California High-Speed Rail Project

Revised 2012 Business Plan:

Addressing Comments from Reviewing Entities

April 2012

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1) Introduction

On November 1st, 2011, the California High-Speed Rail Authority (Authority) released its Draft 2012 Business Plan (Draft Plan). The Draft Plan included a new approach to implementing the program in phases and through blended operations with existing rail services in the state. Many organizations and individuals submitted comments to the Authority on the Draft Plan. This report addresses the comments from the review of the Draft Plan by the Legislative Analyst's Office (LAO) and the California High-Speed Rail Peer Review Group (PRG).

The LAO released its comments on November 29th, 2011 and the PRG provided its comments to the Legislature on March 21st, 2012. On April 2, the Authority released a draft Revised 2012 Business Plan (Revised Plan) for consideration by the Authority Board. Following is a summary of the specific comments by the LAO and PRG that called for response by the Authority, and how the Revised Plan addresses those comments. For reference, a summary of the relevant issues in the Draft Plan is provided, as well.

2) Legislative Analyst's Office Comments

Comment	Draft Plan Treatment	Revised Plan Treatment
"Insufficiently Detailed Project Chronology and Forecasts. Our review of the 2012 draft business plan finds that it satisfies most of the elements required by Chapter 618. However, it is unclear whether the business plan is in compliance with a few of these requirements. Specifically, there does not appear to be a detailed project chronology that identifies the dates when HSRA expects to complete the environmental reviews and initiate and complete construction of each segment of Phase 1. There are also fewer operating and planning scenarios that are used to forecast ridership, revenue, and operating and maintenance costs than appear to be required by Chapter 618."	Not all details fully included in Draft Business Plan. Ridership and revenue forecasts – and related O&M costs -- were prepared for low, medium and high range as required.	More comprehensive and updated information is included in the Revised Business Plan. Environmental and project schedules have been updated and included. Updated ridership, revenue, and O&M forecasts include high, medium, and low forecasts for each step, including Phase 1 Blended. Alternative funding scenarios identifying impact of changes to key assumptions provided.
"Committed Funding Not Identified and Environmental Review Process Incomplete. Proposition 1A identifies certain requirements that must be met prior to requesting an appropriation of bond proceeds for construction. These include identifying for a corridor, or a usable segment thereof, all sources of committed funds, the anticipated time of receipt of those funds, and completing all project-level environmental clearances for that segment. Our review finds that the funding plan only identifies committed funding for the ICS, which is not a usable	Funding Plan details funding committed for ICS. Draft Business Plan identifies funding for IOS, by year.	In addition to the identified funding for the first construction segment of the IOS, the Revised Plan identifies funding for the entire IOS, with cap and trade revenues available as needed, upon appropriation, as a backstop against federal and other funding. EIS/EIR will be completed. The environmental Records of Decision for the four sections included in the IOS are scheduled to completed – with Fresno-Bakersfield scheduled to be complete in December

segment, and therefore does not meet the requirements of Proposition 1A. In addition, the HSRA has not yet completed all environmental clearances for any usable segment and will not likely receive all of these approvals prior to the expected 2012 date of initiating construction."		2012 and Bakersfield-Palmdale in February 2014. See Exhibit 2-6 in the Revised Plan.
"Availability of Funding to Complete a Usable Segment Highly Uncertain. The possible future sources of funding necessary to complete Phase 1 that are identified in the draft business plan are highly speculative. In addition, Congress has approved no funding for high-speed rail projects for the next year. As a result, it is highly uncertain if funding to complete the high-speed rail system will ever materialize."	A range of current and potential sources are identified. Some sources, such as QTCBs, have been proposed as part of reauthorization, and are described as such.	QTCBs have been eliminated from the discussion. More discussion and detail is given to IOS funding strategy. Cap and trade funds have been identified as being available as needed, upon appropriation, as a backstop against federal and other funding sources.
"Alternative Cost Estimate Overstated. The draft business plan compares the estimated $99 billion to $118 billion cost of constructing high-speed rail with an estimated $170 billion cost of adding equivalent capacity to airports and highways. This comparison is very problematic because $170 billion is not what the state would otherwise spend to address the growth in inter-city transportation demand. The HSRA estimates that the high-speed train system would have the capacity to carry 116 million passengers per year but their highest forecasted ridership is significantly less than that amount—44 million rides per year (roughly 40 percent less than capacity)."	Alternative capacity results are summarized in Executive Summary and Chapter 1 with supporting analysis in technical source document.	Discussion of Alternative Capacity clarifies that this is not a needs analysis, and that it does not presume or infer that all alternative capacity would be built in the same timeframes as HSR. Provides additional context by including needs identified by other entities: the California Transportation Commission, the Think Long Committee for California, and American Society of Civil Engineers. Authority revised the comparison figures, using updated costs determined by Caltrans, using its own methodologies.
"Economic Impact Analysis Is	Negative impacts are already	Clarifies that negative impacts

