



November 15, 2013

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The Honorable Mark DeSaulnier, Chair  
Senate Transportation and Housing Committee  
State Capitol, Room 2209  
Sacramento, CA 95814

The Honorable Mark Leno, Chair  
Senate Budget and Fiscal Review Committee  
State Capitol, Room 5019  
Sacramento, CA 95814

The Honorable Bonnie Lowenthal, Chair  
Assembly Transportation Committee  
1020 N Street, Room 112  
Sacramento, CA 95814

The Honorable Nancy Skinner, Chair  
Assembly Budget Committee  
State Capitol, Room 6026  
Sacramento, CA 95814

Dear Senator DeSaulnier, Assembly Member Lowenthal, Senator Leno and Assembly Member Skinner:

The California High-Speed Rail Authority (Authority) is pleased to submit the enclosed Project Update Report, required under Provision 4 of Items 2665-104-6043, 2665-306-0890 and 2665-306-6043 of the Budget Act of 2012 (Senate Bill 1029, Chapter 152, Statutes of 2012), to be submitted biannually on March 1 and November 15.

Since the release of the March 1, 2013 Project Update Report, the Authority has made significant progress in its mission to plan, design, build and operate the nation's first high-speed rail system as a part of the statewide rail modernization program.

The Authority has achieved important results and milestones including, but not limited to, the filling of all executive management positions, the release of a comprehensive risk management plan, the release of a greenhouse gas (GHG) emissions report, the execution of agricultural agreements with the California Department of Conservation and several Central Valley farm bureaus and the award and execution of the first design-build construction contract.

As the project continues to advance, the Authority maintains its commitment to working closely with its state, local and federal partners to ensure success of California's high-speed rail system. Moreover, we look forward to continuing an open and transparent dialogue with the Legislature and the public.

For your review, attached is a copy of the Authority's complete November 15 Project Update Report. If you have any questions, please contact Michael Pimentel, Legislative Aide, at (916) 324-1541 or [michael.pimentel@hsr.ca.gov](mailto:michael.pimentel@hsr.ca.gov).

Sincerely,

Jeff Morales  
Chief Executive Officer

EDMUND G. BROWN JR.  
GOVERNOR



Attachment: Project Update Report, dated November 15, 2013

cc: Honorable Darrell Steinberg, President pro Tem, California State Senate  
Honorable John A. Perez, Speaker, California State Assembly  
Honorable Ted Gaines, Vice Chair, Senate Transportation and Housing Committee  
Members of the Senate Transportation and Housing Committee  
Honorable Bill Emmerson, Vice Chair, Senate Committee on Budget and Fiscal Review  
Members of the Senate Committee on Budget and Fiscal Review  
Honorable Eric Linder, Vice Chair, Assembly Transportation Committee  
Members of the Assembly Transportation Committee  
Honorable Jeff Gorell, Vice Chair, Assembly Committee on the Budget  
Members of the Assembly Committee on the Budget  
Ms. Carrie Cornwell, Chief Consultant, Senate Transportation and Housing Committee  
Ms. Janet Dawson, Chief Consultant, Assembly Transportation Committee  
Mr. Mark Ibele, Staff Director, Senate Budget and Fiscal Review Committee  
Mr. Christian Griffith, Chief Consultant, Assembly Committee on the Budget  
Ms. Diane Boyer-Vine, Legislative Counsel, State Capitol, Room 3021  
Mr. Gregory Schmidt, Secretary of the Senate, State Capitol, Room 3034  
Mr. E. Dotson Wilson, Chief Clerk of the Assembly, State Capitol, Room 3196  
Mr. Brian P. Kelly, Secretary, California Transportation Agency  
Mr. Brian Annis, Undersecretary, California Transportation Agency  
Mr. Brian Putler, Deputy Legislative Secretary, Office of Governor Edmund G. Brown Jr.

**Edmund G. Brown Jr.**  
Governor

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**Brian P. Kelly**  
Secretary

November 15, 2013

The Honorable Mark DeSaulnier, Chair  
Senate Transportation and Housing Committee  
State Capitol, Room 2209  
Sacramento, CA 95814

The Honorable Bonnie Lowenthal, Chair  
Assembly Transportation Committee  
1020 N Street, Room 112  
Sacramento, CA 95814

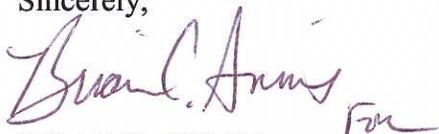
The Honorable Mark Leno, Chair  
Senate Committee on Budget and Fiscal Review  
State Capitol, Room 5019  
Sacramento, CA 95814

The Honorable Nancy Skinner, Chair  
Assembly Committee on the Budget  
State Capitol, Room 6026  
Sacramento, CA 95814

Dear Senator DeSaulnier, Assembly Member Lowenthal, Senator Leno and  
Assembly Member Skinner:

This letter is to indicate that I have reviewed and approve the California High-Speed Rail Authority's (Authority) Project Update Report as consistent with Provision 4 of Items 2665-104-6043, 2665-306-0890 and 2665-306-6043 of the Budget Act of 2012 (SB 1029, Chapter 152, Statutes of 2012),

Sincerely,



**BRIAN P. KELLY**  
Secretary

Attachment

cc list: See next page

11/15/13

Page 2

cc: The Honorable Darrell Steinberg, President pro Tem, California Senate  
The Honorable John Pérez, Speaker, California Assembly  
The Honorable Ted Gaines, Vice Chair, Senate Transportation and Housing Committee  
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Mr. Brian Putler, Deputy Legislative Secretary, Office of Governor Edmund G.  
Brown Jr.



**CALIFORNIA**  
High-Speed Rail Authority

# *Project Update Report to the California State Legislature*

November 15, 2013

## **Board of Directors**

**Dan Richard**

*Chair*

**Thomas Richards**

*Vice Chair*

**Jim Hartnett**

*Vice Chair*

**Richard Frank**

**Patrick W. Henning, Sr.**

**Katherine Perez-Estolano**

**Michael Rossi**

**Lynn Schenk**

**Thomas J. Umberg**

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*Chief Executive Officer*

## **California High-Speed Rail Authority**

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The California High-Speed Rail Authority (Authority) is responsible for planning, designing, building and operating the first high-speed rail system in the nation. California's high-speed rail system will connect the mega-regions of the state, contribute to economic development and a cleaner environment, create jobs and preserve agricultural and protected lands. By 2029, the system will run from San Francisco to the Los Angeles basin in under three hours at speeds capable of over 200 miles per hour. The system will eventually extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations. In addition, the Authority is working with state and regional partners to implement a state-wide rail modernization program that will invest billions of dollars in urban, commuter, and intercity rail systems to meet the state's 21<sup>st</sup> century transportation needs.

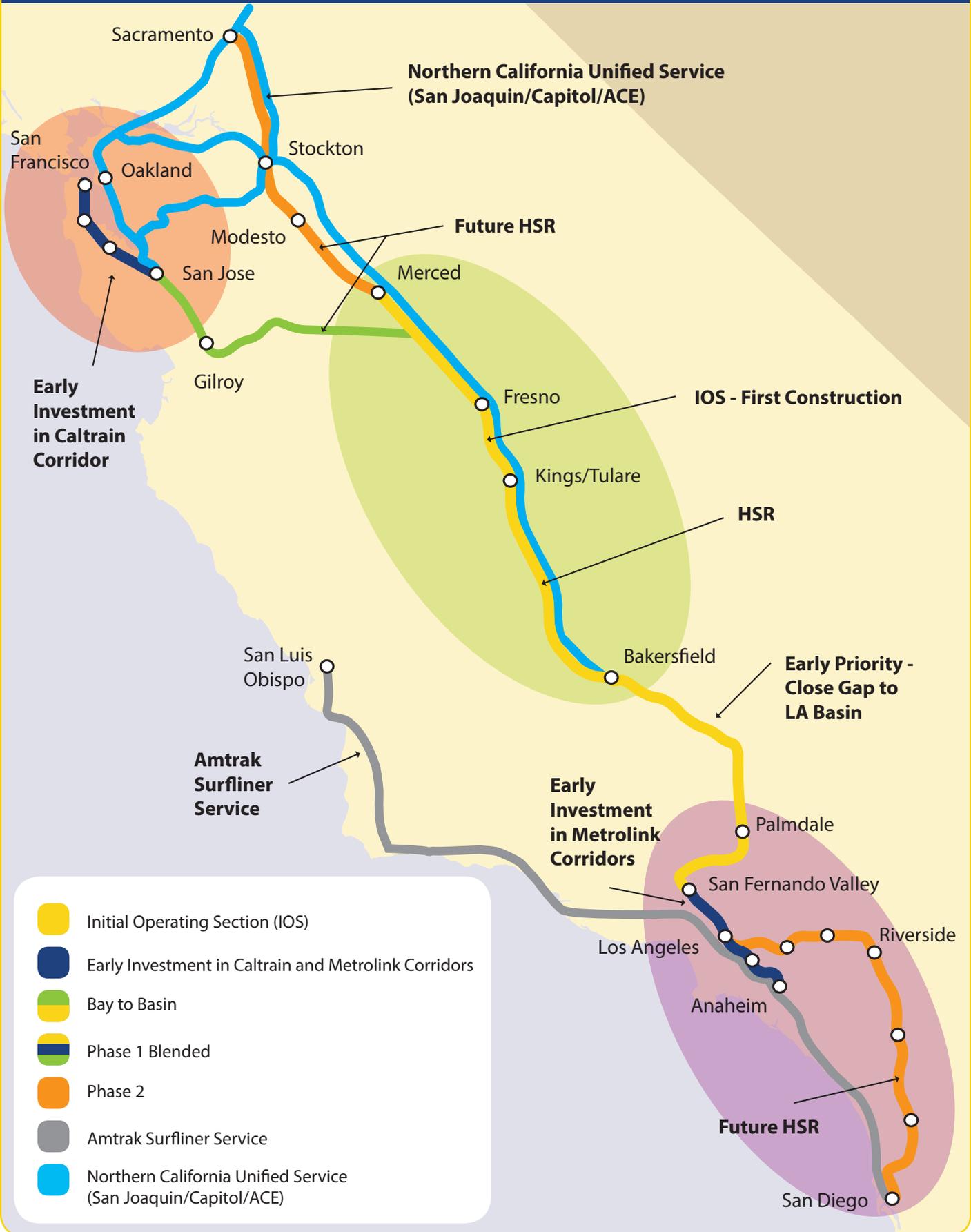


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# STATEWIDE RAIL MODERNIZATION

## EARLY INVESTMENTS/STATEWIDE BENEFITS



# Project Update By Section

## PHASE I

### SAN FRANCISCO TO SAN JOSE

On March 18, 2013, the Authority Board of Directors approved a Memorandum of Understanding (MOU) with the Peninsula Corridor Joint Powers Board to enhance the rail corridor between San Francisco and San Jose by improving the tracks, adding safety features and preparing the route to accommodate future high-speed rail service. The MOU also helped implement the \$1.45 billion Caltrain Modernization Program, which invests \$705 million from Proposition 1A funds, including connectivity funds, allocated under Senate Bill (SB) 1029 (Budget Act of 2012). With this investment, Caltrain will upgrade existing rail lines and improve performance through electrification of the Caltrain corridor, install advanced signal systems and purchase new electrified rail vehicles. The Caltrain Modernization Program will provide more services to more people at more stations while reducing the system's greenhouse emissions by over 90 percent and cutting Caltrain's operating costs in half.

