or we're going to continue to lose. I think this helps balance things out.

David Lyon:

Well, that's a terrific note on which to conclude this discussion.

A balanced transportation system is, I think, what the Authority is trying to argue is one of their major purposes; and so, on behalf of the institutions that have sponsored this, I want to thank this panel, David Abel, John Holtzclaw, William Lee, Richard Silver, and Roger Snoble for coming and participating.

Adrienne Medawar:

And the three of us, Town Hall-Los Angeles, the Commonwealth Club of California, and the Mineta Transportation Institute, not only want to thank the panel, we want to thank you, David, for coming to Southern California to moderate this panel and for all the good work you do.

David Lyon:

And now I'm an expert on transportation.

KEYNOTE ADDRESS

INTRODUCTION

Southern California

Adrienne Medawar:

I'm Adrienne Medawar, President of Town Hall-Los Angeles. I would like to say how pleased we have been to work with The Commonwealth Club of California in San Francisco, and the Mineta Transportation Institute. Rod Diridon, its executive director, is here with us today.

There are many issues we find that relate to Northern and Southern California equally, and certainly transportation is one of them. We're very pleased to have worked with these organizations to put this together.

Our students today are from the Academy of Business Leadership, Huntington Park High School, and Ramona Opportunity High School, and we certainly want to thank their sponsor, the Whitecap Foundation. Students, if you have any questions today, please feel free to raise your hands and I will call on you. Secretary Sweet, some of the questions from the students are the toughest, so be prepared.

Today's remarks can be heard again on the Los Angeles Times web site; the address is: <http://www.LATimes.com/TownHall-LA>.

It's now my pleasure to introduce our program's keynote speaker and former member of the Board of Town Hall-Los Angeles, Maria Contreras-Sweet. Maria is Secretary of the Business, Transportation and Housing Agency for the State of California. She's the first Latina in California history to be a member of the governor's Cabinet. She directs one of the most powerful agencies in state government, overseeing business regulation, transportation, and housing.

The Secretary is working tirelessly to create a strong infrastructure for California, very tirelessly these days, I know. She's committed to the belief that the public and private sectors of the economy can only flourish if the state's infrastructure is solid. It is this philosophy that led Governor Davis to appoint the secretary as co-chair, with Lieutenant Governor Cruz Bustamante, of the commission on Building for the 21st Century. The Commission developed a comprehensive long-term capital investment plan for financing California's infrastructure needs. She also chaired California's most recent census campaign.

Secretary Contreras-Sweet is working hard to improve the efficiency and safety on California's roadways, relieving traffic congestion, improving the movement of goods, and strengthening the integration of highway and transit systems, keeps commerce moving, and affords people more quality time for work and family life. The Secretary was the principal author of the governor's Traffic Congestion Relief Plan, a historic investment in California's transportation infrastructure.

It is now my privilege to ask you to welcome Secretary Maria Contreras-Sweet to Town Hall.

KEYNOTE SPEECH

The Honorable Maria Contreras-Sweet:

Thank you. I'm delighted to see so many good friends of Town Hall. I'm particularly pleased to be here today because I enjoy getting out and talking to folks, but especially students. It's important to see students engaged in this process.

Let me just say, in the context of high-speed rail, that it's important for us to understand *why* it is important to us throughout the State of California. Many of you have traversed the world and have had the pleasure of seeing the more advanced economies actually deploy their systems. What we have seen is the kind of change it brings to a society.

When I took the position here in California, I thought that it was very interesting that in California – I have not seen this anywhere else – we have the intersection of transportation, business, and housing all in one agency. In effect, it's the economic development agency. It is the agency of infrastructure, and so I go up and down the state, talking about the importance of investing in infrastructure, because it is essential to a sound economy.

You're giving me the same reaction that I get in other places. What I've learned along the way is that we have to talk about infrastructure in ways that we can comprehend.

One of the pieces of work that we undertook in this Building for the 21st Century Commission that I chaired with Lieutenant Governor Cruz Bustamante was the idea of first defining what infrastructure meant and why it was essential if we're going to have an economy with bounty.¹⁵

We set out to understand what it was in more advanced economies that made them successful. What we learned is that they had to undertake the important work of understanding land as the essential building block – land use, effective land use, we learned.

I deployed my Housing Department to go out and do work around how we were using land in California. What I learned is that we had good news to announce in our report called “Raising the Roof.” This is available on our web site, <http://www.bth.ca.gov/> for you to review. We learned that we had enough land for 20 years. That was the good news. The bad news was that we *only* have enough land for 20 years at present density ratios.¹⁶

We need to look at how we can use our land more efficiently and think about the sky as an opportunity. Not everything has to go *out*. Maybe we have an opportunity to build *up* as well and to think about three-dimensional planning for our housing needs in the future.

You may recall that I chaired a census for the State of California, the most successful census we’ve ever had in the state’s history. It inured to us another billion dollars. It also inured to us a great deal of information, a greater understanding about how we can use our land, because of the population needs that we’re going to be having in the future.

What we learned is that clearly California is the most populous state in the union, with 34 million people. We also learned that the major growth that we’re enjoying, for the first time ever in our history, is our own native growth. It is our children having children. For the first time, what we’re talking about is expanding and providing opportunities for family growth. We’re talking about our families. So land use is an important building block.

Further, we talk about the importance of managing our resources. We all know in California how important it is to have a constant, reliable flow of energy to give life to our businesses and to all of the activities that we engage in. We have to make sure that we have enough water to feed life in and of itself, and so that’s our third infrastructure building block. We need to be sure that we are managing our water and it is reliable and, of course, that we have the quality that we’re after.

