

**APPENDIX A**  
**CRITERIA FOR SELECTING THE SECTION/USABLE SEGMENT  
IN WHICH TO INITIATE CONSTRUCTION OF THE  
CALIFORNIA HIGH-SPEED TRAIN PROJECT**

**A. Background:**

In 2009 and 2010, the California High Speed Rail Authority (Authority) applied for a total of \$5.73 billion from the Federal Railroad Administration (FRA) under the new High-Speed Intercity Passenger Rail Program (HSIPR) to initiate construction of Phase I of the California High-Speed Train Project (CHSTP). Federal funding, made available under the American Recovery and Reinvestment Act (ARRA) and the FY 2010 Transportation Appropriations Act, would be matched with California Proposition 1A bond proceeds to initiate construction in four of the seven sections of the Anaheim-San Francisco Phase 1 program: San Francisco-San Jose; Merced-Fresno; Fresno Bakersfield; and Los Angeles Anaheim (denoted as “sections” below). To date, California High Speed Rail has been successful in securing an allocation of some \$2.965 billion in total Federal HSIPRP funding that can be applied to construction of the Phase 1 sections. With a planned state match of \$1.962 billion, a total of \$4.333 billion<sup>(1)</sup> is available to initiate construction work. FRA is requiring the selection of an HST section to initiate a cooperative agreement/grant to provide construction financing and this will be conditioned upon completion of environmental studies and selection of a final alignment and the issuance of a ROD by fall of 2011.<sup>(2)</sup>

The FRA requires that any rail project using ARRA funds be capable of demonstrating “operational independence”/ “independent utility” upon completion. A project is considered to have operational independence “if, upon being implemented, it will provide tangible and measurable benefits, even if no additional investments in the same service are made.” Examples of these benefits include “operational reliability improvements, travel-time reductions, and additional service frequencies resulting in increased ridership.” In practice, this requirement means that the improvements can be used for existing or new intercity rail passenger operations, including Amtrak and other intercity service. Importantly, such service is clearly specified as being “intercity service” as opposed to enhanced commuter rail service.

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1) \$2.25 billion minus \$400M earmarked for TJPA’s Transbay Terminal = \$1.85 billion minus \$194M allocated to Phase 1 PE/NEPA/CEQA work = \$1.656 billion of Federal funds matched 50/50 with GO Bond funds = \$3.312 billion plus \$715 million new FY10 HSIPR application, matched 70/30 with GO Bond funds = a total of \$4.333 billion available for construction.

2) As the ROD/NOD for such selected alignment would not yet be completed by the time the Grant / Cooperative agreement is signed with the FRA, such Agreement would obviously still be conditional on the successful conclusion of the environmental impact studies, the selection of the final alternate route within the selected section and the conclusion of the ROD/NOD for the section by the fall of 2011.

The need to demonstrate “operational independence” and also to meet the FRA requirements determines that work will be initiated in one section only, as opposed to all four sections. Combined

Federal and state funding is sufficient to provide one operationally independent corridor. However, additional funding ultimately will be required to fully complete the work necessary to support high-speed train operations and to procure the trains. The Authority will be developing a new business plan that will detail how additional funding will be secured from Federal, state and private sources to extend beyond the first segment and to finally complete the entire CHSTP system.

#### **B. Legally defined Selection Criteria and Guidelines:**

The FRA has required the Authority to select the section in which to commence construction of the CHSTP by January 2011. Selection of the appropriate section requires consideration of many factors. These include impacts on the project schedule, logical sequencing of the work, mandated testing of high-speed trains, and regional impacts resulting from the investment of Federal and state dollars. The Authority also must consider the specific requirements and guidance provided in ARRA and Proposition 1A (as codified in CA Streets and Highways Code §§2704-2704.21 and Public Utilities Code §§185033, 185035 and 185037), provisions of which are cited below. The statutory provisions, together with project-specific construction measures, can be combined to provide a useful set of criteria by which to evaluate the sections.

The statutory provisions include the following:

ARRA: Projects using Federal ARRA funds must meet two key pass-fail requirements:

*a) Construction must be completed by fall of 2017*

*b) The project must have “operational independence”*

In addition, the FRA is expected to establish intermediate milestones for all HSIPRP-funded projects. These will relate to permitting and other approvals, completion of design, ROW acquisition, and initiation of construction activities.

Proposition 1A: AB 3034, which authorized Proposition 1A, and Proposition 1A (as codified) provide useful legislative intent, selection considerations, and conditions for use of bond proceeds.