Electrification of the Caltrain corridor requires environmental approval and Caltrain is currently updating the project's initial environmental review and will engage communities in a public planning process to help guide implementation of the project.

SB 1029 also provides \$42 million, along with contributions from Bay Area Rapid Transit and the Santa Clara Valley Transportation Authority, for the design, installation, testing, training and warranty for an intelligent network of signals, sensors, train tracking technology and computer systems on the Caltrain Corridor as part of Caltrain's advanced signaling systems. This system, known as positive train control (PTC), is required by federal regulation and allows trains to travel safely at higher speeds.

**Next Steps:** Completion of the environmental process on the Caltrain electrification under the leadership of the Caltrain Board of Directors. A draft document is expected to be released in January 2014, with the final due in December of 2014.

### SAN JOSE TO MERCED

The Authority continues to work with the cities of San Jose, Morgan Hill and Gilroy to address questions and concerns related to high-speed rail alignments along the Union Pacific Railroad (UPRR) corridor. The cities of Morgan Hill and Gilroy are in the midst of updating their respective General Plans and are working to include the proposed options for alignments and station locations into those plans. The Authori-

#### SB 1029 PROJECT UPDATE REPORT

##### Section (a)

*A summary describing the overall progress of the project.*

ty is also working with UPRR to address potential impacts on freight operations in this corridor. The draft environmental document for the San Jose to Merced project section is anticipated in 2016.

**Next Steps:** Continuing to work with local communities and UPRR on proposed service, alignment and station options.

## MERCED TO FRESNO

On April 18, 2013, the Authority and the Madera and Merced County Farm Bureaus, Chowchilla Water District, Preserve Our Heritage, and the Fagundes parties reached a settlement agreement and brought to an end the final California Environmental Quality Act (CEQA) lawsuit challenging the Merced to Fresno project section final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) documents. The agreement provides for the preservation of important farmland and mitigation of the effects of high-speed rail construction on agricultural operations. The settlement agreement is a mutually beneficial agreement that integrates local expertise into the agricultural mitigation for the project section, and provides protections for the agricultural community in Madera and Merced County and the Central Valley.

Further demonstrating its commitment to protecting and preserving the natural and human environment, in late October 2013, the Authority started sub-surface archaeological investigations on several properties in the historic Chinatown area located in downtown Fresno. These surveys included excavation work with hand tools and heavy equipment and had the overall goal of exploring and preserving evidence that might provide valuable insight into the rich history of the area. The work was guided through an Archaeological Treatment Plan, approved by the California Office of Historic Preservation.

At the November 7, 2013, Authority Board of Directors meeting, the Board delegated Authority staff to finalize and approve the mitigation agreement with Lazy K Ranch, a 1,555 acre ranch located near the communities of Chowchilla and Le Grand. This agreement will preserve habitat and species that are unique to this area of the Central Valley and will serve as a model for the Authority in working with stakeholders to preserve and protect existing habitat, and provide new habitat for species that could be impacted by the project.

Work also continues to finalize permit applications and mitigation requirements for the Central Valley from partner agencies such as the California Department of Fish and Wildlife (CDFW), State Water Resources Control Board (SWRCB), United States Army Corps of Engineers (USACE), and United States Fish and Wildlife Service (USFWS), including completion of the Permittee-responsible mitigation plan, the regulatory framework for storm water management, geotechnical reports and hydraulic studies.

At the June 6, 2013, Authority Board of Directors meeting, the award of the first major design-build contract for Construction Package 1 (CP 1) was confirmed for the Joint Venture of Tutor Perini/Zachry/Parsons (TPZP) based on their fixed bid price of \$969,988,000 and hazardous material unit bid price of \$15,154,530 for a total bid price of \$985,152,530. Work on CP 1 got underway on August 16, 2013, when the Authority and TPZP executed the contract for the fixed bid price amount with a fixed provisional sum of \$53,000,000 for utility relocation, construction contract work and unforeseen circumstances. A Limited Notice to Proceed (NTP) was issued to TPZP in August 2013. In October 2013, the Authority issued NTP-1 for an amount up to \$78,000,000. Pre-construction work, such as moving employees into the area, acquiring properties and equipment, design, and utility re-location is currently underway.

The Authority continues to pursue environmental clearance on a preferred alignment alternative for the Central Valley Wye in the vicinity of Chowchilla and Fairmead. The Authority has made significant progress in identifying a reasonable range of Central Valley Wye alignment alternatives. At the April 4, 2013, Authority Board of Directors meeting, staff presented a Supplemental Alternatives Analysis (SAA) and the results of public engagement.

The Authority continues to do agency and public outreach activities in the Central Valley Wye region.

**Next Steps:** Continuing the permitting process, the acquisition of right-of-way, the securing of off-site mitigation parcels, and the design-build work on the first construction section. Continuing to work with state and federal agencies to secure the permits required and the further development of the Central Valley Wye draft environmental documents.

## **FRESNO TO BAKERSFIELD**

The Authority has gone to great lengths to ensure that the environmental documents developed for the Fresno to Bakersfield project section take into account community feedback and input from a variety of sources. In Fall 2011, the Authority and the Federal Rail Administration (FRA) determined that it would revise the Draft EIR/EIS to include additional alignment alternatives and station options. This resulted in the release of a Revised Draft EIR/Supplemental EIS in July 2012 for the 114-mile section. In our continued efforts to receive robust public participation in its process, the Authority lengthened the public comment period to 90 days, which is 45 days more than what is required by law.

At the April 4, 2013, Authority Board of Directors meeting in Fresno, Authority staff presented a preliminary recommendation on the preferred alternative alignment for the Fresno to Bakersfield project section. This recommendation included components of several alternatives and parts of the Burlington Northern Santa Fe Railroad (BNSF) Alternative. After reviewing staff reports and receiving public input, the Board directed staff to continue evaluating a preferred alternative alignment and seek further public input and study the broad environmental, social, and economic implications of the project alternatives in addition to the requirements of resource-specific environmental regulations.

Since April, Authority staff has conducted additional evaluation of project alignment alternatives and environmental criteria. This effort was bolstered by additional public outreach activities throughout impacted communities including more than 115 meetings with key stakeholders, local governments, elected officials, farm bureaus, irrigation districts and local community groups and through one-on-one meetings.

On November 7, 2013, the Authority Board of Directors concurred with the staff recommended preferred alternative alignment for the purpose of preparing final environmental documents and moving into the next phase of federal environmental permitting.

**Next Steps:** The Authority Board of Directors will make a final decision about alignments and station locations after issuance and consideration of the final documents in Spring 2014.

## **BAKERSFIELD TO PALMDALE**

The Authority is collecting engineering and environmental data needed to define and analyze project operations, maintenance facilities, tunnel and viaduct information, construction information and design features. The Authority has conducted stakeholder meetings with numerous federal, state and local entities, including the U.S. Department of Defense, Bureau of Land Management, Kern County, the cities of Rosamond, Tehachapi, Lancaster and Palmdale, local farm bureaus, and land and business owners along the alignments. Coordination with key resources agencies such as USACE, USFWS, and the CDFW is also underway.

Work is progressing on targeting energy needs and assessments through this section. Locations for the traction power and other systems sites have been identified based on the latest alignments and profiles. The Authority is also developing multiple options for traction power supply systems on the northern and southern slopes of the Tehachapi Mountains.

On November 7, 2013, the Authority Board of Directors awarded a new Architectural and Engineering (A&E) contract to T.Y. Lin International. The contract's scope of work includes preparation of draft and final alternative analysis documents, final purpose and need statements, support for stakeholder and agency coordination, and support on station area planning, sustainability, private investment opportunities and implementation and regional connectivity planning.

**Next Steps:** Continuing outreach to stakeholders in the region as the Authority works toward completion of an SAA, and preparation of draft environmental documents. This includes the identification of the range of alignment alternatives to be further studied in draft environmental documents.

## **PALMDALE TO LOS ANGELES**

The Authority is collecting engineering and environmental data along with key stakeholder feedback needed to define and analyze corridor alignment options, station location options, configuration factors, construction and maintenance requirements and design features. The Authority continues to meet with elected officials, key stakeholders, and technical staff within the alignment cities of Palmdale, Acton/Agua Dulce, Santa Clarita, Burbank, Glendale and Los Angeles. Major coordination efforts are ongoing with the Los Angeles County Metropolitan Transportation Authority (LA Metro) and Metrolink in order to plan an integrated passenger rail network.

The Authority has also been coordinating with the Los Angeles Union Station Master Plan Team, which is in the process of developing LA Metro's vision and plan to guide future development at the Los Angeles Union Station.

**Next Steps:** Continuing outreach to stakeholders in the region as the Authority works toward completion of an SAA, and preparation of the draft environmental documents. This includes the identification of the range of alternatives to be further studied in draft environmental documents.

## **LOS ANGELES TO ANAHEIM**

Current work in this section is focused on preparing a revised SAA, proposing a narrower system cross section reflective of design standards appropriate for operating intercity high-speed rail in an urban rail corridor, while achieving federal standards for high-speed rail. The urban corridor approach for the Los Angeles to Anaheim project section incorporates the principles of an integrated passenger rail network described in the 2012 Business Plan. Outreach efforts for this section have primarily been focused on addressing comments received from the Gateway Cities Council of Governments. Additionally, the Authority continues to meet with the corridor cities and partner agencies in order to review any ongoing issues.

**Next Steps:** Continuing work with stakeholders in the region to prepare a revised SAA. This document will provide an update on the alignment alternatives that are practical and feasible and reflect the urban corridor approach that greatly reduces the impacts of high-speed rail to local communities along the alignment.