So its land, energy, water, and then of course, housing is another building block. Then we talk about education, because we can’t be a civilized society without our fabulous educational institutions. There are our public facilities, like our courts, our prisons, our hospitals, and all those State buildings that need to be maintained in order for us to conduct our work.

Then, of course, we talked about transportation, because without transportation we don’t have mobility of people, mobility of goods, and that means no commerce. Transportation is essential to the movement of goods, the price points that we enjoy in our retail outlets, and all of the business that we engage in. For me personally, transportation represents mobility of all things, people getting to work on time, people getting back to their families with peace of mind – too many times in California our rush hour is anything but a rush.

We learned about the importance of technology, technology in two ways: one is how we bring technology into all things that we do to make them more efficient, more valuable, more effective; another way is how technology is an important industry in this state.

Lastly we talked in this report about financing. How do we finance all of these critical infrastructure blocks?

So that is the work that we've been undertaking, and in that we have to take up those things that make our society continue to be the progressive, advanced society that it is, such as transportation. This is where all of these building blocks bring us to the conversation that we're here to talk about, and that is high-speed rail. Because it is about the intersection of how we're going to use land more effectively, how we're going to use technology, how we're going to use our resources, and of course, make transportation more efficient.

Before coming to this opportunity in government, I worked in the private sector in the beverage business. For those of you who followed the famous, or maybe I should say infamous, "Cola Wars," I can tell you that there were few things that were more precious to us in the retail trade than to get our goods out in time. That was critically dependent on a sound transportation system. I could not manage the competition's prices in those retail outlets. But if I could manage my inventory – if I could manage what time my raw materials got in and my finished goods out into the trade – then I could manage my overhead. So for me, one of the crucial things in addressing transportation was goods movement as it related to commerce.

We also needed to think about transportation in the sense of goods movement not only for our own local businesses within the state, but also because we bear a special responsibility. California boasts the first, the second, and the fourth largest ports: they are L.A., Long Beach, and Oakland. We have the most important ports in the nation.

In the Southern California region, one of the things that we undertook was looking at the ports. The ports are essential, not only for California's vibrancy, but also because of all of those goods coming in from the Pacific Rim, from other parts of the world, into the state of California's transportation system and out to the rest of the country. Reciprocally, for the rest of our country to do well, in terms of goods movement and getting their goods out to the Pacific Rim and other parts of the world, we need to make sure that the California transportation system is working and that it's working well.

If our economy is going to turn around, it's going to be because we're also able to take all of the commerce that comes in from other states going out to the Pacific Rim. Chicago will tell you that 60 percent of what comes into Chicago comes through Los Angeles. Detroit will tell you that the way that they get their cars out to the rest of the world is through Los Angeles. That's the kind of impact we're having.

We have a special responsibility. We need to address the issue of goods movement. We also need to make sure that we are investing in California's transportation system because all of us want more congestion relief. So we are working on a seamless, integrated system, not just highways, and that is why it's important for us to talk about the entire system.

We have a couple of initiatives underway. One of them is that, as we speak, Congress is taking up the very important work of what we call in transportation, "T re-authorization." The Transportation Act, when they take that up, will determine what the funding formula will be for California for the next six years. It's so important for us who care about transportation to engage in the debate in Washington, D.C., and to make certain that we make the case about the imperative of investing in California's transportation system now. The nation's economy will not be able to turn around if California's transportation system isn't the reliable system we've come to know it to be.

They always say that there's a silver lining in things. When the ports shut down here because of the strike, it was wonderful to see Congress and even the White House on the record acknowledging the importance of the West Coast ports and what they meant, even to children who might not get Christmas. We need to continue to make that case about the importance of our system and the criticality of our ports.

Further, as we look at goods movement, we are also looking at congestion relief for all of us. The only way we're going to move the goods is if people are there to help move them. So for each of us that need to get to work on time, or whatever it is that we do each day, for the last four years we've been making record investments in our transportation system.

What did those investments represent?

When I came in, Governor Davis and I talked about where Caltrans was. It was important for us to look at what had been called, maybe in my grandfather's time, the State Highways Department. Largely, there were some people who still felt that the California Department of Transportation was about highways. Caltrans saw itself as the place where the state highway system was maintained. Surely we are proud of having the most sophisticated highway system in the world, a more advanced and complex system of state highways.

I felt it was important to redirect the thinking and make sure that we talk about connectivity and about choices in terms of its relationship to rail and its relationship to the ports: seaports and airports. We needed to talk about transportation in terms of congestion relief and making sure that our system was connected, so that when you come out of your home you can catch a bus that connects to a rail line that connects to an airport that gets you to another place.

Heretofore, as your Secretary of Transportation, we have made record investment. I say that emphatically, because I'm very proud of this work.

When I came in, the Caltrans budget was hovering close to a \$6 billion budget, large for a transportation department, one of the largest in the country with about 20,000 employees. Now we have it running at about a \$9 billion budget. It's important to tell you that we have grown the program by 50 percent under the Davis Administration.

We know that for a lot of reasons, transportation jobs are quality jobs. They have a great multiplier affect on the economy and on all of the things that we've outlined here in terms of impacting our businesses and our quality of life.

For that reason, when we made these record investments, we made sure that two-thirds of the budget continued to be invested in our traditional systems. That means that today, the good news is when you go out there you now see one in every five road miles with some major work underway. We've put a \$100 million into buses; the San Francisco Bay Area was able to receive \$40 million out of that fund.

