An Alternative Strategy for Developing High-Speed Rail Service in California

Californians enthusiastically supported high-speed rail when they approved Proposition 1A in November 2008. Over the last four years, however, public support for the project has eroded as a result of the High-Speed Rail Authority's ineptness in dealing with communities in both northern and southern California, providing inaccurate and misleading information regarding cost and ridership, and deciding to spend $6 billion to construct the initial segment in the San Joaquin Valley.

High-speed rail is important to the future of California, yet the public has found the Authority's concept to begin construction in the Valley unacceptable. The program needs to be redesigned to make sense to the public. The $2.553 billion in American Recovery and Reinvestment Act (ARRA) funds awarded to California for high-speed rail is precious money that we cannot allow to be squandered.

Let's put transportation funding in perspective:

- The California Transportation Commission has found that, over the next ten years, California's surface transportation system of freeways, local streets and roads, and public transit facilities have unfunded maintenance and reconstruction needs of $341.1 billion.
- Congress just enacted the first transportation funding authorization since 2005. This two-year law will provide California - the state, cities, and counties - about $5.5 billion annually. That's insufficient to maintain the system we have, let alone attempt to develop new projects.
- Congress did not provide funds for high-speed rail in the new transportation funding authorization.

In light of the constrained funding environment, it is incumbent to put both the federal funds and the Proposition 1A funds to uses that provide immediate benefits and set the stage for high-speed rail development when there is a more predictable funding stream.

Since December 2007, the Senate Transportation and Housing Committee, the Budget Subcommittee on Resources, Environmental Protection, Energy and Transportation, and the Senate Select Committee on High-Speed Rail have held over a dozen hearings on the performance of the Authority. The committees, relying on the Legislative Analyst's Office (LAO), the Bureau of State Audits, the Institute of Transportation Studies at the University of California Berkeley, the Peer Review Group, and others, have pursued a fact-base inquiry into the performance of the Authority. The Authority's performance has been found to be inadequate.

Principles Governing High-Speed Rail Funding

We share the vision of high-speed rail for California, but do not share the approach being offered. California has to get the high-speed rail program right. The initial $2.553 billion must be spent in a way that makes sense. This means some elements of the current project must be changed - but this must be done thoughtfully. The state risks the prospect of a stranded asset that will have limited value on an interim basis. Recognizing these circumstances, the following principles form a framework for redesigning the program:

Principals for Redesigning the High-Speed Rail Program

- Investments should benefit both today's train riders as well as tomorrow's high-speed train riders.
- All projects must be constructed by the federally required September 2017 deadline.
- California should take advantage of the flexibility of federal funds. (ARRA funds can be used in the San Francisco-San Jose, Merced-Fresno, Fresno-Bakersfield, and Los Angeles-Anaheim segments of Phase 1 Corridor.)
- ARRA funds should be committed to eligible corridors in the urban regions.
- No stranded passenger rail assets. ARRA investments should be usable and benefit the most users when construction is complete.
- Continue the commitment to fund and construct the Madera to Fresno segment of high-speed rail.
- Investments must be consistent with Proposition 1A.
- Investments should have the possibility of attracting additional public and private funds.
- Investments should foster economic development opportunities, especially in the vicinity of stations, and should improve air quality and contribute to meeting California's climate change goals.

These principles are based on the premise that California deserves a world class passenger rail network. Proposition 1A provides the opportunity to develop a system that will evolve into a full scale high-speed rail service. All investments that the state makes in passenger rail going forward should be capable of evolving into high-speed rail service.

Where should California Invest in High-Speed Rail Projects?

Proposition 1A designated the travel corridor from Anaheim/Los Angeles to the San Francisco Transbay Terminal via the San Joaquin Valley as the Phase 1 high-speed rail corridor. By law, high-speed rail investments must first be made in this corridor. The Authority identified six segments comprising the corridor. Of the six, the state received federal funding for San Francisco Transbay Terminal-San Jose, Merced-Fresno, Fresno-Bakersfield, and Los Angeles-Anaheim.