## PHASE II

### LOS ANGELES TO SAN DIEGO (VIA THE INLAND EMPIRE)

Conceptual engineering and preliminary environmental review activities are progressing to augment existing information on the current set of alignment alternatives shown in the March 2011 Preliminary Alternatives Analysis (PAA) Report. A Draft Section Refinement Report documents the refinement of the PAA alignments at 18 locations identified through an extensive stakeholder outreach process. The Authority continues to meet with regional transportation partners as part of the four-county Southern California Inland Corridor Group (ICG) to coordinate the high-speed rail project with regional plans. The ICG has been integral in fostering integrated regional planning in order to promote synergy among the many systems and agencies along the 167-mile alignment.

On October 14, 2013, the Authority Board of Directors awarded the A&E contract for regional consulting work to CH2M Hill. CH2M Hill is expected to carry out work related to finalizing the section's draft alignment refinement report, supporting stakeholder and agency coordination, advancing the section's SAAs and supporting the Authority in station area planning, sustainability, private investment opportunities and implementation planning. CH2M Hill is expected to subcontract much of its work to small businesses in the region.

**Next Steps:** Continuing work with stakeholders and outreach with the ICG to coordinate the high-speed rail project with regional plans, and refine section alignment alternatives in preparation for development of an SAA.

### MERCED TO SACRAMENTO

The Authority continues to engage with stakeholders, coordinate with local agencies and develop engineering in support of project definition. Additionally, the Authority continues to partner with the Northern California Rail Partners to identify and work to prioritize near term regional rail improvements as part of the Northern California Unified Rail Service. The Authority will continue to explore upgrades to the San Joaquin, Altamont and Capitol Corridor intercity rail lines to improve service and provide connectivity to the future high-speed rail system.

On October 14, 2013, the Authority Board of Directors awarded the A&E contract for regional consulting work to Precision Civil Engineering, Inc. (PCE), a certified small business located in the Central Valley. The scope of work for this contract includes preparation of planning and design documents, stakeholder and agency coordination, and support for station planning, sustainability, private investment and regional connectivity planning. PCE is committed to 100 percent small business participation for this contract.

**Next Steps:** Continuing planning efforts and stakeholder outreach to review draft Alternatives Analysis and receive input for setting project priorities over the next two years.

### ALTAMONT CORRIDOR

On June 6, 2013, the Authority Board of Directors voted to transfer full leadership and funding for rail planning in the Altamont Corridor to the San Joaquin Regional Rail Commission (SJRRC) and has taken a supporting role in the future development of the corridor. The SJRRC operates the Altamont Corridor Express, which connects the Central Valley and Silicon Valley via the Altamont corridor and serves a million commuters per year. The SJRRC is focusing on the completion of a revised Program Level Environmental Review and will seek the completion of project level environmental clearance for specific near-term project improvements.

**Next Steps:** Planning is underway regarding coordination on the environmental process and proposed near-term service expansion.

# Financials

## **SB 1029 PROJECT UPDATE REPORT**

### **Section (b)**

*The baseline budget for all project phase costs, by segment or contract, beginning with the California High-Speed Rail Program Revised 2012 Business Plan.*

### **Section (c)**

*The current and projected budget, by segment or contract, for all project phase costs.*

### **Section (d)**

*Expenditures to date, by segment or contract, for all project phase costs.*

## **BASELINES, CURRENT AND PROJECTED BUDGETS AND EXPENDITURES TO DATE**

The 2012 Business Plan included a cost estimate for the Phase I Blended System by implementation phase: Initial Operating Section (IOS), Bay to Basin, and Phase 1 Blended. Costs for these implementation phases are shown in 2011 and year of expenditure dollars (YOE).

## **PRE-CONSTRUCTION PHASE**

Pre-construction expenditures are defined in California Streets and Highways Code Section 2704.08(g), as, “environmental studies, planning, and preliminary engineering activities, and for (1) acquisition of interests in real property and right-of-way and improvement thereof (A) for preservation for high-speed rail uses, (B) to add to third-party improvements to make them compatible with high-speed rail uses, or (C) to avoid or to mitigate incompatible improvements or uses; (2) mitigation of any direct or indirect environmental impacts resulting from the foregoing; and (3) relocation assistance for property owners and occupants who are displaced as a result of the foregoing.”

Table 1 shows the current contract amount (baseline) for the Program Management and the Regional Consultant contracts, and current projected contract costs for the Program Management contract and for each of the Regional Consultant contracts issued for the pre-construction phase of the high-speed rail project. These initial contracts were awarded between 2006 and 2008; during that time frame it was assumed that the environmental reviews for all of the Phase 1 sections would be complete by 2014 and Phase 1 of the high-speed rail implemented and operating in 2020.

As shown on the table, two contracts were originally issued as single contracts for larger environmental segments but were subsequently divided:

- Subsequent to issuing the contract for the Sacramento to Fresno section, it was divided into the Merced to Fresno and Merced to Sacramento sections with both remaining under contract to AECOM.
- Subsequent to issuing the contract for the Fresno to Palmdale section, it was divided into the Fresno to Bakersfield and Bakersfield to Palmdale sections with both remaining under contract to the URS-HMM-Arup/JV.
- Since the March 2013 Project Update Report, three of the Regional Consultant contracts expired and were re-procured in accordance with the State’s A&E contract procurement process. The sections that were re-procured include Merced to Sacramento, Bakersfield to Palmdale, and Los Angeles to San Diego.

→ The projected budget by contract amounts reflect the current forecast to complete the pre-construction phase for each section, including an additional \$29 million for resource agency costs for partner agencies such as CDFW, USACE, and the USFWS and \$10 million in contingency to cover potential future changes to scope.

→ Program Management costs are allocated across planning and construction funding.

The amounts in Table 1 show the current contract expiration dates, current contract value, projected contract costs, and expenditures (expenditures to date – Sept. 30, 2013) for the Program Management Team contract and for each of the Regional Consultant contracts for work performed during the pre-construction phase of the program from inception of the contracts. This includes the current federal and state dollars and pre-date Proposition 1A when this work was funded using a mix of Public Transportation Account and Reimbursement funding.

Section	Contract Expiration	Current Contract Value	Projected	Expenditures
Program Management (Parsons Brinkerhoff) <sup>1</sup>	Jun-15	\$295	\$209	\$184
San Francisco - San Jose (HNTB) Expired	Expired	\$55	\$77	\$45
SF -SJ Future <sup>2</sup>	N/A	TBD	TBD	\$0
San Jose - Merced (Parsons Transportation Group)	Jun-14	\$64	\$77	\$57
Merced - Fresno (AECOM) <sup>3</sup>	Jun-15	\$83	\$65	\$60
Fresno - Bakersfield (URS-HMM-Arup/JV) <sup>4</sup>	Jun-15	\$158	\$133	\$100
Bakersfield - Palmdale (URS-HMM-Arup/JV) <sup>5</sup>	Mar-14	--	--	\$25
Bakersfield - Palmdale (TY Lin) <sup>10</sup>	Oct-18	\$46	\$45	\$0
Palmdale - Los Angeles (HMM-URS-Arup/JV) <sup>6</sup>	Sept-14	\$74	\$74	\$55
Los Angeles - Anaheim (STV)	Jun-14	\$50	\$50	\$36
Los Angeles - San Diego (HNTB) Expired	Sept-13	\$95	TBD	\$11
Los Angeles - San Diego (Ch2M Hill) <sup>10</sup>	Oct-15	\$2	\$109	\$0
Merced - Sacramento (AECOM) Expired <sup>7</sup>	Sept-13	--	TBD	\$7
Merced - Sacramento (Precision Civil Engineering) <sup>10</sup>	Oct-15	\$1	\$51	\$0
Altamont (AECOM) (Under SJRRC direction) <sup>8</sup>	Jun-14	\$55	\$41	\$7
Agency Costs (Estimate) <sup>9</sup>	N/A	--	\$29	--
Contingency	N/A	--	\$10	--
<b>TOTAL</b>		<b>\$978</b>	<b>\$970</b>	<b>\$587</b>

(Dollars in millions)

<sup>1</sup> Contract extended at the Board of Directors meeting on 5/2/13 from 6/30/13 to 6/30/15. Current contract value, projected value and expenditures represent the combination of values for the original contract and the contract extension and incorporate all costs starting from the execution of the original contract on 11/16/06. In addition, a portion of the PMT costs are now allocated to construction funding.

<sup>2</sup> San Francisco to San Jose is part of the blended system. Caltrain will lead the environmental process with a yet to be determined contribution from the Authority.

<sup>3</sup> Contract extended at the Board of Directors meeting on 5/2/13 from 6/30/13 to 6/30/15. Current contract value, projected value and expenditures represent the combination of values for the original contract and the contract extension and incorporate all costs starting from the execution of the original contract on 2/17/07.

<sup>4</sup> Contract extended at the Board of Directors meeting on 4/4/13 from 6/30/13 to 6/30/15. Current contract value, projected value and expenditures represent the combination of values for the original contract and the contract extension and incorporate all costs starting from the execution of the original contract on 2/12/07.

<sup>5</sup> Bakersfield to Palmdale, Contract value is included in the Fresno to Bakersfield totals.

<sup>6</sup> Contract extended at the Board of Directors meeting on 5/2/13 from 6/30/13 to 9/30/14. Current contract value, projected value and expenditures represent the combination of values for the original contract and the contract extension and incorporate all costs starting from the execution of the original contract on 12/29/06.

<sup>7</sup> Merced to Sacramento, Contract value is included in the Merced to Fresno totals.

<sup>8</sup> The Altamont corridor is now under the direction of the SJRRC. The agreement between SJRRC and Authority has not been completed regarding Authority financial support of the environmental document.

<sup>9</sup> Agency costs consist of multiple contracts with an estimate to complete.

<sup>10</sup> A&E contracts for these sections were re-procured. Execution of these contracts is pending.

## CONSTRUCTION COST

Table 2 shows the construction cost estimates in YOE dollars from the 2012 Business Plan by project section. Approximately \$8.1 to \$8.2 billion in program wide costs, which were identified in the 2012 Business Plan, have been prorated across the project sections. These costs include approximately \$4.4 billion for rolling stock, \$1.5 billion for program, project and construction management costs, and \$2.3 billion in unallocated contingency funds (approximately 3 percent of the overall cost of the project).

TABLE 2: CONSTRUCTION COST BY SECTION	
Baseline Budgets by Section	2012 Business Plan Cost Alignment Estimate (YOE)
San Francisco - San Jose	\$8,363
San Jose - Merced	\$19,757
Merced - Fresno	\$5,482
Fresno - Bakersfield	\$7,711
Bakersfield - Palmdale	\$9,533
Palmdale - Los Angeles	\$16,704
Los Angeles - Anaheim	\$815
<b>TOTAL</b>	<b>\$68,365</b>

(Dollars in millions)

Table 3 shows the breakdown of costs for the contract awarded to TPZP for CP 1. The contract price for CP 1 is \$969,988,000 with additional Authority-controlled provisional sums of \$53,000,000 for utility relocation, construction contract work, and unforeseen circumstances, such as the discovery of hazardous materials. Table 3 also shows the \$160,000,000 contingency, approved by the Authority Board of Directors, which was based on Authority staff's risk-informed contingency assessment reports and recommended contingency estimates and the unit price allowance for hazardous soil remediation.