We added incredible growth to our rail systems, because we knew that so many people are looking for choice and they're looking for more reliability. Those rail investments are now being talked about by Mr. David Gunn, the President of Amtrak, as the model for the nation in terms of the growth and expansion of the Amtrak program. I know that many of you have enjoyed riding on the Capital Corridor, many of you are familiar with the LOSSANs – people call it the San Diegan or the Surfliner, the system that goes from San Diego to Los Angeles – and then of course, there are the San Joaquins, the system that goes through the Central Valley. All have seen record investments in those systems.

I know that in the San Francisco Bay Area some of you saw when we launched the program for the Baby Bullet train. You have followed the investments that we're making on the MUNI transit system around 3rd Avenue and Ocean Avenue. You've been watching the investments that we've been making around BART to San Jose and BART to the San Francisco airport to make sure that the system is connected. More recently, we've been working on the Transbay Terminal so that the region can have a transfer terminal that addresses all of the modes. We're pleased to address those things.

But those are immediate-term investments, like the buses, and mid-term investments in the transportation systems. For the long term, for the 21st Century, we needed to make sure that we were preserving our options, that we were providing choice for California, and that we were truly living up to our destiny as a leader in technology.

Coming back to high-speed rail, we have been studying what's taking place in other economies. I know that you've probably heard that we boast that here in California we now rank as the fifth

largest economy in the world. If California were its own country, we would be fifth, only after the United States, Japan, Germany, and the United Kingdom; then would come California's economy. So we wanted to study what could sustain this growth. What we've seen is that these other advanced economies all have high-speed rail.

So we created the California High-Speed Rail Authority. We gave them some study money to have them actually study these systems. We wanted to make sure that you had a choice. If we waited until everything was perfect – and you know what they say, that perfection is the enemy of the good – if we waited until everything was perfect, then we might not be able to preserve the options that we have today. Things are being developed, routes are changed, alignments are taken over by other systems, and then soon Californians would not have the choice to engage in what is the future, and that is high-speed rail.

We studied what was going on abroad. We talked to the British, the Germans, the Japanese, the Spanish, and learned from them. We went out personally and actually tested their systems, from the ballast (the rocks) to the catenary (the wiring up above). We tried to understand what their educational systems were, to make sure that we have the human infrastructure to sustain such a program.

The purpose of my visit here with you today is to invite you to engage in the conversation about it.

High-speed rail should not be taken lightly. The system is complex and many of us have to appreciate the change it would bring. It could be like bringing water into a region. When you bring in a system such as the high-speed rail system, what we could be doing is changing the density of certain communities and allowing local property values to go up. We could be changing the way people commute. We could be changing the way people do business, because you could get on a train in Los Angeles and be in San Diego or Santa Barbara in minutes. You could get to the Bay Area in a couple of hours. It could change things dramatically. So we have to take the opportunity seriously and think about how we preserve this option to make sure that California continues to be a vibrant economy.

I remember when I first started talking to groups, I enjoyed talking about California being the seventh largest economy. Now California ranks as the fifth largest economy in the world. That is an enormous responsibility.

Governor Davis was telling me that he was having a visit with British Prime Minister Tony Blair and that the prime minister asked him, "Governor, you're just a state Governor. I don't understand why you're here visiting with the Secretary of Foreign Affairs." Governor Davis explained, "You know, in my first year we overtook the economy of Italy. In my third year we overtook the economy of France, and Mr. Prime Minister, we're now coming after you."

If we are to maintain our bounty, enjoy the fruit of our Central Valley, and have the world understand and appreciate the wines of our beautiful wine country and the beautiful beaches throughout our state, we think high-speed rail presents a special opportunity for us that should not be taken for granted.

How did we get to this point of embarking on high-speed rail for California? We started by studying successes and failures of others when preparing our plans and strategies. We learned from other failed attempts in Texas and Florida. The California Bullet Train taught us that we could not rely solely on private funds to build the system, that substantial public funds must be committed to it for construction. We learned that we had to do our homework, we had to have a solid plan, before we went to the public. We needed to make sure that we understood the sound science and engineering. Of course, we needed to understand the political reality. We started and I was pleased to see that we were able to gain Governor Davis' support of this program.

In fact, just recently the President of Spain came to meet with Governor Davis. We entered into a Special Memorandum of Understanding, where we would be talking about interacting and exchanging technological advancements and research. The Spain agreement included discussions around high-speed rail ridership and revenue estimates, cost estimates, engineering standards, construction methods, system planning, and of course, an operational plan.

We have learned from the experiences of other successful high-speed rail lines that it's not only technologically feasible, it's also economically viable. In France, we found that their high-speed rail line paid for itself in less than 10 years. Not only did rail ridership skyrocket, but road and highway traffic decreased significantly. In California, we have the opportunity to decrease traffic congestion and extend the repair schedules and the service life of our highway system if we had fewer people on the highway. Elsewhere in the U.S., we're finding that the Boston-to-Washington, D. C., train service tripled its ridership in less than a year, and the route from Boston to Portland, Maine, had a similar surge in usage. Overall, the benefits of a statewide high-speed train system for California could be numerous. We believe the system is right.

Some might say that it's a little premature for us to take on high-speed rail. I just want to remind them that in California, considering the land use issues that I described, if we don't reserve the option of preserving that right-of-way today, we may forever wipe out our ability to bring a high-speed rail system into the state. So, while some of you may think, "How can she be talking about such an enormous investment when we are desperate for dollars for essential programs?" I ask us, how can we lose the opportunity? Would we give up the opportunity to invest in a system so that when we get to the year 2020, we can say that our vision was 20-20? That is the issue around high-speed rail.

Why high-speed rail as opposed to some of the other systems? I can think of many reasons, and we'll walk through some of them together.