Imbalanced. Our preliminary review of the economic analysis in the draft business plan is that it may be incomplete and imbalanced, and therefore portrays the project more favorably than may be warranted. For example, the plan does not estimate economic losses from negative impacts to business from right-of-way acquisition and rail construction activities or from increases in urban traffic congestion around train stations."	accounted for in the mitigation costs which are included in the capital cost estimates.	are identified, that the costs of mitigating them are already included as part of the capital costs, and that these costs are captured in the Benefit Cost Analysis.
"Independent Benefits of ICS Unlikely to Justify Expense. As noted previously, it appears doubtful that substantial additional federal support will be forthcoming anytime soon. This makes it increasingly likely that the ICS may be all that is ever built. The HSRA has not demonstrated that the benefits of the independent operational utility of the ICS exceed the costs. For example, there remain a number of unanswered technical questions regarding whether the ICS may be used to improve the existing *San Joaquin* Amtrak service, as suggested in the business plan**"**	The potential use of the ICS by Amtrak (San Joaquin service) is presented as a fallback option should there be a delay in securing funds to implement the IOS. ..	Revised Plan identifies commitment to building IOS and the use of the first construction segment of the IOS for blended operations with Amtrak and other transportation systems to provide new Unified Northern California Service. Shows that the IOS will support revenue service without subsidy, generating revenues for investment in system expansion. Expanded discussion of early investments and the early benefits that will be produced throughout state.
"Inadequate Structure and Staffing Persist. The HSRA must reorganize and fill key executive positions as it intends to Initiate construction in 2012. The successful implementation of this large and complex project becomes increasingly risky without adequate staff to oversee its development. The draft	The risks associated with inadequate management resources were fully explained in the Risk Chapter.	Describes steps to add key staff, discusses in risks and mitigation chapter. Reinforces and strengthens Board's commitment to developing organizational resources and capabilities in order to deliver program.

business plan notes the HSRA is considering private-sector organizational structures but provides no specifics. While the HSRA has filled some vacancies over the past several months, three key executive positions remain vacant”.		

3) Peer Review Group Comments

Comment	Draft Plan Treatment	Revised Plan Treatment
"Governance and Management. Virtually every HSR in the world has been planned, built, financed and operated by an integrated state-owned railway enterprise organized in corporate form. As such, these enterprises have had full management authority along with access to public funding and to the planning and operating skills of the railway or its affiliates. Many countries have used the private sector for competitive construction contracting; some have used private finance, but rarely without the actual demand risk remaining with the enterprise. The Authority's plan is to transfer the demand risk to a private sector operator(s) as soon as possible after completion of an Initial Operating Segment and ridership is established. The proceeds from the sale of future revenues are proposed to be used for further capital infrastructure costs. By contrast with other HSR operations, California Law, under which the CHSRA operates, makes no provisions for a parent railway, and the Authority has no ability to take demand risk, no ability or authority to finance operating deficits, and no related agency to take responsibility for planning, system integration and operations. These are challenges of which the Authority is keenly	The need for additional staff is included in the plan. Basic breakeven analysis was conducted	Authority has aligned plans and actions with other key State agencies including Caltrans, DOF and others. California is larger than many countries that have successfully delivered HSR. The State and Authority together will deliver this project. The Authority continues to emphasize the need for more staff and resources and has moved to address some of those deficiencies. Describes steps to add key staff (discussed in risks and mitigation chapter). Reinforces and strengthens Board's commitment to developing organizational resources and capabilities in order to deliver program.

aware and they will have to be dealt with as the project moves forward. In terms of governance, the CHSRA has already acknowledged problems with managerial resources and we once again strongly suggest consideration by the Legislature and Administration of the statement in the Business Plan which says that "it is critical for the Authority to continue to develop and obtain resources to provide the management and support structure to support a multi-billion program development and operating program." Immediate steps need to be taken to correct the deficiencies that exist in the program's management structure, and we are pleased to see some progress in that direction."		
"Alternative Investment. The report presents a favorable estimate of the investment in other modes that might be "avoided" by HSR construction. In particular, it uses maximum **capacity** rather than predicted **demand** for rail service, and it does not take into account the ways in which highway and airport capacity can and will be increased whether or not HSR is built. The final BP should address these issues and should provide a range of potential alternative investment rather than a single point estimate."	Alternative capacity results are summarized in Exec. Summary and Chapter 1 with supporting analysis in technical source document.	Discussion of Alternative Capacity has been moved to Chapter 3 – Capital Cost. Revised Plan clarifies that this is not meant to be a needs analysis, and that it does not presume or infer that all alternative capacity would be built in the same timeframes as HSR. Revised Plan provides additional context by including needs identified by other entities: the California Transportation Commission, the Think Long Committee for California, and the American Society of Civil Engineers. The Authority updated the comparison figures, using costs determined by Caltrans and