TABLE 3: CONTRACT COSTS FOR CP 1	
Item	Price
<b>CONTRACT PRICE</b>	<b>\$969,988,000</b>
Utility Provisional Sum:	\$25,000,000
Construction Contract Work Provisional Sum:	\$20,000,000
Building Hazardous Materials Provisional Sum:	\$8,000,000
<b>TOTAL PROVISIONAL SUMS</b>	<b>\$53,000,000</b>
<b>CONTRACT PRICE + TOTAL PROVISIONAL SUMS</b>	<b>\$1,022,988,000</b>
Board of Directors approved Contingency	\$160,000,000

# Schedule

## Current and Projected

### CONSTRUCTION/IMPLEMENTATION SCHEDULE

The Design-Build contract for CP 1 was executed with TPZP on August 16, 2013. The award and execution of CP 1 in Summer 2013 is a change from the initial schedule of early 2013 as was stated in the 2012 Business Plan. This change was made to accommodate requests received from the design-build teams bidding on the project for more time to develop their proposals. Despite the adjustments, the Authority remains on schedule to completing environmental review and design and construction of the first construction section by 2018.

The table below shows the 2012 Business Plan phased implementation schedule. For more detail on these phases, please see Chapter 2 of the 2012 Business Plan titled “The Implementation Strategy: Blending, Phasing, Investing in Early Benefits.”

#### **SB 1029 PROJECT UPDATE REPORT Section (e)**

*A comparison of the current and projected work schedule and the baseline schedule contained in the California High-Speed Rail Program Revised 2012 Business Plan.*

IMPLEMENTATION SCHEDULE		
Phase	2012 Business Plan	Description
<b>INITIAL OPERATING SECTION</b> 300 Miles Merced to the San Fernando Valley	2022	Begins with construction of the first usable segment of up to 130 miles of track and structures in the Central Valley; supports speeds capable of over 200 mph high-speed rail service; includes trains and systems. Ridership and revenues sufficient to attract private participation. Connects with regional/local rail for blended operations.
<b>BAY TO BASIN</b> 410 Miles San Jose to Merced to the San Fernando Valley	2026	First high-speed rail service to connect the San Francisco Bay Area with the Los Angeles Basin.
<b>PHASE 1 BLENDED</b> 520 Miles San Francisco to Los Angeles/Anaheim	2029	Builds on Bay to Basin with blended operations with existing commuter/intercity rail, and additional improvements for a one-seat ride, connecting Downtown San Francisco and Los Angeles/Anaheim. Caltrain corridor electrified for high-speed rail and new dedicated lines into Los Angeles.

## ENVIRONMENTAL SCHEDULE

The Authority extended the comment period on the Fresno to Bakersfield Revised Draft EIR/EIS from the required 45 days to 90 days, allowing more time for public comment and stakeholder involvement. The public comment period for this section concluded on October 19, 2012, which initially shifted the anticipated date for the Federal Railroad Administration Record of Decision (ROD) out from January 2013 (as projected in the 2012 Business Plan) to Fall 2013. However, to address stakeholder concerns as well as additional comments from the reviewing agencies, the date for the Fresno to Bakersfield ROD has been extended to the Spring of 2014. Once the ROD has been issued and construction approval has been obtained by the Surface Transportation Board (STB) for this project section, the Authority will be able to procure real property and begin construction.

The implementation of the Blended System and integration of the state rail modernization program has resulted in some changes in the environmental schedule in order to accommodate work with strategic stakeholders on the Bookends (the San Francisco Bay Area and Los Angeles Basin) and on Connectivity projects. These extended timelines will allow additional time for community outreach and stakeholder input.

PROJECTED MILESTONES FOR ENVIRONMENTAL REVIEW PROCESS/POTENTIAL CONSTRUCTION COMPLETION			
Section		Receive Record of Decision	Complete Construction
Merced - Fresno	BASELINE	June 2012	2018*
	REVISED	COMPLETED	
Fresno - Bakersfield	BASELINE	December 2012	2018
	REVISED	Spring 2014	
San Francisco - San Jose	BASELINE	December 2014	2028
	REVISED	Summer 2017	
San Jose - Merced	BASELINE	December 2013	2026
	REVISED	Fall 2016	
Bakersfield - Palmdale	BASELINE	February 2014	2021
	REVISED	Fall 2015	
Palmdale - Los Angeles	BASELINE	October 2013	2028
	REVISED	Summer 2015	
Los Angeles - Anaheim	BASELINE	December 2014	TBD
	REVISED	Spring 2016	
Merced - Sacramento (Phase 2)	BASELINE	TBD	TBD
	REVISED	TBD	
Los Angeles - San Diego (Phase 2)	BASELINE	TBD	TBD
	REVISED	TBD	

\* Completion date does not include construction of Central Valley Wye

# Milestones Achieved

## Since March 2013

### **U.S. GOVERNMENT ACCOUNTABILITY OFFICE GIVES AUTHORITY'S COST, REVENUE AND RIDERSHIP ESTIMATES HIGH MARKS**

In March 2013, after an exhaustive, year-long review requested by members of the U.S. Congress, the Governmental Accountability Office (GAO) published a report on the reliability and reasonableness of the Authority's costs, revenue and ridership, funding and economic impact estimates. The report found that the Authority substantially met best practices for developing accurate cost estimates; the Authority's ridership and revenue forecasts are reasonable; and the Authority did a comprehensive job in identifying the potential economic impacts of the high-speed rail project.

### **PARTNERSHIP FORMED WITH U.S. SMALL BUSINESS ADMINISTRATION**

In April 2013, the Authority partnered with the U.S. Small Business Administration (SBA) to expand outreach and marketing in support of small business utilization on the high-speed rail project. The Strategic Alliance Memorandum, a two-year agreement, outlines the Authority and SBA's joint outreach efforts to strengthen and expand Central Valley small business participation in the initial construction of the high-speed rail system. In 2012, the Authority Board of Directors approved a Small Business Program which has an aggressive 30 percent goal for small business participation, including Small Businesses, Disadvantaged Business Enterprises (DBE), Disabled Veteran Business Enterprises (DVBE) and Micro-Businesses (MB). The overall small business goal also includes a 10 percent DBE participation goal and a 3 percent DVBE participation goal.

### **FRESNO REGIONAL WORKFORCE INVESTMENT BOARD RECEIVES GRANT**

In April 2013, the Fresno Regional Workforce Investment Board (WIB) received a \$1.5 million grant to train people for jobs building the high-speed rail system. The grant, funded by the federal Workforce Investment Act, will underwrite skills training for hundreds of people. The Fresno WIB set up a website [www.hsrjobs.com](http://www.hsrjobs.com) where people can register to learn if they qualify for grant-funded training or if they are eligible for targeted hiring as "disadvantaged" workers, including veterans or the long-term unemployed.

### **AGRICULTURAL AGREEMENTS WITH DEPARTMENT OF CONSERVATION AND CENTRAL VALLEY FARM BUREAUS**

In April 2013, the Authority and several Central Valley farm bureaus and stakeholders entered into agreements to provide additional preservation of farmland and mitigation of the effects of high-speed rail construction on agricultural operations.

#### **SB 1029 PROJECT UPDATE REPORT**

##### **Section (f)**

*A summary of milestones achieved during the prior year and milestones expected to be reached in the coming year.*

The agreement calls for the creation of a \$4 million Agricultural Mitigation Fund that will be utilized to protect important farmland into perpetuity.

In June 2013, the Authority entered into a contract with the California Department of Conservation that represent the culmination of an agreement between the Authority and the agricultural interests in the Central Valley. This agreement had been in the works for several years and will be critical to the Authority's commitment to preserve important farmland. This preservation is to occur by identifying suitable agricultural land for mitigation of the project's impacts and by funding the purchase of agricultural easements from willing sellers. For approximately every acre impacted, at least one acre will be preserved in perpetuity.

## **CALL TO INDUSTRY RELEASED ON RENEWABLE ENERGY**

In September 2008, the Authority committed to run the high-speed rail system entirely with renewable energy. The Authority has determined that the most effective and feasible way to supply renewable energy for operations is to procure or produce enough renewable energy and feed that energy into the grid, offsetting the amount of energy that the system uses.

In April 2013, to increase the Authority's knowledge of feasible, available and planned renewable energy supply, the Authority released a call to industry to the renewable energy industry to receive information on renewable energy opportunities. This call to industry laid out the power requirements of the system, based on the phasing identified in the 2012 Business Plan. It clarified timing for interested parties, and confirmed the Authority's intent to meet its policy goal through an annual net-zero approach.

The initial findings showed that a variety of California-based companies have capacity to supply the entire electricity need of the high-speed rail system, and are prepared and interested in providing that capacity. The findings reinforce the realistic, feasible nature of the renewable energy goal. The Authority has had several follow-up meetings with suppliers and will continue to develop a feasible plan for renewable energy based on the information gathered through the call to industry process.

## **PARTNERSHIP FORMED WITH U.S. MINORITY BUSINESS DEVELOPMENT AGENCY**

In May 2013, the Authority partnered with the U.S. Minority Business Development Agency (MBDA), part of the U.S. Department of Commerce, to expand outreach and marketing in support of minority-owned business and small business participation on the high-speed rail project. The five-year agreement outlines the Authority and MBDA's joint outreach efforts to strengthen and expand the utilization of Central Valley minority business enterprises during the initial construction of the high-speed rail system. The MOU was signed at the grand opening of a new Fresno MBDA Business Center on May 3, 2013. The center will provide minority-owned firms with professional management and technical assistance, information for regional contracting opportunities, and help businesses to get certified and ready for work.

## **AUTHORITY REVAMPS ITS ONLINE PRESENCE**

In May 2013, the Authority launched a new website, [www.hsr.ca.gov](http://www.hsr.ca.gov), with the goal of cutting costs, improving accessibility to information and achieving compliance with current standards for executive brand websites. The new website preserves and contains all the documents and records from the old website, and was designed to improve user experience, foster transparency, and provides the Authority with an online presence consistent with other California state agencies.