High-speed trains have proven to be a safe and reliable form of transportation, with well over five billion passengers served worldwide. To date on these high-speed, dedicated rail systems, we have not seen a single fatality anywhere in the world. High-speed rail is not impacted by fog. For those of you who travel through the Central Valley, as I do occasionally, you know what it's like to try to navigate through the Tule fog, although I have made huge investments, with Governor Davis, in the fog patrol program that the CHP undertakes. We believe that the high-speed rail system also would help alleviate some of that work, because it's not subject to, or impacted by, the fog. Electrically powered high-speed trains could reduce California's dependency on fossil fuels and reduce pollution. We all want to have less reliance on fossil fuels, especially these days. First of all, just imagine how many people we can move off of the highways. By the year 2020, we predict that we could carry from 32 to 58 million intercity passengers a year on high-speed rail. It's a fully grade-separated, double-track system. It would not compete, as some other trains do, at the same grade level where you have these accidents because trucks and passenger cars are on the same level as trains. We would separate it and make sure that it was a dedicated track. With the capability to run trains every 3 minutes, the system could potentially move as many people as a 12-lane freeway does during peak traffic periods. Imagine that kind of congestion relief. The construction of the system would be a major investment in infrastructure on the scale of the State Water Project and the freeway system. The construction of the system alone would generate the equivalent of 300,000 job-years of employment.

So think about it, the liberty and the freedom that this would enable us to have. The high-speed rail infrastructure offers great flexibility and potential in the type of services it can support. In addition to intercity and commuter passenger traffic, the infrastructure could also be used to transport high-value, time-sensitive goods within the state. The high-speed train system, in concert with local planning, can act as the catalyst to strengthen our urban centers, promote more compact development around the stations, and help increase local property values.

A new high-speed rail system built to the highest, most recent, earthquake design standards could preserve our mobility in the event of an earthquake, something that Californians know all too well. Right now, all of us together are investing \$3 billion to retrofit the bridges in the Bay Area: the San Francisco-Oakland Bay Bridge, the Carquinez, the San Rafael, you know them all. We are in there doing this very dangerous work to make sure that they are retrofitted so that when you get on them you are safe. This high-speed rail system, if built to the standards that we're suggesting, would not be compromised by an earthquake.

High-speed trains would improve the accessibility of intermediate markets like Fresno and Bakersfield, and serve a growing Central Valley population. High-speed trains will complement and connect to airports and highways, providing a substantially greater degree of mobility for those who travel in California: guests, tourists, and Californians, of course.

High-speed trains could free up valuable capacity at our major airports. I notice that some of the larger airlines concern themselves with how many landing slots they have. They want to make sure, now that we have a global society, that there are enough take-offs to accommodate our needs to be in Paris, to be in Tokyo. The business community wants more frequency of flights, but we have to accommodate the local flights. High-speed rail would compete effectively for those local flights and thus relieve the airports of the short-haul flights.

For my mother, who talks to me quite a bit about not wanting to drive and fight the congestion, it's for those of us who don't want to drive. With so many of our seniors wanting to move around but not having the ability to effectively move around, and certainly for our young population, it provides an important relief. We have an immigrant population and we have low-income folks that can't always afford to buy cars. They will be able to move around the state.

I could go on and on, you can see that I personally have been convinced, and that's why we've been helping this High-Speed Rail Authority do its work.

My purpose for being here today is twofold: one is the ballot measure.

Some of you may say, but it's not going to be on the ballot until November of 2004. Why should we listen to you today? I ask you to engage in the process today because we're going to be releasing the EIR – the Environmental Impact Report – and we will be seeking your comments.

If California is going to do it right, we need to have the sage advice of all of you experts in the field to engage and to give input to help refine the process. So join in, learn, and be a part of the solution. As I've always said, I don't mind if you have a different view to what I'm suggesting, I just mind if you have an *indifferent* view to the things that are going on about us. I hope that you will engage and take part in the debate and give it your serious consideration. Let's decide whether this makes sense for California.

High-speed trains can complement and connect to airports and highways, providing a greater degree of mobility for all of us who travel in California. Most of the money from the bond would be used to link San Francisco to Los Angeles through the Central Valley. That would be about \$9 billion. We're putting on the ballot about \$9.95 billion, so there is another \$950 million to put into programs here in Southern California that I know you enjoy, like the MetroLink system, the Surfliner that comes up from San Diego into this community, the Capitals, the Amtrak trains that run through the state, and the San Joaquins. All of those would be supported. The BART system would get some support. The San Diego Trolley would get some support, and the Coaster that's part of our community here.

Second, it's about economic development. Let me say that I believe that transportation is the essence of more choices, more chances for Californians. As the chair of the census, I traveled the state, and I can tell you that one of the things that I have learned about the transportation

investments that we have made is that we've provided more choices for Californians to get ahead, to become part of democracy, to get the kind of job that they wouldn't normally get. We can change and develop communities in wonderful ways. I have seen that, after we helped put in a system in San Francisco that brought people into downtown, people who normally couldn't get to jobs in the San Francisco downtown area now can. I am working today – and by the way, working very collegially with Roger Snoble of the MTA – to make sure that we continue the Gold Line not only to Pasadena, but also to make sure that it gets to East L.A. so that all the people in East Los Angeles can also get into the valley to allow for more mobility and more chances for jobs and advancement.

You know my story. You know that my mother brought me here at the age of five, from my beautiful Guadalajara, Jalisco. I came here and it was a wonderful experience seeing all the beautiful things here. But I saw my mother struggle because transportation didn't work for her. She didn't drive. She didn't have a driver's license and so she would look for buses that enabled her to get to work. Unfortunately, the only kind of work my mother could get was on swing shift. So there she was, in the middle of the night, trying to figure out how she was going to get home, what neighbor she might call, to get back to her six children. It was a difficult time.

