

**California High Speed Rail Peer Review Group Summary Comments on the California High Speed Rail Authority's 2009 Report to the Legislature**

**Attachment A**

Below are the summary comments by the peer review group on issues as they appear in the High Speed Rail Authority's 2009 Report to the Legislature and other related documents reviewed by the group.

**Authority Staffing.** Though not an explicit part of the 2009 Business Plan, we are concerned after discussions with the Authority that the staff level now permitted is totally inadequate to oversee a project of this magnitude, no matter what business model is ultimately chosen. One of the dangers in public sector management of major projects is that staffing levels and compensation are not always related to the needs of the job at hand because of bureaucratic restrictions. The existing massive imbalance between the numbers of Authority staff and consultants has been the source of continuing criticism; the problem will be much exacerbated as the project moves into implementation. We urge the Authority, the Governor and the Legislature to ensure that the Authority has access to the staff numbers and compensation needed for managing the project: anything less will ensure major problems of budget control, accountability and schedule. In addition, we suggest that the Authority and Legislature consider other organizational approaches, such as public corporations, that would improve the ability of management to secure adequate staff and reliable funding.

**Business Model.** The Authority should focus immediately on selection of an appropriate "business model." "business plans," "strategic plans" and "business models" are not synonymous. The business model must be a clear statement by the Authority of the roles to be played by all involved parties concerning the project's ownership, construction, financing and general management. As the project moves toward implementation, the selection of an appropriate business model, though a complex task, will have great bearing on the project's implementation and success.

There appear to be five general business models that might be used in California, though there are many variations due to local conditions. (1) **Fully public, mass transit model:** using BART as an example, the Authority would acquire all needed property, manage and pay for the design and construction of the system, acquire rolling stock, set fares and manage the operation and maintenance of the system; (2) **management contracting, or "gross cost" franchising/concessioning:** the Authority would plan, finance and build the project according to the Authority's demand estimates, but contract with a private entity to take responsibility for operating and maintaining it at the Authority's specified demand level; (3) **long term "net cost" concessioning:** the Authority would plan and construct the system, and concessionaires would then compete for a long term contract under which they would set prices and make demand estimates, furnish rolling stock and operate and maintain the system; (4) **separated infrastructure:** the Authority would design, finance and construct the system and permit one or more operators to provide rolling stock and operate various services, and the Authority would charge non-discriminatory access fees to all operators, including the HSR operator(s) and other local service providers; (5) **essentially private approach:** the Authority would acquire right-of-way (ROW), establish a broad system of specifications and award an exclusive concession to a private consortium to design, build, finance, operate and maintain the system based on a long term contract. As the project moves toward

implementation, the model chosen by the Authority should be based on available project finances, private and public costs and benefits, and risk sharing.

**Management of Risk and Uncertainty.** All “mega projects” such as High Speed Rail (HSR) carry significant risk and uncertainty. Community opposition to the project’s proposed alignment between San Francisco and San Jose, as well as the early stage of the system’s overall design status (among many other issues) will cause the cost of the project to fluctuate.

Further contributing to the project’s uncertainty will be the expected change in the estimated cost variability in each of the project’s components. The Authority should make the necessary adjustments in these areas based on the project’s stage of development. By doing so, the Authority will provide the public a better understanding of the reliability and variability of the engineer’s estimate. Applying traditional mechanisms to the engineer’s cost estimate, such as percentage contingencies, etc., will not engender continued confidence in the project. In addition, we encourage the Authority to conduct more detailed and transparent sensitivity analyses of the impact on expected outcomes of variations in demand, revenues, investment costs, operating costs and project timing.

The transfer and allocation of risk is another issue which the Authority needs to assess. In the context of the business model, the Authority should investigate project risks and determine who will bear them along with a justification of why a particular risk allocation model was selected.

**The Financial Gap between Currently Available Resources and Total Project Cost.** There is now considerable uncertainty and unreliability of federal funding combined with the state’s structural deficit, over-reliance on federal funding and budget unpredictability. In light of the public concern over excessive government spending, how will the Authority close the gap between any funding resources and the project’s total estimated cost? What will the Authority’s course of action be if the funding gap cannot be closed? The group suggests that if the project experiences a shortage of funding resources, it should: (1) concentrate the funds available on completing operable segments; and (2) reassess the business model, given the ability and willingness of the involved parties to raise money. The group has two added concerns related to the operable segment issue and the absence of a credible financial plan. The Authority apparently must now focus federal resources on a single segment, requiring a choice between demonstrating HSR in the short run and independent utility if the project is not completed.