## **SURFACE TRANSPORTATION BOARD ESTABLISHES JURISDICTION OVER PROJECT**

In June 2013, the Surface Transportation Board (STB), an independent federal regulatory agency with exclusive jurisdiction over the nation's interstate rail system, ruled that it has jurisdiction over the high-speed rail project and therefore, became a cooperating federal agency for the development of California's high-speed rail system. In addition to this decision, the STB ruled that the Authority is authorized to begin construction of the Merced to Fresno section of the high-speed rail project and exempted the Authority from their full application process for this project section. Going forward, the Authority will work closely with the STB to ensure the success of the high-speed rail program.

## **NEW POSITIONS AUTHORIZED FOR ADMINISTRATION AND PROGRAM MANAGEMENT**

In June 2013, Governor Brown signed the 2013-14 Budget Act, which contained a provision to appropriate \$9.2 million to enable the Authority to hire 106 new positions. These positions will serve the Authority in the areas of fiscal services, contracts and procurement, information technology, human resources, business services, communication and outreach, audits, legal, regional office support, transportation and environmental planning, right-of-way and project delivery. As of the end of the 2012-13 fiscal year, the Authority has 175 positions to manage and implement the high-speed project.

## **CONTRACT AWARDED FOR CONSTRUCTION PACKAGE 1**

In June 2013, following an evaluation and selection process designed to obtain the best overall value for the Authority, the Authority Board of Directors approved award of the design-build contract for CP 1 to the California-based Joint Venture, Tutor Perini/Zachary/Parsons, based on their fixed bid price of \$969,988,000 and hazardous material unit bid price of \$15,154,530 for a total bid price of \$985,152,530. CP 1 will extend for approximately 29-miles in the San Joaquin Valley, from Avenue 17 in Madera County to East American Avenue in the City of Fresno. The contract was finalized and executed in August 2013.

## **GREENHOUSE GAS EMISSIONS REPORT RELEASED**

In July 2013, the Authority delivered a report to the Legislature entitled, *Contribution of the High-Speed Rail Program to Reducing California's Greenhouse Gas Emission Levels*, on the benefits of the high-speed rail program on the reduction of California's greenhouse gas emissions. Specifically the report, required by SB 1029, details the projected net greenhouse gas (GHG) emissions associated with the construction and operation of the high-speed rail system.

The report detailed how the high-speed rail system will provide a high-quality, environmentally-friendly interregional transportation system connecting northern California to southern California. In addition to helping reduce California's GHG emissions, the high-speed rail system will improve the environment by saving an estimated 4 to 8 million metric tons of CO<sub>2</sub>e by 2030, participating in urban tree planting across the Central Valley, being a major focal point within sustainable community strategies, and achieving zero-net greenhouse gas emissions during construction.

The Authority consulted with staff at the California Air Resources Board and the California Energy Commission to review and confirm the assumptions, models and methodologies used to prepare this report.

## **AUTHORITY JOINS THE CALIFORNIA STATE TRANSPORTATION AGENCY**

In July 2013, the Authority joined the California State Transportation Agency, a newly-formed state agency focused on developing and coordinating the programs of the California's various transportation entities to achieve the state's mobility, safety and air quality objectives. As part of this organizational change, the Authority has gained additional

oversight, not previously in place, greater access to transportation experts at Caltrans, and consistency of process with the state's other transportation entities.

## **RISK MANAGEMENT REPORT RELEASED**

In July 2013, the Authority delivered to the Legislature a comprehensive risk management plan that defines the roles, responsibilities and objectives for risk management and addresses the process by which the Authority will identify and quantify risks, implement risk response activities, and monitor and control risks through the duration of the high-speed rail project. In accordance with SB 1029, the report features a quantification of the effect of identified risks in financial terms, establishes mitigation steps, provides a plan for regularly reassessing its estimates of capital costs, provides a plan for reassessing risks and reserves and provides a plan for integrating the estimates for capital, support costs and contingency reserves in required reports.

## **BOARD MEMBERSHIP FILLED**

Three new members were appointed to the Authority Board of Directors in 2013. As a result, all Board positions are currently filled.

In March 2013, Governor Brown appointed Katherine Perez-Estolano to the Board. Ms. Perez-Estolano is an Adjunct Professor at the University of Southern California School of Policy, Planning and Development. She's also a businesswoman and co-founder of Estolano LeSar Perez (ELP) Advisors LLC, a firm that works with cities, agencies, stakeholders, foundations and business groups to craft strategies and environmentally-friendly solutions to create thriving, healthy, vibrant communities that feature strong economic development and transportation policies. Prior to co-founding ELP Advisors, Perez-Estolano served as the Executive Director of the Urban Land Institute, Los Angeles District Council. She was the Vice President of Development for Forest City Development and Executive Director for the Transportation and Land Use Collaborative of Southern California.

In June 2013, Assembly Speaker John A. Pérez appointed Patrick W. Henning, Sr. to the Board. Mr. Henning was the Director of the Employment Development Department (EDD) before his retirement in 2010. Prior to his appointment to EDD by Governor Arnold Schwarzenegger, Henning was the key labor and employment policy committee consultant to the California Legislature for 17 years, first in the Assembly, and then later in the Senate. Henning also served as Labor Commissioner, the state's chief labor law enforcement officer, for then-Governor Edmund G. Brown, Jr. He was a member of the state Commission on the Status of Women and was appointed as a Member of the Agricultural Labor Relations Board. As a labor representative in the 1970s, Henning represented workers on behalf of three labor organizations: the Service Employees International Union, the Hotel and Restaurant employees and Bartenders' Union in Los Angeles, and the International Union of Operating Engineers, Local 12, in Southern California.

In September 2013, the California State Senate Rules Committee appointed Richard Frank to the Board. Mr. Frank is currently a Professor of Environmental Practice and Director of the California Environmental Law and Policy Center (CELPC) at the University of California at Davis School of Law. Prior to this position, he was the executive director of the Center for Law, Energy, & the Environment (CLEE) at University of California Berkeley School of Law. In addition to leading the CELPC, he teaches classroom courses in the environmental law curriculum. Before coming to CLEE and UC Berkeley, Professor Frank practiced law with federal and state agencies for 32 years, most of that time with the California Department of Justice. Immediately before joining Berkeley Law, he served as California's Chief Deputy Attorney General for Legal Affairs.

## **TUTOR PERINI/ZACHRY/PARSONS AND WONG-HARRIS OPEN FRESNO OFFICE**

In September 2013, the Authority's design-build team TPZP and Program Construction Management team Wong-Harris opened their CP 1 operations headquarters in downtown Fresno. The offices are located on the third, fourth and fifth floors of the historic Grand Tower in downtown Fresno near the Fulton Mall. As the project moves from the design phase to construction, a total of 250 staff is anticipated to round out the office.

## **REQUEST FOR QUALIFICATION FOR CONSTRUCTION PACKAGE 2-3 RELEASED**

On October 10, 2013, the Authority released a request for qualification (RFQ) for design-build work for Construction Package 2-3 (CP 2-3), a 60-mile section that begins at East American Avenue in Fresno and continues south to one mile north of the Tulare/Kern County line. The estimated \$1.5 to \$2 billion design-build contract will bring thousands of jobs to the Central Valley, an area with one of the highest unemployment rates in California and the nation. The route will also provide environmental benefits, relieve roadway congestion and spur economic development.

The selected design-build firm will be responsible for all work required to design and construct the CP 2-3 section in the Central Valley. The work will include delivering final designs for bridges, culverts, trenches and tunnels, utility relocations, aerial structures, grade separations, tunnels, security and drainage. The environmental clearance for the route is already underway and is anticipated to be final by Summer 2014.

Due to the high level of interest from firms wishing to bid on the construction package, the Authority extended its deadline for submittal of Statement of Qualifications (SOQs) from December 6, 2013 to December 13, 2013. Firms will be selected based on experience, technical competency, ability to perform and other factors. The shortlisted firms will then be eligible to submit formal design-build proposals in 2014. The Authority anticipates awarding and executing the design-build contract in 2014.

## **AUTHORITY ISSUES 144 FIRST WRITTEN OFFERS**

The Authority has received approval of the site selection from the State Public Works Board for 383 parcels needed for CP 1. To date, the Authority has completed appraisals for 264 of the 383 parcels and has issued first written offers for 144 parcels. The Authority has 35 proposed settlements with various property owners to date; these agreements are in various stages of review and approval. Pursuant to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. Sec. 4601), the Authority continues to provide relocation advisory assistance as well as payments on claims for moving and housing to affected residents and businesses, and minimizing impacts of those within the corridor proposed right-of-way.

## **AUTHORITY AND CALIFORNIA DEPARTMENT OF VETERAN AFFAIRS SIGN STRATEGIC AGREEMENT**

The Authority and the California Department of Veterans Affairs (CalVet) held a joint press conference on November 7, 2013 announcing a strategic partnership that will bolster participation of small businesses, especially those owned by disabled veterans, on the high-speed rail project. Following the announcement, CalVet Secretary Peter J. Gravett and Authority CEO Jeff Morales signed the agreement to implement the partnership. It is worth noting that five of the nine members of the Authority Board of Directors are military veterans. The Authority's 30 percent small business goal contains a 3 percent provision for small businesses owned by veterans.

## **STATEWIDE SMALL BUSINESS CERTIFICATION WORKSHOPS YIELD RESULTS**

In its continued outreach and assistance to small businesses, the Authority hosted a series of free statewide workshops to help certify small businesses that want to participate in the statewide high-speed rail project. The Authority provided small businesses with hands-on technical assistance, which included on-the-spot certification that can be completed online. Participants received pertinent information on upcoming procurement opportunities around the state that would be of interest to their businesses. Since the program's kickoff in April 2013, 13 workshops were held around the state, yielding hundreds of small businesses certifications.

In November 2013, the Authority was recognized at the Department of General Services (DGS) State Agency Recognition Awards (SARA) program and luncheon with a certificate as a SARA finalist for furthering "Best Practices" that benefit small business and DVBEs.

## **NEXT MILESTONES**

### **CONTINUE THE ACQUISITION PROCESS**

The Authority will continue the appraisal process for the balance of parcels that have not had their appraisals finalized. For the 264 parcels that have completed the appraisal process, the Authority will continue to issue first-written offers and enter into negotiations with property owners or begin eminent domain proceedings, the first steps in acquiring the required property. The Authority will also take active steps to acquire the parcels for which settlements are pending.

### **ENVIRONMENTAL CLEARANCE FOR FRESNO TO BAKERSFIELD**

The Authority Board of Directors expects to approve final environmental documents for the Fresno to Bakersfield project section in Spring 2014, followed by a ROD from the FRA, and STB approval. These actions will authorize the Authority to begin negotiations with the impacted land owners for property acquisition, purchase real property and award subsequent design-build contracts.