That's the reason I'm still committed to making certain that we have a responsive transportation system. I know what it means in everybody's real life. As she struggled and as I saw her arthritis develop, I would say, "Mom, I'm not sure that we did the right thing coming here."

She would say, "Mija (daughter), I want to tell you something. We came to California because this is the place where dreams, if they are harvested anywhere, it is in California that we harvest dreams with such bounty. Let me tell you we did, because some day you won't have to work like this. You're going to work in an office, and you're going to be able to be a secretary.

Well, let me say, thankfully, the good Lord, Governor Davis, and my mother got it right, and I am a secretary in the governor's cabinet to manage transportation and health care, and regulate the state's businesses.

In 2020, our population will look different, our state will be different. Will we say that we had 20-20 vision today? That is the question. Will our vision have been right?

I would venture to say that what we want to do is know that we created more options for Californians; that we created a system that was responsive and provided environmental relief, one that provided congestion relief for all of us, that provided an alternative choice to the security challenges we face today.

This is about providing more choices, more chances for all Californians. California, of all the states in the Union, I believe is where we have been able to harvest with such bounty these kinds

of dreams, over and over and over again. I believe personally that the high-speed rail system is another form of democratization. It will allow for so many new jobs to be created. It will allow us to be able to move to places.

So let me just say in closing, that it is about the way we treat our people. As the Greek philosophers taught us, they said, at the end of the day it's not about the bridges, the roads, the buildings. At the end of the day, a society is judged on how it treats its people. Let us be remembered for treating our people in a civilized, advanced way and have California continue to be the archetypical leader in all modes of transportation.

So again, I invite you to engage in this discussion, to let us know how we can refine it and make sure that we're providing the bounty of these dreams like so many others who will follow and deserve the same kind of chance to live the California Dream.

KEYNOTE QUESTIONS & ANSWERS

NORTHERN CALIFORNIA Q & A SESSION

Rose Guilbault:

Our thanks to the Honorable Maria Contreras-Sweet, Secretary of California's Business, Transportation and Housing Agency, for her comments here today. I am Rose Guilbault, Vice Chair of The Commonwealth Club Board of Governors and Chair of the Club's Executive Committee, and I will be moderating the question-and-answer session.

The Honorable Maria Contreras-Sweet:

I do apologize because I thought I was going to close at 7 and I will miss my flight, so I'm going to invite Mehdi Morshed to come up and answer those questions. Thank you again for the opportunity to be with you.

Rose Guilbault:

Thank you very much, Secretary. Now we're going to be joined by Mehdi Morshed, who's the Executive Director of the California High-Speed Rail Authority. Thank you for joining us.

The first question is: Why should so much money be set aside for this, given California's budgetary problems?

Mehdi Morshed:

Well, you're talking about the big picture question in terms of why *now*, and I think the answer was that if we don't do it now, when do you do it?

I just want to repeat the other part that she mentioned earlier, and that is that there are opportunities that if we don't take advantage of them, they will be missed. The opportunity to build a high-speed train through Central Valley, where you can go 220 miles an hour by having a straight line through the valley, is there. As the Central Valley develops and as more houses and more schools and shops are built there, those opportunities are going to evaporate. So it's not one of those things that is going to sit there and wait for us to decide when we want to do it. Either we do it now, or we may not be able to do it later.

I want to give you one quick example in that respect, of what I refer to the Tale of Two Cities: one is San Francisco and one Los Angeles. You go back to the '50s when they were both looking at the possibility of having traffic congestion and making investments in urban rail systems. The San Francisco Bay Area moved ahead, they put the issue on the ballot, they voted on it, and they built the BART system. For the last 30-plus years, either you've enjoyed by riding it, or enjoyed the fact that somebody else is riding it and freed up the freeway for you.

In Los Angeles, they waited, and they debated and debated for 20 years. Finally they decided to build it and now it costs them about 10 times as much and they don't have nearly as efficient a system as the San Francisco Bay Area has. That's the difference. If you wait too long, you miss the opportunity, and I think that's a very important message that we all have to realize.

Rose Guilbault:

I have a couple of questions on power. One is, where is the power going to come from for the high-speed rail? And what kinds of power generation is the state willing to fund?

Mehdi Morshed:

The power requirement for the high-speed rail system, even though it will be a large consumer of power, it's not that large relative to the overall market for power in California. It's not one of those things that require us to build new generators and other things. I think the amount of power that we're going to need to air-condition the houses of the 10 million people who are going to come to the state over the next period of time is considerably higher and a bigger magnitude to be concerned about than the high-speed train.

Rose Guilbault:

How will the system interact with the already existing Amtrak system?

Mehdi Morshed:

Some of the panelists earlier addressed that, and I think that's a very important issue.

The system we are designing is such that it actually will be complementary to the existing train systems. The existing train systems include the urban train systems, such as BART and MUNI and others, or light-rail system in Sacramento or San Diego, as well as Amtrak and others. High-speed rail will be part of the total system.

For example, the Capital Corridor will continue to operate. We have to actually improve its operation in order to serve part of that market, which is San Francisco and the Bay Area, through Suisun Valley into Davis, into Sacramento and the foothill region. Those are short trips that you don't need to go 220 miles an hour to compete with automobiles. If you go 60 or 70 miles an hour, you're perfectly competitive with automobiles. You don't need to make the investment in high-speed rail. Those kinds of systems are more efficient and will continue to operate. They will be a feeder system, or a complementary system to high-speed rail. The San Joaquin train, for example, will be the one that will make *all* the stops through the Central Valley, because there are a lot of communities in the valley who would need train systems. If we stopped the high-speed train at every one of those communities, then we don't have a high-speed train. So what we want to do is be able to stop at a very few stations, and then rely on the San Joaquins and others to pick up the in-betweeners that carry the people to the rest of the destinations.