The Authority and the Federal Railroad Administration (FRA) decided the first segments where construction should begin are Merced-Fresno and Fresno-Bakersfield. The Authority is a year behind the development schedule for these two projects. It hopes to go to construction between Madera and Fresno at the end of this year. Fresno-Bakersfield is at least another year away from construction. The risk of further delay is very high because these two projects face complex environmental mitigation issues, as well as current and potential litigation. Moreover, property acquisition, which introduces further risks, has yet to begin. In addition, the Authority is not exactly certain as to the length of the project. If it were to build the entire project, it would be 130 miles in length; but its own documents indicate the project may be as little as 80 miles in length.

In light of these complexities, there are alternative projects that meet the above principles and are nearly ready to go to construction to meet the 2017 deadline. These projects include:

Transbay Terminal

This project is a 1.3 mile tunnel that will connect the Caltrain commuter service from San Jose to the Transbay Terminal in the San Francisco business district. The project is in the Phase 1 high-speed rail corridor, and has already received $400 million in ARRA funds for constructing the terminal in the building's basement. Funding for the tunnel under normal circumstances is unavailable until 2023. Early funding will prevent the terminal from being a stranded asset, unusable for existing commuter train service between San Francisco and San Jose, and possibly Amtrak service beginning in Bakersfield, for ten years. The terminal will be designed to accommodate future high-speed rail operations. The cost of the tunnel is $2.5 billion - with $1.250 billion from ARRA funds and $1.250 billion from Proposition 1A funds.

Los Angeles Union Station "Run-through tracks"

The "run-though tracks" would allow trains to operate directly through the station without having to reverse direction. Nearly 100 passenger trains use Union Station on a typical weekday. This investment will reduce travel times for commuter rail riders coming from Orange, Riverside, and San Bernardino Counties and will improve schedule reliability for all trains. The station will be designed to accommodate future high-speed rail service.

Union Station is the lynch pin for the revitalization of downtown Los Angeles. With the construction of the regional connector from Union Station across the central city to the Red Line at 7th and Flower, Los Angeles will provide the type of rail connectivity that has proven elsewhere in the world to attract additional intercity travelers wishing to take advantage of this new travel opportunity. The cost of this project is $400 million. Funding will be shared equally with $200 million from ARRA funds and $200 million from Proposition 1A.

Grade separations between Los Angeles and Anaheim

According to the California Public Utilities Commission, the Rosecrans/Marquardt Avenue, the Los Nietos Road, and the State College grade separations are among the five highest priority safety projects. This means that, of all the projects seeking funding, these three projects have the highest risk of accidents between motor vehicles and trains. Because of funding shortfalls, these projects have been unable to be constructed. By constructing these grades separations, the opportunity to purse the blended program between Los Angeles and Anaheim will be enhanced. Complementing the grade separations are two street closures that will further improve safety for motorists and reliability for rail travel between Los Angeles and Anaheim. The total cost of the grade separations and the street closures is $264 million. Funding for these projects will be shared equally with $132 million from ARRA funds and $132 million from Proposition 1A.

Madera to Fresno

The Authority is in the process of procuring a design-build construction team to build the Madera to Fresno San Joaquin Valley high-speed rail segment. This 29 mile segment will begin near Madera and end in Fresno. The segment will allow the City of Fresno to achieve its long-time goal of moving its passenger rail station from the east side of the city to the west side while also reducing the number of trains through residential areas of the city. The city anticipates the construction of the new station will spur growth on the west side of downtown, consistent with the city's redevelopment plans. For this segment to meet the federal usability requirement, it will have to connect with the Burlington Northern Santa Fe rail line over which the existing Amtrak service operates near Madera and on the south side of Fresno. Funding this project is consistent with the LAO's 2012-2013 budget recommendations. The estimated cost for this project is $2 billion, including right-of-way and contingencies. The sources of funds for this project includes $923 million from a Federal Fiscal Year 2010 grant, $401 million from ARRA funds, and $651 million from Proposition 1A.

Can Federal Funds be Redistributed to These Projects?

A reasonable question is whether the federal funds can be redistributed to the projects comprising this alternative strategy. The FRA entered into a "cooperative agreement" with the Authority, committing $2.553 billion of ARRA funds for environmental review on all seven Phase 1 sections, as well as for the design and construction of the Merced-Fresno and Fresno-Bakersfield segments. Federal regulations governing cooperative agreements permit a revision in the "scope or objectives of the project" upon written approval by the FRA. In addition, federal regulations allow the cooperative agreement to be amended to change the scope of the project. The FRA has done this before. This is exactly what this proposal does.