### **RELEASE OF REQUEST FOR PROPOSALS FOR DESIGN-BUILD SERVICES FOR CONSTRUCTION PACKAGE 2-3**

The Authority anticipates releasing the request for proposals (RFP) for design-build work for CP 2-3 in early 2014. Firms interested in CP 2-3 have until December 13, 2013, to submit their SOQs as part of the RFQ process. The Authority will then review these applications and establish a shortlist of the most highly qualified firms to provide design-build services for the project. Firms will be selected based on experience, technical competency, ability to perform and other factors. The shortlisted firms will then be eligible to submit formal design-build proposals in 2014. Similar to CP 1, the CP 2-3 contract will ultimately be awarded using both technical and costs factors. The Authority anticipates awarding and executing the design-build contract in 2014.

### **RELEASE OF REQUEST FOR QUALIFICATION FOR PROJECT AND CONSTRUCTION MANAGEMENT SERVICES FOR CONSTRUCTION PACKAGE 2-3**

The Authority anticipates releasing the RFQ for Project and Construction Management Services (PCM) for CP 2-3 in early 2014. The scope of services include: project management and administration; quality verification and validation; oversight of safety, security, project controls, engineering, construction, environmental, contracts and utility and public outreach and specialty support services.

The PCM ensures that technical and contract requirements, including costs, are met for CP 2-3. They will oversee inspection and testing of the high-speed rail infrastructure, technical and environmental compliance including

hazmat oversight, utility relocation, procurement and risk management assistance, construction safety and security, document control, fraud and theft prevention and public outreach.

## **EXECUTION OF AGREEMENT WITH UNION PACIFIC RAILROAD FOR CONSTRUCTION, ENGINEERING, MAINTENANCE AND RELATED INSURANCE AND INDEMNIFICATION**

The Authority anticipates executing a Master Agreement with UPRR for engineering, construction and maintenance and related indemnification and insurance requirements covering the high-speed rail project from Merced to Bakersfield in late 2013. These agreements will ensure safe access for construction, temporary relocation of UPRR tracks, changes to signal/communication systems, design approval over key project design features, including overpasses and intrusion protection barriers; and continuous and safe operation of freight service during and after construction.

## **ISSUANCE OF JOINT REQUEST FOR PROPOSALS FOR TRAIN SETS WITH AMTRAK**

Recognizing the value inherent in combining train set orders, the Authority anticipates issuing a joint request for proposals (RFP) with Amtrak for train sets currently being manufactured and in commercial service that are capable of operating safely at speeds up to 220 m.p.h. The joint procurement approach will increase industry interest and competition, reduce administrative and capital costs associated with procurement, and facilitate compliance with the Federal Railroad Administration's Buy America requirement by encouraging off-shore manufacturers to establish factories in the United States. The eventual procurement will be administered jointly by the Authority and Amtrak.

The Authority anticipates an initial request of up to 20 trains to operate on the Initial Operating Section.



# Issues

## SB 1029 PROJECT UPDATE REPORT

### Section (g)

Any issues identified during the prior year and actions taken to address those issues.

## LEGAL CHALLENGES

### **JOHN TOS, AARON FUKUDA AND COUNTY OF KINGS V. CALIFORNIA HIGH-SPEED RAIL AUTHORITY**

*Sacramento Superior Court, Filed November 14, 2011*

On August 16, 2013, Sacramento County Superior Court Judge Michael P. Kenny issued a ruling on the first part of the proceedings in the Tos lawsuit after the hearing held on May 31, 2013. Judge Kenny ruled that the initial 2011 bond funding plan, submitted pursuant to Streets and Highways Code section 2704.08(c), and tied to the Authority's draft business plan, did not meet all requirements of the statute. The Authority's 2012 Business Plan, along with actions of the Legislature, significantly modified the initial plan and addressed initial shortcomings.

The court specifically found that the Legislature had the authority to approve the appropriation made through SB 1029 and that the terms of Proposition 1A do not give the court any authority to interfere with that exercise of judgment. Judge Kenny ordered supplemental briefs from the parties on the issue of what remedies, if any, are appropriate given that finding.

**Actions Taken:** The issue regarding whether appropriate remedies exist were heard by the court on November 8, 2013. Judge Kenny took the matter of remedies under submission and has 90 days to make a ruling.

### **HIGH-SPEED RAIL AUTHORITY V. ALL PERSONS INTERESTED IN THE MATTER OF THE VALIDITY OF THE AUTHORIZATION AND ISSUANCE OF GENERAL OBLIGATION BONDS TO BE ISSUED PURSUANT TO THE SAFE, RELIABLE HIGH-SPEED PASSENGER TRAIN BOND ACT FOR THE 21ST CENTURY**

*Sacramento Superior Court, Filed March 19, 2013*

On March 18, 2013, the High-Speed Passenger Train Committee, pursuant to the Bond Act, and after public notice, adopted its Resolution IX, entitled, "High-Speed Passenger Train Finance Committee Resolution IX (2013)," authorizing the issuance of State of California High-Speed Passenger Train Bonds or Commercial Paper notes in the principal amount not to exceed \$8,599,715,000 to carry out the purposes of the Bond Act. On March 19, 2013, the Authority filed a bond validation action in the Sacramento County Superior Court regarding the approval to sell bonds.

On September 5, 2013, Kings County Water District filed a motion to stay the bond validation action until a decision has been reached in the Atherton appeal case, which is currently before the California Third District Court of Appeal.

On September 27, 2013, a hearing was held on the bond validation action and on the motion to stay. Judge Michael Kenny is expected to issue a written decision within 90 days on both issues.

On July 8, 2013, the Kings County Water District filed a cross complaint of the hearing to invalidate the Board's decision to approve awarding the first design/build contract.

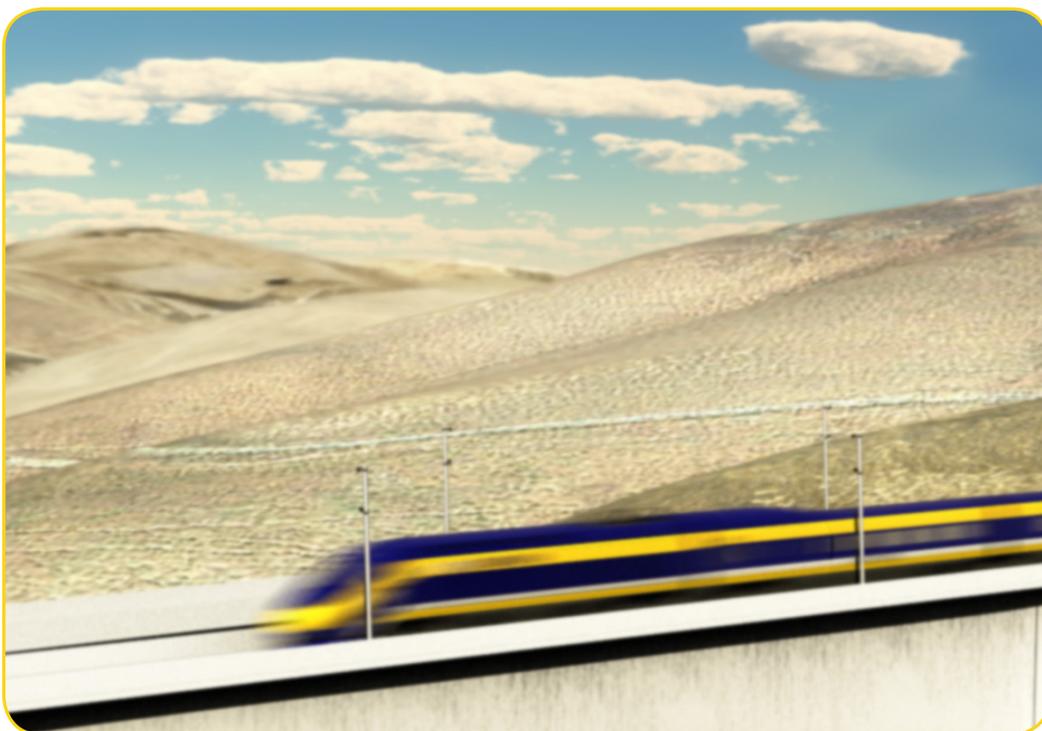
**Actions Taken:** On August 7, 2013, the Authority filed a motion to dismiss the cross-complaint; then on August 13, 2013, the Authority filed a motion to sever the cross-complaint and have it tried separately on the argument that the cross-complaint raises distinct issues that do not overlap with the bond validation. The hearing on the motion to dismiss will be on November 22, 2013.

## **TOWN OF ATHERTON V. CALIFORNIA HIGH-SPEED RAIL AUTHORITY**

*Court of Appeal, Third Appellate District, Filed April 13, 2012*

In the November 2011 rulings for Atherton I and II, the Sacramento County Superior Court determined that the Authority had complied with the environmental review requirements in CEQA for the Bay Area to Central Valley Program EIR/EIS. The court also ruled that the Authority did an adequate job of engaging the public in the environmental review process. The Atherton plaintiffs are appealing the ruling on those items. On June 26, 2013, the Authority provided notice of new legal authority after the ruling issued by the STB in June 2013, and requested continuance of the oral argument and permission to file a supplemental brief on possible federal preemption issues.

**Actions Taken:** On August 9, 2013, the Authority filed a supplemental letter brief addressing whether federal law preempted the state's environmental laws in respect to the California high-speed rail program. Several amicus curiae briefs have been filed on this issue; the Authority submitted its first response to those briefs on November 1, 2013, and filed additional responses on November 8 and 12, 2013.



# Risk Management

## **SB 1029 PROJECT UPDATE REPORT**

### **Section (h)**

*A thorough discussion of various risks to the project and steps taken to mitigate those risks.*

Identifying and managing project risks is an essential element of successfully delivering the high-speed rail program. The Authority is utilizing a state-of-the-art approach to risk management, including extensively detailed calculation of variables to quantify risk and the incorporation of lessons learned by global experts from other programs.

The Authority is also working with the Legislature's Peer Review Group, not just to implement provisions of SB 1029, but to also gain the benefit of their perspective and guidance to continually improve the program.

The risk management program provides the Authority with a formal, systematic approach to identifying, assessing, evaluating, documenting and managing risks that could jeopardize the success of the project. These include specific engineering, environmental, planning, right-of-way, procurement, construction, organizational, stakeholder, budget and schedule risk, or any other potential inabilities to deliver the required results.

## **OVERVIEW OF KEY RISK AREAS**

### **RIDERSHIP AND REVENUE**

The financial viability of the program is dependent on public funding for early construction, and then on ridership revenues to support access to private capital as the program matures. Given that the program is entirely new, and no high-speed rail currently operates in the U.S., a risk exists that the actual ridership demand and revenue will differ from the projections currently being used. The impact to the program could be wide ranging and include the following:

- Decreased commercial and financial viability.
- Lower-than-expected project revenue.
- Increase in the public funding required.
- Loss of stakeholder support.