So it has to be part and parcel of the total system. The same holds true for the ACE train. ACE provides service between Stockton, the East Bay, and San Jose. That system needs to be improved and connect on both ends with the high-speed train system at San Jose as well as in the Central Valley. So again, it's a total system. Just like the freeway system connects with the city streets and they work together as a total system, the high-speed train is being planned that way.

Rose Guilbault:

How will our high-speed trains compare to those in Europe and Japan?

Mehdi Morshed:

The state-of-the-art high-speed rail system we are planning is 220 miles an hour. That is very similar to the current system that is being built in Spain. The Spanish system, the new line between Madrid and Barcelona, is being designed and built as a 220-mile-an-hour system, very similar to ours. The French TGV is about a 186 miles an hour; the Japanese bullet train has been around 170 miles an hour. They're all part of the same class of systems. Just like anything else, as you go to the next model, it's a little faster, a little more efficient, a little fancier, a little more equipped. We are pretty much following the lead of the Japanese in the '60s and Europe in the '80s. Finally we are catching up.

Rose Guilbault:

How does high-speed rail differ from traditional rail, in terms of capital investment, operating costs, profitability, etc.?

Mehdi Morshed:

It's totally different. With traditional rail, you rely on the existing track, which we share with freight. It's slower. Cars have to stop for it because you have all these grade crossings. It's a considerably slower operation. The whole signal system is different. The high-speed train has its own track. It has lighter vehicles. It's totally grade-separated, it's electrified, and it doesn't share tracks or compete with freight trains and anything else.

Rose Guilbault:

This person is concerned about safety. We live in a state where the bus drivers can't drive safely, so what makes you so certain a high-speed rail system can function well?

Mehdi Morshed:

High-speed trains can operate very safely and very well without a driver, because the system is automated. I've ridden in the cab of trains in Germany and France. The operator basically sits there as an observer. The computer is running the train and the operator is there to just watch.

Every two minutes they have to reach and push a button to make sure that they're still awake, and that's about it. The system depends on the computers, the electronics, and it's totally built around avoiding accidents, not surviving accidents. You avoid accidents by getting everything else out of your way. So the tracks are fenced, the tracks are secure, and there are electronic eyes all over the place watching the tracks and watching how things operate. That's why, as pointed out by Secretary Contreras-Sweet earlier, there is a history of close to 40 years of operation – the high-speed train started in Japan in the 1960s – and there hasn't been a single fatality on a high-speed train system. Somebody is doing something right. Now I'm sure that the Japanese, the French, and the Germans have their share of good and bad drivers, of attentive and inattentive operators. Yet they've been able to provide this kind of a safety even with all the human shortcomings.

Rose Guilbault:

This is another safety question that I assume is tongue-in-cheek. Why would I not have to take off my shoes? I guess the question means, for something moving at 200 miles per hour, is that not a security risk as attractive as an airplane?

Mehdi Morshed:

Not really, because if you look at the whole history of the plane and hijackings, when we all started going through the security checks, the people were hijacking the plane because they wanted to go to Cuba or someplace else. Once they took over the plane, the pilot had to take them to that destination. So we started going through security. We are sure our train isn't going to Cuba or Entebbe.

Then, in the 9/11 attacks, we learned that they can also hijack the plane and use it as a weapon. So we are now doing this heightened security to make sure that nobody takes our plane and crashes into buildings and so forth. You can't do those things with high-speed trains.

A high-speed train is not any more of a target for terrorists than this building, this meeting. If somebody wants to hit 100, 200 people, there are plenty of opportunities to do that.

You can't hijack the train and take it someplace *you* want to go, because the train is only going to go where it wants to go. You can't crash it into any building, because it's an automated system that can operate without a driver. You can hold a gun on the driver and the train is still going to go where it wants to go and it's not going to do anything else. So it is not a target in the same sense as an airplane and the reasons we go through all the security checks we go through at the airport.

Rose Giulbault:

What can we learn from Texas voting down a high-speed-rail system?

Mehdi Morshed:

I think the biggest lesson we can learn from there is that you have to be honest with people. Texas, as well as some of the other rail systems, failed because they weren't honest about it. They went to the public and said, let us build you a high-speed train and it won't cost you a dime – no money from the public sector – the private sector will build it for you and make a profit out of it. Obviously they wanted to get the head of the camel into the tent, and nobody bought it. They couldn't find the financing in the market.

We learned from that. From the beginning, whenever we talked to people and when we went to testify before the legislature on various bills, usually the first thing I said to them was, a high-speed train is a great idea, but it's very costly. It costs \$25 billion and the public sector has to reach in their pocket for most of that money. If that turns you off, then it's not for you, because there is no free lunch. Nobody is going to come in and build you this fantastic system free of charge. It will cost you something, and I think that's one of the biggest lessons we've learned.

A similar thing happened in Florida that happened to us in California, in 1981. When I was in the legislature, a group of bankers and the Japanese came to us and asked us to authorize them to build a high-speed train between L.A. and San Diego. They said it won't cost you anything; we will build it for you. And so we did. And they didn't.

Rose Guilbault:

Well, this follows then, how can we be assured that the budget for this won't be grossly expanded like every other state project?