The Transbay Terminal project, the Los Angeles Union Station project, the grade separation projects, and the Madera to Fresno project are all in the designated segments for which the state received ARRA funding from the FRA. Moreover, these projects are in the Phase 1 high-speed rail corridor approved by California voters. The projects offer near-term benefits to today's commuter rail and Amtrak riders and will be fully compatible with future high-speed train service.

Blended Program

The High-Speed Rail Authority in its final 2012 business plan introduced the concept of a blended rail development plan. The blended plan proposes to integrate high-speed trains with existing intercity and commuter rail services. This plan recognizes that there will be segments of high-speed rail service that will have to utilize upgraded conventional rail facilities. Blended projects are proposed in the Proposition 1A Phase 1 Corridor, and for some projects in the Phase 2 corridors. The Authority is proposing to use Proposition 1A funds to further fund the blended program. Proposition 1A requires a dollar-for-dollar match. The blended program relies upon local funding to match the Proposition 1A dollars. Because of this constraint, the Authority has entered into memorandums of understanding with both the Los Angeles and San Francisco regions to identify projects and the funding that the regions would commit to match Proposition 1A bond funds. Two of these blend projects are discussed below:

Los Angeles to Palmdale

The Authority proposes to upgrade the Phase 1 segment from Los Angeles to Palmdale. Metrolink operates commuter train service in this corridor, which would benefit immediately from this investment, and committing Proposition 1A funds in this corridor offers the possibility of attracting private funds. A private corporation that is linking Las Vegas and Victorville with high-speed rail service is interested in extending the service to Palmdale and on to Los Angeles via the Metrolink line. There have been some exploratory discussions on the feasibility of a public-private partnership being formed to develop this project.

Caltrain Electrification

This project electrifies the Caltrain commuter service between San Jose and San Francisco. This is a segment of the Phase 1 corridor and is a regional priority, as it is expected to increase the frequency of service and ridership. In addition, it will replace the current diesel electric locomotive fleet with electric locomotives, contributing to the region's climate change goals and reducing the reliance on petroleum-based fuels.

Connectivity Funds

Proposition 1A set aside $950 million for connectivity projects. These projects are intended to integrate the existing rail system with high-speed rail service. The California Transportation Commission recently committed $931 million to eleven connectivity projects and several safety projects. The recipients of the funds will have to match them dollar-for-dollar, according to the terms of Proposition 1A. The Brown Administration is proposing that the funds be appropriated this year to fund these projects. These projects are important and should be funded.

Development Opportunities

The Authority will add substantial value to properties within proximity of the stations as well as to the surrounding communities. For example, San Francisco is currently working on the TransBay Terminal Project. This is a 40-acre mixed-use project in San Francisco's business district. Real estate analysts expect an 11 percent premium on property values within a ¼ mile of the project. In Los Angeles, the Metropolitan Transportation Authority owns 40 acres of land and has entitlements for 6 million square feet of residential and commercial uses next to Los Angeles' Union Station. When the area around the Fresno station is open for development, it is likely to experience similar development opportunities. These increased values will result in increased property tax receipts for the respective local governments. In order to ensure that these increases are realized, it may be appropriate to share some portion of future tax increment with the high-speed rail project itself. Commitments of future tax increment could be bonded to provide upfront capital for the high-speed rail construction.

Reform of the High-Speed Rail Authority

During Senate oversight hearings over the past several years, the High-Speed Rail Authority has demonstrated a fundamental lack of maintaining an organization capable of managing such an immense project. Only recently has the Authority appointed an executive director, while important positions on the executive management team remain vacant, including a chief financial officer, a risk management expert, and an environmental oversight expert. In addition, the Authority could benefit from a member of the board knowledgeable about environmental issues and community impacts of large construction projects. The Authority's technical analyses, including the ridership forecast and the projects impact on greenhouse gases, have been called into question by many experts. The Authority should contract with relevant research organizations at the University of California to provide an independent evaluation of these technical analyses.