The lack of a clear financial plan is a critical concern. The group fully realizes that developing a credible financial plan is difficult depending, as it does, on a large number of decisions not yet made and on factors far beyond the control of the Authority. In a deteriorating budget climate in which even large and highly beneficial projects are abruptly canceled because of shortage of funds, and in which the likelihood of new large federal funding programs appears small, there is an air of unreality about a plan that includes \$17 to \$19 billion in “free” federal funding from programs that do not yet exist. The same can be said of the expectation for large local or state funding for stations and area development, when local governments are highly stressed and when the finances of the state are sufficiently weak that a sale of \$9 billion in state General Obligation bonds might only be possible (if at all) at unusually high interest rates. This limits the project’s credibility with private investors. The demonstration of firm Public Sector financial commitments will be an absolute necessity, prior to approaching sources of private capital. In our discussion with Roelof van Ark, it is clear that the Authority recognizes the

“chicken and egg” nature of the conundrum: the Authority cannot get private investment without a solid prospect that the project will be completed and it cannot complete the project without private investment that would make the project successful.

**Demand Modeling and Estimating.** The Authority has come under increasing criticism regarding the project’s demand and revenue estimates. The issues identified by the Institute for Transportation Studies at the University of California at Berkeley, the Legislative Analyst’s Office and the State Auditor’s office have raised sufficient concerns with the demand model so as to call into question the project’s fundamental basis for going forward. The group recommends that the Authority work with UC Berkeley, the Legislative Analyst’s Office and the State Auditor to complete an analysis of any issues regarding the demand models so that a mutually agreed estimate can be reached along with ranges of uncertainty. Failure to arrive at such an agreement will put the project’s forward progress in jeopardy.

**Need for a Revenue or Demand Guarantee.** According to the Proposition 1A bond measure, any public “operating subsidy” is prohibited, making demand or revenue guarantees legally questionable. However, discussion of a revenue or demand guarantee for the private sector in order to attract private investment must be seen in the context of the business model adopted by the Authority. For example, if a private concession were offered to an operator whereby the operator was required to design, build, finance, and operate the system as well as buy rolling stock, much of the demand risk might have to be assumed by the Authority through a revenue guarantee unless the demand estimates were pegged so high that the profitability of the system was beyond a doubt. Conversely, if the system were designed and built by the Authority, with the Authority buying and leasing the rolling stock and not charging the operator for the use of the system, with operator’s revenues applied to covering only the operation and maintenance costs, the need for a demand guarantee and subsidy might well not arise.

Obtaining an agreed definition of the term “operating subsidy” has become critical. A recent report, “The Financial Risks of California’s Proposed High-Speed Rail Project,” has argued that interest payments on State bonds should be considered as a part of operating costs, whereas the Authority has excluded State bond interest (and most other capital costs) from funds to be repaid by the Authority. The Authority should seek clarification on the costs and revenues to be included within the term “operating subsidy.” This could significantly affect the legal viability of the project and the choice of business model.

The “Financial Risks” study highlights the confusion between **financial** analysis, the basis for private involvement, and **economic** analysis, the basis for public involvement. The study makes a series of critical comments on the 2009 Business Plan and deserves careful attention and response from the Authority, as we share many of the same concerns. The study is, however, limited to financial analysis, while leaving aside all of the reasons – consumer surplus, reduction of congestion on rural and urban highways, airports and airways, reduction of pollution and carbon emissions, and reduction of accident costs, among others – that would be included in an economic analysis to evaluate public involvement in the project. The treatment of public benefits was much more detailed in the 2008 Business Plan than in the 2009 Business Plan. Given the importance of the issue in the overall evaluation of the project, and the close interrelation of public benefits with demand forecasts, we strongly encourage the Authority to include a thorough and updated treatment of public benefits and costs in the 2010 Business Plan and to link these results with the agreed definition of “operating subsidy.”

**ROW and Alignment Availability.** While different types of service can run on the same right of way, the Review Group agrees that freight and high speed rail should not operate on the same track. There remains significant uncertainty in the cost and the availability of ROW as well as alignment issues. While we understand that the level of cooperation has improved, any lack of cooperation, or resistance by Class I Railroads regarding the joint use of urban rail segments as well as the project's need for long and straight alignments, will be problematic. The Authority should recognize the risks involved and the impacts they will have on budgets and project schedules. The Authority must be prepared to finalize an alignment as well as develop an approach which acknowledges the potential of any alignment changes and the risks involved in order to minimize their impact on the project.

**Technical, Safety and Seismic Issues.** There has been limited information from the Authority regarding such issues as what proportion of the project will be at-grade, in tunnel and/or elevated. These decisions will have significant cost implications. For example, analysis of the cost of the high speed rail project in China revealed that the cost of elevated track was approximately double the cost for at-grade track and the cost of tunnels was double the cost of an elevated configuration. Any decisions made by the Authority in this area will have significant financial implications for the project. The same can be said of train speeds and seismic-related issues. Specifically, train speeds in China, due to safety reasons, mandated that the track be grade separated, either in tunnel or elevated. Also, given the seismic issues in California, larger foundations will be needed, resulting in higher system costs, perhaps by as much as 60 percent. The Authority needs to make a clear statement on these issues.