### **MANAGEMENT AND MITIGATIONS**

Demand and ridership estimates have been reduced and peer reviewed and a range of revenue scenarios have been evaluated for sensitivity. High, medium, and low revenue estimates all illustrate that the project will generate a positive operating cash flow.

The model developed for the 2014 Business Plan has been enhanced with additional features and latest available input data to address SB1029 requirements. Four main

sources of data were updated complementing previous dataset and widening the range of perspectives. The most recent dataset was developed in conjunction with the California Department of Transportation to ensure better consistency with other California model suites. Additional features include more detailed access / egress mode choice model, variable forecast horizon years, streamlined model structure and faster run times.

As part of the 2014 Business Plan forecasting effort, the Authority is developing a Risk Analysis Model to estimate a ridership and revenue forecast range and an associated probability for each of the Business Plan scenarios. The risk model will be used to develop Monte Carlo Simulations for each of the Business Plan scenarios and associated forecast year. The risk analysis model will include a range of assumptions relating to various risk factors having the greatest combination of uncertainty and impact on the results. Main risk factors considered in this analysis include:

- Change in demographic growth rate.
- Change in household income and size.
- Change in statewide and regional spatial distribution.
- Automobile fuel cost.
- Highway capacity.
- Airline ticket prices and frequency of service.
- Change in overall amount of long distance travel.
- Amount of travel induced by the introduction of high-speed rail.

For each risk factor, a middle or most likely value will be estimated based on best available research and analysis. A “high” value projected near the 85 percentile of likely future outcomes, and a “low” value projected near the 15 percentile of likely future outcomes will be estimated. The range of probable outcomes will be represented by a distribution curve estimated for each risk factor. Using Monte Carlo simulations for each 2014 Business Plan scenarios across the risk factors, the risk model will determine a distribution of ridership and revenue outcomes suggested by each risk factor, sensitivities and probability distribution.

### **OPERATIONS AND MAINTENANCE COSTS**

Without a directly comparable system operating in the U.S., there is a risk that current estimates for operations and maintenance (O&M) costs are different than eventual actual costs. Currently, development of pre-revenue O&M costs are captured as part of the testing and start-up costs in the capital cost estimate under and are estimated as percentages of the system elements that are subject to the testing and startup operations.

### **MANAGEMENT AND MITIGATIONS**

To further refine its understanding of the system’s O&M costs, the Authority undertook a comprehensive effort to develop a bottom-up O&M cost model for the 2014 Business Plan. The new model includes a detailed estimate of each cost category based on the current information about the system, service plans, federal regulations, and industry standards that is available. The model produces a separate estimate from the top-down 2012 Business Plan estimate and helps validate the results of the 2012 effort. The model is also capable of producing both high and low cost scenarios to further evaluate the potential range of O&M costs based on current system design/plans. The model was designed to follow the U.S. Department of Transportation Office of Inspector General’s (DOT IG) guidance for the creation of O&M cost forecasts and the FRA WBS.

As an “intermediate” forecast, the estimate for the 2014 Business Plan accounts for all known cost categories and includes appropriate contingencies (based on the DOT IG guidance) for each cost category.

A thorough reassessment of appropriate contingency was undertaken to develop risk-based contingencies based on a number of applicable reference projects (for a particular O&M cost category), guidance contingency percentages defining limits, and a group of expert’s judgment regarding the uncertainty or risk surrounding a particular O&M category’s cost. In order to ensure judgments were as objective as possible, each assessor made their own assessment regarding their confidence in a particular category’s base cost individually (assigning it a score on a scale of 1-5). These assessments were then averaged and combined with the guidance contingency percentages to determine a recommended contingency percentage for the particular O&M cost element.

Additionally, the Authority has undertaken an effort to understand the risks associated with the O&M forecasts more thoroughly. To do that, the Authority conducted Monte Carlo Simulations that analyzed the risk to the total cost estimate based on the accuracy of other O&M forecasts (reference cases) and to specific cost categories based on uncertainties internal to those categories (bottom-up). The two Monte Carlo simulations were run as an interim step in the development of the forecasts but they showed that current contingency percentages covered the majority of the scenarios in the reference case and nearly all scenarios in the bottom-up case. The preliminary results of the new estimating approach and these Monte Carlo simulations were shared with the Peer Review Group in July 2013. The Group commented that significant progress had been made in the creation of O&M cost estimates.

In September 2012, the Authority commissioned the Union Internationale des Chemins de Fer (UIC), the International Union of Railways, to conduct a review of the operations and maintenance estimates that were developed to support the 2012 Business Plan as required by SB 1029. The UIC formed a group of international high-speed rail experts from France, Spain and Italy to conduct this analysis. The experts reviewed the methodology and the procedures developed by the Authority and assessed the resulting O&M cost estimates for reasonableness. The independent experts’ role was not to produce another O&M cost estimate; instead their review was conducted for the sole purpose of evaluating the soundness, validity and reasonableness of the process, approach, assumptions and variables used in the O&M cost study.

The review also provided best practice guidelines and some European benchmark values, based on the experts’ experience in building, operating and maintaining European high-speed rail systems, in order to improve the O&M cost modeling process developed by the Authority. This effort was conducted between September 2012 and January 2013 in collaboration with the Authority staff. The UIC issued its report earlier this year, which was delivered to the Legislature and is available on the Authority website.

### **CAPITAL REHABILITATION AND REPLACEMENT COSTS**

For the 2014 Business Plan, the Authority has developed a comprehensive life cycle cost model to capture the 50-year capital rehabilitation and replacement costs for the infrastructure and assets of California’s high-speed rail system. The 2014 model transparently presents the methodology used to develop lifecycle requirements for each asset, allows changes to rehabilitation and replacement costs, timing, and spread for each asset, and generates outputs to summarize 50-year lifecycle costs in real and inflated dollars. The model has two scenarios built in; the base scenario assumes that assets are rehabilitated and replaced according to specifications, while the low scenario aims to optimize costs by modifying the frequency and spread of rehabilitation and replacement activities.

The 2014 model uses the 2012 Business Plan to establish system and service assumptions, and the model methodology is based on established research and practice by MAINTenance, renewaL, and Improvement of rail transportation INfrastructure to reduce Economic and environmental impacts (MAINLINE), which is part of the European

Union-funded research program. MAINLINE's methodology is documented in *Proposed methodology for a Life-cycle Assessment Tool* and aims to capture all costs involved throughout the life of an asset, including construction, operations, maintenance, and end-of-life. The 2014 model also draws from lifecycle guidance by the International Union of Railways and the European Investment Bank, based on the planning and experience with existing systems.

The model includes detailed estimates for each cost category based on the design life and experience around the world for asset lifespans and rehabilitation requirements. Contingency was applied to the model to account for inherent risks and uncertainties with forecasting lifecycle costs. Unallocated contingency and allocated contingency were applied to mirror those percentages applied to each asset category in the capital cost model. Professional services, which includes all professional, technical, and management services related to the design and construction of infrastructure during the preliminary engineering, final design, and construction phases of the project, was also applied to each second level asset cost category.

### **STAFFING AND ORGANIZATIONAL STRUCTURE**

During the peak construction years, the annual construction outlay will be several billion dollars. The Authority faces the risk that it will not have the number of experienced staff necessary to meet the demands of the program from an internal management perspective. If this risk is not mitigated by enhancing in-house capabilities, engaging supplemental resources, and considering appropriate business and commercial structures to transfer or share risk, then staffing and organizational structure may prove to be inadequate to the demands of the high-speed rail program, and the Central Valley project in particular. Without adequate staffing and expertise necessary to make timely, informed decisions necessary to advance the program, delays and increased costs are likely.

#### **MANAGEMENT AND MITIGATIONS**

The risk(s) associated with staffing and organizational structure have been addressed with key hires on the Authority side as follows:

1. Risk Manager
2. Chief Program Manager and Assistant Chief Program Manager
3. Assistant Chief Counsel
4. Northern California Regional Director
5. Central California Regional Director
6. Southern California Regional Director
7. Chief Administrative Officer
8. Chief of External Affairs
9. Director of Communications
10. Deputy Director of Legislation

The Authority has made significant progress in filling the positions authorized by the Legislature. As of November 15, 2013, there are 93.5 staff, up from 61.5 prior to enactment of the budget.

### **ENVIRONMENTAL APPROVALS**

The risk associated with environmental approvals may be broadly separated into risk of obtaining approvals in the requisite time necessary to avoid delays to construction, and risk associated with conditions of the approval (e.g. work windows). While the working relationship between our staff and the staff at various resource agencies, including USACE, USEPA, USFWS, SWRCB, CDFW, is good, we do continue to experience delays at least

partially and perhaps largely due to review periods that are extending longer than anticipated. Due to the interdependencies between various approvals/permits granted by different agencies, it may take delays of only one or two permits at one or two agencies to delay the entire process. The conditions and restrictions associated with these permits or approvals are another area of uncertainty, as is the relationship between property acquisition and ability to implement pre-construction permitting requirements. Per terms of the contract with the design-build contractor, meeting these conditions will be the responsibility of the design-build contractor, but they will not be fully known until the permit is in hand and not achievable until the property(ies) in question are acquired.

#### MANAGEMENT AND MITIGATIONS

We continue to manage this risk by increasing staff levels and maintaining intergovernmental collaboration while complying with all approval processes in addition to the risk transfer alluded to above. Specifically:

- Establish MOU/Memorandum of Agreement (MOAs) with the required agencies.
- Authority to pay for third party resources dedicated to support high-speed rail environmental reviews now in place.
- Continue to work with the FRA to prioritize resource allocation.
- Authority to develop Right to Entry agreement with private land owners.
- Regional Coordinators to develop a work plan for coordination with property owners (environmental and engineering staff to coordinate to minimize the impacts on the community).
- Develop strategy anticipating alignment changes.
- Obtain process concurrence from lead and permitting agencies.
- Integrate environmental considerations earlier into the Alternative Analysis process.
- Pursue early access to parcels and funding of survey work whenever feasible.
- Preliminary design schedule and deliverables to be carefully aligned with environmental permitting process in order to allow sufficient time for review by the environmental team.
- Targeted environmental permitting/process analysis to be performed.
- Regional consultants to define the impacted areas and include standard mitigation measures in EIS/EIR.