		utilizing its own methodologies.
"Capital Costs. Capital costs continue to rise from BP to BP. The Authority believes that a system of contingencies at the project and system level combined with a relaxed schedule gives sufficient budget flexibility for the future that may be appropriate. Our experience, however, suggests that the transition from planning to construction rarely leads to cost reductions and that a great deal of caution about cost estimates is still in order. Moreover, as with demand forecasting, independent peer review of the capital cost estimates would add to the confidence in the estimates or would clarify the expected uncertainty in those estimates. We understand that this review has taken place and we look forward to reviewing that data."	Presented a frank assessment of the cost building the Phase1 Full Build system.	Through adoption of the blended approach, the Revised Plan delivers benefits at significantly reduced costs. Cost estimates have undergone additional review, and have been updated to adjust for inflation. Revised Plan discusses Inclusion of contingencies, presents methodologies, and consistency of approach with industry standards, including the use of 15-30% design levels for procurement of design-build contracts.
Business Model. The Authority's general concept of public funding for infrastructure in combination with a private operator that earns an operating surplus that might repay a portion, but certainly not all, of the investment cost is consistent with international practice. Unfortunately, it is not consistent with the Authority's committed funding, and it places the Authority in the position of making a number of design decisions that might better be made by the eventual operator and could have liability consequences for the State. "	Presented business models identifying roles of public and private sectors over life of the program.	Expanded and clarified discussion of business models, risk transfer, and the limitations inherent in Proposition 1A that affect the potential for earlier private sector financial involvement.

"Ridership and Revenue. We have two concerns: unlike almost all other HSR projects elsewhere, HSR in California is a "greenfield" project with no existing base of effective rail service on which to build projections; and we believe that further examination and review of the demand forecasts would be valuable. The limited examination by the UC Berkeley Institute of Transportation Studies (ITS) in the past identified concerns about various details of the forecasting system. As was previously done, the Legislature may want to request CHSRA to retain ITS to complete a final review of the demand forecasts so that the Legislature can have the best possible picture not only of the demand predictions but of the inherent uncertainty in those predictions"	Ridership and revenue forecasts were reviewed by the Independent Peer Review Panel of international forecasting experts and other outside groups.	Forecasts have continued to be refined and assumptions updated to reduce (positive or negative) bias. The Peer Review Panel has continued to be actively involved and has reported positively on the methods and assumptions. A comparative model run of Northeast Corridor-like operations confirms the reliability of the model. Based on comments from PRG, independent Peer Review Panel and others, a wider range of inputs has been used and additional sensitivities run to demonstrate reasonableness of model and viability of operations.
"Risk Identification and Mitigation. The report is an improvement over prior BPs in that it does provide a more comprehensive list and treatment of many of the risks to be expected on the project. A more robust discussion of mitigation should be included for other potentially serious risks that are described in the report, such as funding, organization and staffing, environmental litigation, demand and revenue, and the risk of completing the ICS alone."	Risks were identified and potential mitigation measures were listed.	The Revised Plan further expands discussion of mitigation actions that are being taken in the initial contracts and other portions of the program.
"Benefit-Cost Analysis. The benefit-cost analysis involves several issues – discount rate, values of time – that are beyond our expertise. If this analysis is to be used in evaluating the project, it should be subjected to full	The Authority consulted with academics, other professionals in the field, and the FRA in conducting the benefit-cost analysis.	The Authority continued to refine its assumptions in the BCA to produce sensitivities and more robust results.

academic review by one of the State's universities. The Authority has advised that an independent review has been conducted, and the results will be provided to the Group for consideration."		
"Additional Funding and Financing Opportunities. The draft 2012 BP proposes a segmental approach to constructing the HSR system, beginning with an Initial Construction Section in the Central Valley. Based on the statement in the letter from the Deputy Secretary of Transportation, dated January 3, 2012, that the Federal Railroad Administration cannot re-allocate Federal funding to other projects, the Group agrees that the Authority should move to a "blended" system that would provide for incremental investments in existing rail infrastructure in the Los Angeles Basin and San Francisco Bay Area. However, we would urge the CHSRA to be more specific in the revised BP regarding an implementation strategy for these "early investments." The Group also suggests that the Authority explore additional potential opportunities for private investment in these segments as a combination of State and local funding for these improvements could attract interest from the private sector as well. Finally, we encourage every effort to maximize the utility of any investments through the closing, where feasible, of gaps between existing passenger rail facilities along the proposed alignment."	The Draft Plans describes the general approach to blended systems and operations.	The Revised Plan includes much more detail on the planned phasing and implementation of blended services including the Unified Northern California Service, early investments in the bookends, blended operations, and more. Based on analyses that were not complete at the time of the issuance of the Draft Plan, the Revised Plan identifies the blended approach as the preferred implementation strategy, compliant with Proposition 1A. Revised Plan includes description of memoranda of understanding with southern California and Bay Area agencies for early investments in the bookends.