Several questions have been raised about potential conflicts of interest among the board members. One important way to vet board members is to require that they be subject to Senate confirmation. In addition, the executive director of the Authority should be subject to confirmation.

Project Risks

The high-speed rail project, similar to other projects of its size, will have risks. That being said it is important to consider ways to manage risks. The Peer Review Group clearly spoke to the risk the state is assuming by funding the Valley project when it reported the following:

> *. . . the decision to put the entire initial effort into the Central Valley maximizes the risk to the State if no significant funding appears after the initial Federal contributions. This is because the San Joaquin passenger rail service carries about 1 million passengers annually, whereas the two end segments—San Jose to San Francisco, and Los Angeles to Anaheim—support service to nearly 28 million passengers annually. Some improvements on the two end segments will be necessary for the blended approach (electrification and minor track changes for the Caltrain services, grade crossings, and other track changes for Anaheim to the San Fernando Valley) in any case, and would reduce the risk to the state of a stranded project. In addition, both Caltrain and Metrolink have experienced management teams who could administer their segments effectively, relieving the CHSRA of potion of the management burden which, we believe, CHSRA cannot handle under the current organizational approach.*[1]

In addition, if the project is to go forward, the LAO has recommended that the best approach to managing risk is to fund only the Madera to Fresno segment. Once the Authority's requested budget is appropriated, the Legislature loses control over the funds. Control language and efforts at achieving accountability has limited impact.

[1] See page 6 of the California High-Speed Rail Peer Review Group report dated January 3, 2012.

Funding Alternative High-Speed Rail Program

Since 2009, California's high-speed rail project has received $3.481 billion in federal funding, including $2.553 billion in ARRA funding and $929 in funding from other federal sources. Table 1 summarizes the grant awards that the state has received. The $2.553 billion in ARRA funds were used to develop the alternative program. The segment between Madera and Fresno is funded from the $923 million of FY 2010 funds, which are dedicated to the Valley.

Table 1
Federal High-Speed Rail Grant Awards
(In millions)

Award	CHSRA		TJPA[1]	Total
	ARRA	FY2010	ARRA	
Original ARRA Award on January 28, 2010	1,850.00	-	400.00	2,250.00
FY 10 Appropriations Awards on October 28, 2010	-	715.00	-	715.00
Redistribution of HSIPR funding on December 9, 2010	616.18	-	-	616.18
Redirected HSIPR from Florida in May, 2011	86.38	213.62	-	300.00
Total	2,552.56	928.62	400.00	3,881.18

1. Awarded to the High-Speed Rail Authority but directly transferred to the Transbay Terminal Project.

Table 2 on the next page summarizes the funding for the alternative program. The total value of the projects is $5.164 billion, with $1.983 of ARRA funds committed to the program. There remains $569 million of uncommitted ARRA funds that are available for unexpected costs.

The $923 million in Federal Fiscal Year 2010 funds are committed to the Madera–Fresno segment as are $401 million in ARRA funds. The total Proposition 1A match of $2.233 includes funding for the Madera-Fresno segment.

It is important to recognize the Authority, at its March 2012 meeting, waffled on the length of the project. In a report the Authority said that the length of project will be 130 miles, but could be as little as 80 miles. Presumably, the Authority is uncertain about its cost estimates.

Table 2

Alternative High-Speed Rail Program Phase 1 Corridor

	Total Cost	**ARRA Funding**	**Proposition 1A**	**Federal FY 2010 Funds**
<u>Los Angeles-Anaheim</u>				
Los Angeles Union Station - Run Though tracks	0.400	0.200	0.200	
Street Closures	0.004	0.002	0.002	
Norwalk Blvd/Los Nietos Road Grade Separation	0.040	0.020	0.020	
Rosecrans/Marquardt Ave. Grade Separation	0.150	0.075	0.075	
State College Blvd. Grade Separation	0.070	0.035	0.035	
Total Los Angeles-Anaheim	0.664	0.332	0.332	
<u>San Francisco-San Jose</u>				
Transbay Terminal	2.500	1.250	1.250	
Total	3.164	1.582	1.582	
Madera to Fresno	2.000	0.401	0.651	0.923
Grand Total	5.164	1.983	2.233	0.923