#### **STAKEHOLDER SUPPORT**

The program could face a number of potential adverse effects due to a possible decline of local public support. Local interest groups (primarily in the lower Central Valley) could prevent or delay the local authorization process and local permitting or cooperation necessary for work to advance. Ultimately, a decline in public support across the state could help fuel efforts to repeal or otherwise delay release of state funds from Proposition 1A. Maintaining public support at the local level poses its own risks to the project budget if expectations are not clearly managed and any mitigation costs are not budgeted for in the cost estimates. If the Authority does not clearly present both the program's cost and benefits or agrees to mitigations (and their associated costs) in an incremental manner, without first determining the cost implications for the overall program, there is a significant risk that public support will erode and/or that the program's overall costs could exceed current cost estimates.

#### MANAGEMENT AND MITIGATIONS

Mitigation of this risk overlaps to some extent with staffing risk discussed previously in this document. Regional Directors in Northern California, the Central Valley and Southern California were appointed in 2012 and the Authority's Central Valley office was established in early 2013, the Northern California office was also established in 2013 and

the Southern California office is nearing completion. These Regional Directors and their staff have a program-level understanding of the cost implications of potential program decisions, and use this information to act as a point of contact for local and regional stakeholders when addressing their needs and concerns related to potential project effects in their region. Regular outreach meetings are being held by all Regional Directors and their staff to provide outreach and facilitate communication opportunities between the program and stakeholders. A Small Business Advocate was also appointed in 2012 to serve as the main point of contact between the Authority and small businesses.

### **RIGHT-OF-WAY**

Before construction can begin on a given parcel of land, the parcel must be acquired by the Authority. Thus, the acquisition of right-of-way is directly linked to the ability to meet project deadlines. This ability may be affected by timing of achievement of environmental milestones, receipt of funding, and completion of multiple levels of governmental review and approval processes. Delays in the acquisition process could affect contractor ability to meet deadlines or costs.

### **MANAGEMENT AND MITIGATIONS**

The Authority is mitigating and managing the risk associated with right-of-way in a variety of ways, including development of a highly detailed right-of-way acquisition plan, vetting the right-of-way acquisition plan with contractors and prioritizing right-of-way acquisition to meet initial contractor work-zone requirements and securing technical expertise and additional capacity.

Steps being taken include:

- Survey all single alignments prior to selection of preferred alternative.
- Consult with Department of Finance (DOF) and the Public Works Board (PWB) to allow earlier site selection.
- Accelerate survey and appraisal of all parcels.
- Ensure adequate resources to avoid staffing constraints – subsequent to conclusion of pending contracts (four) with full-service right-of-way firms, resource constraints are not anticipated; however, considering the anticipated rate of condemnation and other unknown variables, the support budget for these activities may need augmentation.
- Keep involved review agencies (e.g. DOF, DGS, and Caltrans) informed regarding the project, status, and expected workload. Work through the court system to ensure potential caseloads can be handled on a timely basis.
- Work through the court system to ensure potential caseloads can be handled on a timely basis.
- Assess advisability, practicality of having design-builders perform some of the acquisition (except condemnation), including but not limited to temporary construction easements.
- Improve cross functional communications - discussions revolving around design refinements, noting that the current design is very preliminary.
- Indicate a need for early review of parcel impacts similar to Caltrans' condemnation review meetings, as well as need for more comprehensive understanding of the Authority's condemnation process in relation to environmental and construction. Caltrans' legal division, DGS, DOF and the Authority have met to review Caltrans' current condemnation processes as an initial step in finalizing the Authority's process.

## **THIRD-PARTY AGREEMENTS**

The program faces a number of challenges, both general and location specific, associated with third-party agreements. There are a significant number of project dependencies that are introduced to a longitudinal project. Simply put, key activities necessary to construct the project are not under the direct control of the project team (Authority, Project Management Team or contractor). For example, construction of a section of high-speed rail or overcrossing may be dependent on the relocation of a section of existing rail which may in turn depend on the relocation of a fiber-optic cable or major utility. The relocation of fiber-optic cable or major utility in many locations will be done by third-party(s) operating under their own business constraints and according to their own schedule.

## **UTILITIES**

Prior to selecting a preferred alternative, the program faces information limitations regarding the physical location of many utilities (both major and minor), ownership of utilities, and, generally, a limited understanding of how this and other third-party work is best integrated with construction of high-speed rail infrastructure and systems to provide a schedule and cost estimates with a high degree of confidence. While the Authority is currently in negotiations with the utility owners who will be impacted by and anticipates securing all cooperative utility agreements prior to receiving proposals to construction, there may be some utilities for which the Authority does not have enough information in order for design-build contractors to price the cost of the relocation or removal. There is also a risk that such relocation or removal may require additional right-of-way.

Minor to significant delays and additional costs to the overall program may also arise from lengthy regulatory process for signing utility agreements and requisite assumptions that must be made to advance the work at the regional level. Regions are required to carry multiple alternatives owing to uncertainty surrounding utility plans and certain elements of the power system must be "over provisioned" and regional teams must make assumptions regarding power supply by utilities - If these assumptions are not ratified by subsequent studies by the utility company, significant rework on engineering and environmental sides together with potential delays are likely as review and permitting process, for these locations must be restarted.

Cooperative agreements must be followed up with sufficient technical and operations detail, without which there will be no effective way to establish a realistic scope and schedule, which must precede financial detail and subsequent financial agreements. Who is doing "what" and "when" needs to be reflected in contract documents. As noted above, the "what" can be difficult to determine given the level of planning and design, which can make it difficult to determine the appropriate "when" with a high level of confidence.

## **MANAGEMENT AND MITIGATIONS**

The Authority is working to mitigate and manage the risk associated with utilities in a variety of ways, including working closely with the affected utility companies in managing utility design and construction requirements, and in finalizing all cooperative utility agreements prior to the receipt of proposals to construct. In June 2013, Governor Brown signed SB 85 (Committee on Budget and Fiscal Review, Chapter 35, Statutes of 2013) that established a framework for the reimbursement or payment, and apportionment, of utility relocation costs, clarifying the Authority's utility relocation process on land acquired for the high-speed rail project. SB 85 will help the Authority avoid delays in project delivery from a failure to reach agreements with utility companies regarding the relocation of utility facilities. These provisions were modeled after existing statutes utilized by Caltrans for the relocation of utilities within right-of-way acquired for highway purposes in order to establish a familiar framework for utility companies.

## **RAILROAD AGREEMENTS**

Given the interface with existing railroad right-of-way, there is a need to come to agreement with the railroad companies. At this time, there is not a Master Agreement in place between the Authority and BNSF or between the Authority and UPRR to inform design and construction of modifications to UPRR or BNSF facilities and each railroad's ROW and operational requirements. There is also risk related to fulfilling the obligations of the agreements once they are in place. In addition, there may be significant additional costs to the program associated with any disruptions to service experienced by BNSF and UPRR during construction. If agreements cannot be reached with the railroad companies, then design work in progress or already completed may be affected, leading to cost increases or schedule delays that could become significant if the delay in reaching agreements persists. In addition, the terms of these agreements and constraints imposed by railroad normal operations may negatively impact (implicit) productivity assumptions made during the development of the program's schedule and cost estimate, as well as the eventual contractor's possible means and methods.

### **MANAGEMENT AND MITIGATIONS**

While the Authority is responsible for securing the agreements with the railroad companies, the Authority intends to transfer much of the risk related to performance under the agreements to the design-build contractors. The design-build contract will mandate that the contractor will be responsible for fulfilling the Authority's obligations under the agreements with continued participation by the Authority.

The Authority has executed reimbursement agreements with the following railroads/operating agencies: Orange County Transportation Authority, Southern California Regional Rail Authority, Capitol Corridor Joint Power Authority, San Joaquin Regional Rail Commission and UPRR. In addition, the Authority has executed MOUs with both BNSF and UPRR. Currently, the Authority is negotiating a reimbursement agreement and an overpass agreement with the BNSF. Additionally, the Authority has made substantial progress in negotiating a master Engineering, Construction and Maintenance Agreement and an Indemnification/Insurance Agreement with the UPRR. Finally, the Authority has begun negotiations with UPRR on a purchase and sale agreement, which will include all the parcels required from the UPRR for CP 1.

## **FINANCING AND FUNDING RISK**

A number of risks exist for the overall program related to funding. Failure to receive the anticipated amount of public funding at the requisite time could threaten the pace of development of the full program. Additionally, failure to manage the timing of committed funds against the cash flow requirements of the construction program presents another risk. In the case of the Central Valley Project, the primary funding risks relate to meeting the administrative requirements for full and timely receipt of the state and federal funding already identified for the Central Valley project.

### **MANAGEMENT AND MITIGATIONS**

The near-term funding risk is mitigated by the identification of all necessary sources for the \$6 billion cost. The ultimate scope of the Central Valley project will be adjusted up or down over the course of the multiple phases of construction procurement, such that the total miles to be constructed will fit within the available funding. Steps to address uncertainties in future federal funding include:

- Phased implementation to align construction costs with funding.
- Utilize an American Recovery and Reinvestment Act reserves to preserve funding for the minimum systems and track connections.

- Continue to work with legislators, the USDOT the private sector and other stakeholders to maintain support for funding the programs, such as the High-Speed Intercity Passenger Rail Program; the Passenger Rail Investment and Improvement Act of 2008; the FTA New Starts Program; the Transportation Investment Generating Economic Recovery Discretionary Grant program; the Passenger Rail Investment and Improvement Act reauthorization, etc. and investigate other future funding sources.
- Engage private sector entities to discuss the ability of private finance to complement or supplement public sector funding.
- Develop budget commitment requirements to quantify funding requirements.
- Continue to work with federal partners to establish funding sources.
- Performing scenario and sensitivity analysis to test the project's financial performance under different ranges of inputs (see Ridership).
- Financing strategies aligned with successful high-speed rail projects in other parts of the world, including the Channel Tunnel Rail Link (HS1) in the United Kingdom. Financing is timed to align with project cash flows to enhance project value.

## **LITIGATION RISK**

Litigation can affect schedule, costs and financing. In the case filed in 2011 by parties from Kings County, the Authority provided supplemental briefings regarding the 2011 funding plan on November 8, 2013. At the state appellate level, a case regarding the programmatic environmental report is considering whether federal preemption applies to the project. In March 2013, the Authority sought legal action to validate the issuance of Proposition 1A bonds and is currently awaiting the judge's ruling.

## **MANAGEMENT AND MITIGATIONS**

The Authority continues to work closely with affected stakeholders to address legal issues raised in the various lawsuits. The Authority has settled the three of lawsuits challenging CEQA compliance on the Merced to Fresno environmental documents where the project construction will commence. The STB accepted the Merced to Fresno environmental documents, granting approval to begin construction. Represented by the State's Attorney General Office, the Authority has also prevailed in several key court rulings, including one that upheld the appropriation in SB 1029.