Mehdi Morshed:

There are no guarantees in life. I'm not going to stand here and tell you that the cost of a high-speed train isn't going to go up, because there are so many things in life, in California, that I can't control, and none of us can. The fact of the matter is I think we have made an honest estimate of what it costs. We assessed what it is and we are sharing that with the public. Obviously, the cost may change as time changes, and life changes, and things *do* change, but its cost is not going to expand geometrically. We're talking essentially within that kind of a ballpark.

If you compare it to other things, we are making similar kinds of cost estimates. It's very useful to think about it, when we talk about comparing. As much as \$25 billion is to us, and it's a huge amount of money, over the same period of time over the next 20 years, the State of California, using existing dedicated tax dollars for transportation, will be spending over \$200 billion in investment in transportation, bridges, highways, buses, other transit systems. Each one of them is going to play the same kind of role in terms of the cost estimate. Each one of them is going to play same kind of role whether or not we deliver on schedule. Each one of them is going to suffer the same consequences. You get in the line, you march with the rest of them, and it's not going to be that much different than the rest of the projects. Basically, if we want these things, we have to recognize the reality of life, the fact that things change in life and you have to roll with it.

Rose Guilbault:

Why not use high-speed rail to move freight?

Mehdi Morshed:

High-speed rail *is* going to move freight, but it's going to move high-value freight just like the airlines do.

Most of the freight shippers don't put any kind of value on time. So if you're delivering somebody's furniture, and you're late three days or a week, there is very little added cost to your system, so you're not going to pay three times as much to get that furniture shipped to Sacramento.

If you're delivering a piece of equipment for a factory or something that needs to be fixed tomorrow because people can't work, then you put it on a plane or you drive it there. It's a high value; you place a value on time. Those kinds of freight will be carried on the high-speed train system, very similar to air freight.

Rose Guilbault:

What agencies currently endorse and do not endorse this project?

Mehdi Morshed:

Frankly, I don't have a list. I know there are dozens of public and private agencies who support it. Just in the San Francisco Bay Area, the City of San Francisco, the City of Oakland, most of the communities in the East Bay and the West Bay, and the Metropolitan Transportation Commission have been involved and supporting of the process. A number of chambers of commerce support it. We have a large group of labor unions who support it by supporting the bond measure, and that list is fairly extensive.

How many don't support it? That's a big question. Obviously, all of the people haven't spoken up and we haven't heard from them. I don't know whether they don't support it, but they haven't stepped forward. As of today, we do not have any entity or organization that has stepped forward and said, "We are opposed to it." We have had people who may disagree about the route alignments or about the station locations or some other parts of the system, but we don't have entities who have stepped forward saying this is a bad idea, stop working on it, you shouldn't be doing that. I should add a caveat. There is an individual who claims to be a UC professor who has come to a couple of our meetings. He has said that this is a very bad idea, you shouldn't do it, the same as BART was a very bad idea and we shouldn't have done that.

Rose Guilbault:

If California did not invest in a high-speed rail program, how much more would we have to spend on other systems?

Mehdi Morshed:

Well, that's a question we will have to answer in our environmental document. As we speak, we are formulating that. We had to develop a scenario where you provide the same kind of mobility to the people as the high-speed rail provides and then try to cost it out, and we're in the process of doing that. What that is will be actually included in our draft environmental document.

Rose Guilbault:

We have time for one more question, and this is a very practical question. How much will a ticket from Northern California to L.A. cost?

Mehdi Morshed:

Well, that depends on eight or ten years from now, whoever's running the system, what they want to charge. It also depends on what is the price of an airline ticket and what is the price of gasoline, and everything else in life. As I said earlier, our estimate of ridership revenue that we are using was based on a \$50 fare from San Francisco to L.A., one way.

Rose Guilbault:

Thank you so much for stepping in for Secretary Contreras-Sweet. That's Mehdi Morshed, who is the Executive Director of the California High-Speed Rail Authority. That concludes our meeting. Our thanks to the Honorable Maria Contreras-Sweet, Secretary of the California Business, Transportation and Housing Agency, for her comments today. This program has been co-sponsored by The Commonwealth Club of California, the Mineta Transportation Institute, and the California State Automobile Association.

SOUTHERN CALIFORNIA Q & A SESSION

Question:

What is the best argument for high-speed trains in terms of budgetary considerations, given California's problems? Why should so much money be earmarked for this?

The Honorable Maria Contreras-Sweet:

We will always have challenges, and funding high-speed rail is not going to be easy. First we are talking about funding it over 16 years. We're talking about private sector investment. But I wonder about the cost of *not* making these investments and I think that's what we have to consider. What is the cost of not making these investments?

We have time for one or two questions from our students, okay?

Yesenia Delgado:

My name is Yesenia Delgado and I attend Ramona High School. Ramona High School is clearly in the path of the MTA plan, and Buena Heights is really upset because our school will be moved. So my question is, how many families will be affected by your high-speed rail plan?

The Honorable Maria Contreras-Sweet:

You know, any time we take on a transportation project, that issue has to be addressed. We are very, very concerned at Caltrans in the state of California about making certain that there is minimal impact to communities, and that's one of the issues. The longer we delay, the more mitigation would have to occur.

Specifically, I don't know exactly where your home is. I know that the MTA is taking up the work of the Gold Line again, and in each community there are businesses, sometimes there are homes affected. I will look to the experts here, but surely there has got to be a plan. At least that would be one of the things that I would want to look at, is what kind of mitigation is there for anybody that is disrupted in a program to make sure that they are safely placed in another safe community and that you minimize the impact on families.

I cannot tell you until we actually do the Environmental Impact Report as to how many families would be affected because we don't have a confirmed alignment at this point. It is certainly a question that you would want to bring up during the public comment period once the EIR is released. I think it's a very powerful question, and you should stay with that point.

Do we have any other questions?

Lazera Pressium:

Hi, my name is Lazera Presium from the Academy of Business Leadership. Since I'm in this business academy, I'm really focused on economics. Seeing that you are focused on Los Angeles and San Francisco, how will Central California be recognized or focused on?

The Honorable Maria Contreras-Sweet:

The rail line that we're speaking of would go from Los Angeles through the Central Valley, and then up to the Bay Area. That is the plan. So we think that it would have a marvelous impact on the Central Valley. Again, it's my opinion, and we will look at the EIR to see exactly what that alignment does, but it would certainly make it more interesting. For example, in Silicon Valley, they were paying record levels for their housing, because there was just no accommodation for housing in the Silicon Valley. With the high-speed rail, you could actually live in the Central Valley and get to the Silicon Valley in about 20 to 25 minutes, making it much more attractive to live in the Central Valley and be able to develop that. The important thing is that if we anticipate it today, we can make sure that we are going about it in a much more responsible way; to make sure that we have a more effective strategy about how we use that land that is so fertile in the Central Valley, always preserving the agricultural industry that is so essential to our economy.

I want to thank the panel that did such a terrific job before this luncheon began. I understand that they took up the very serious work and helped to address some of your questions. So, again, I want to thank all of the good people, Mehdi Morshed, for doing such a great job running the Authority for us, and Mr. Rod Diridon, who has been just a stalwart advocate throughout the country for California's transportation system, as he is at the helm of the Mineta Transportation Institute. Thank you for joining us today.

Adrienne Medawar:

Thank you, Secretary Contreras-Sweet, for giving us such a comprehensive view of our infrastructure needs and goals in our state of California, and exactly where that high-speed rail system would fit in here. And thank you for doing this at Town Hall-Los Angeles. You are always welcome back. On behalf of Town Hall-Los Angeles, The Commonwealth Club of California, and the Mineta Transportation Institute, once again, I thank you for coming today.

END NOTES

1. Kopp, Sen. Quentin and Costa, Sen. James, *Statutes of 1996: Senate Bill 1420*, State of California.
2. California High-Speed Rail Authority (CHSRA), *Business Plan*, (2000), source: <http://www.cahighspeedrail.ca.gov> (accessed July 2003).
3. San Francisco League of Conservation Voters, *This View of Density*, (n.d.), source: <http://www.sflcv.org> (accessed July 2003).
4. Lee, William, *ERA Issue Paper: Economic Impact And Benefit/Cost of High-Speed Rail For California*, Economics Research Associates, (1996).
5. Bay Area Council, *Regional Transportation Initiative: Mobility for the 21st Century*, (1997), source: <http://www.bayareacouncil.org> (accessed July 2003).
6. Bay Area Council, *Bay Area Water Transit Initiative: Charting the Course* (1999), source: *ibid.*
7. Burnham, Daniel, *Plan for a New San Francisco*, American Builders Review (1906).
8. Caro, Robert, *The Power Broker: Robert Moses and the Fall of New York*, Random House, (1974).
9. Metro Investment Report, *Is There a Future for High-Speed Rail in California?* Volume VI, No.8, (January 1999).
10. Starr, Kevin, *Endangered Dreams, The Great Depression in California*, Oxford University Press, (1997).
11. Harrington, Lee, *LAEDC Says California High-Speed Rail Project is Too Big*, Los Angeles Economic Development Corp. (2003), source: <http://www.PRWeb.com> (accessed July 2003).
12. Baldassare, Mark, *PPIC Statewide Survey: Special Survey on Land Use*, p.1, Public Policy Institute of California (November 2002), source: <http://www.ppic.org> (accessed July 2003).
13. *Ibid.*, p.3.
14. Baldassare, M., *PPIC Statewide Survey: Special Survey on Californians and the Environment*, p.7, Public Policy Institute of California (July 2003).
15. Final Report of the Commission on Building for the 21st Century, *Invest for California: Strategic Planning for California's Future Prosperity and Quality of Life*, State of California (2001); source: <http://www.bth.ca.gov> (accessed July 2003).
16. Department of Housing and Community Development, *Raising the Roof, California Housing Development Projections and Constraints 1997-2020*, Business, Transportation and Housing Agency, State of California (n.d.), source: <http://www.hcd.ca.gov> (accessed July 2003).

Other Readings

- Nash, Andrew, *Best Practices in Shared-Use High-Speed Rail Systems*, MTI Report No. 02-02, Mineta Transportation Institute (2003).
- Schreiber, Kenneth, *Making Growth Work for California's Communities*, MTI Report No. 02-01, Mineta Transportation Institute (2003).

GLOSSARY

ACE	Altamont Commuter Express
Amtrak	National Railroad Passenger Corporation
BART	Bay Area Rapid Transit
Caltrain	Peninsula Corridor Joint Powers Board rail service
Caltrans	California Department of Transportation
CHP	California Highway Patrol
CHSRA	California High-Speed Rail Authority
EIR	Environmental Impact Report
EIS	Environmental Impact Study
FHWA	Federal Highway Administration
HSR	High-Speed Rail
LAEDC	Los Angeles Economic Development Corporation
LAX	Los Angeles International Airport
LOSSANS	San Diego-Los Angeles-Santa Barbara Rail Corridor
maglev	Magnetic Levitation
MTA	Los Angeles Metropolitan Transportation Authority
MTC	Bay Area Metropolitan Transportation Commission
MTI	Mineta Transportation Institute
MUNI	San Francisco Municipal Transit Agency
PPIC	Public Policy Institute of California
SAMCEDA	San Mateo County Economic Development Agency
SCAG	Southern California Association of Governments
SFO	San Francisco International Airport

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