- Legislative Intent: Section 8(f) of the AB 3034 established three primary goals underlying use of state bond fund proceeds for the CHSTP. It provides that “it is the intent of the Legislature:

*1) That the entire high-speed train system shall be constructed as quickly as possible in order to maximize ridership and mobility of Californians*

**Comment: it is recommended that this goal be incorporated into Criterion III, which is more explicit regarding schedule risks.**

2) *That it be completed no later than 2020*

**Comment: it is recommended that this goal be incorporated into Criterion III, which is more explicit regarding schedule risks.**

3) *That all phases shall be built in a manner that yields the maximum benefit consistent with available resources.*

**Comment: it is recommended that this goal be incorporated into Criterion IV, which covers aspects of cost benefits of the section to be constructed.**

- Selection Priorities: Streets and Highways Code §2704.08(f) provides criteria for prioritizing selection of corridors or usable segments thereof for construction. These are as follows:

4) *The Authority shall give priority to corridors or usable segments thereof that are expected to require the least amount of bond funds as a percentage of total cost of construction*

**Comment: This applies equally to the four sections. The applications for funding as submitted to the FRA are principally identical with respect to matching state bonds with federal funds.**

5) *Projected ridership and revenue*

**Comment: it is recommended that this priority be incorporated into Criterion I, which is more explicit regarding ensuring the construction of an operable high-speed rail system at the lowest possible cost.**

6) *The need to test and certify trains operating at speeds of 220 miles per hour [FRA safety regulations require that each Individual train be certified through extensive testing at the maximum top speed]*

**Comment: it is recommended that this priority be incorporated into Criterion I, which is more explicit regarding ensuring the construction of an operable high-speed rail system at the lowest possible cost.**

7) *The utility of those corridors or usable segments thereof for passenger train services other than the high-speed train service that will not result in any unreimbursed operating or maintenance cost to the authority [i.e. as long as the other train operator pays track access or other charges which cover the Authority's incremental operating and maintenance costs for the new infrastructure]*

**Comment: it is recommended that this priority be incorporated into Criterion IV, which considers the overall benefit and utility of an operable high-speed rail system.**

8) *The extent to which the corridors include facilities contained therein to enhance the connectivity of the high-speed train network to other modes of transit, including,*

*but not limited to, conventional rail (intercity rail, commuter rail, light rail, or other rail transit), bus, or air transit.*

**Comment: it is recommended that this priority be incorporated into Criterion IV, which considers the overall benefit and utility of an operable high-speed rail system.**

- Preconditions for Seeking/Using Bond Proceeds: Streets and Highways Code §2704.08(d) establishes several pre-conditions that must be certified before the state can appropriate or use bond proceed funding. Key conditions include:

- 9) Identified funding sources are sufficient to complete the corridor or usable segment thereof, based on offered funding commitments by private parties, and authorizations, allocations, or other assurances received from governmental agencies

**Comment: This applies equally to all four sections and does not affect the comparative evaluation of the four ARRA sections. Each of the four sections will be built to meet “operational independence and / or independent utility” with the funds available.**

- 10) The corridor or usable segment thereof will be suitable and ready for high-speed train operation when completed

**Comment: it is recommended that this priority be incorporated into Criterion I, which is more explicit regarding ensuring an operable HSR system to ensure for the lowest installed cost. None of the four ARRA sections would be HSR ready, but as the intent is to continue the construction beyond the ARRA funding - Criterion I. is applicable.**

- 11) One or more passenger service providers can begin using the tracks or stations for passenger train service

**Comment: it is recommended that this priority be incorporated into Criterion (b) as meeting “Operational Independence” is more stringent than this requirement in our opinion.**

- 12) The planned passenger service by the authority in the corridor or usable segment thereof will not require a local, state, or federal operating subsidy

**Comment: it is recommended that this priority be incorporated into Criterion I, below, as it has the same intent.**

- 13) The Authority has completed all necessary project level environmental clearances necessary to proceed to construction

**Comment: it is recommended that this priority be incorporated into Criterion III, below, which is more explicit regarding schedule risks.**

### **C. Program defined selection criteria:**

The legally defined selection criteria and guidelines were to some extent based on an earlier understanding of the project (e.g. Proposition 1A anticipated federal funding but was drafted before stimulus [ARRA] funding was allocated) and were in themselves neither exhaustive nor did they consider some of the commonly applied selection criteria normally applicable to such large infrastructure rail projects in the industry. Thus in this section further mission-critical selection criteria are added, with the aim to ensure that the project maximizes the benefits for California and minimizes the risks:

#### **I. Logical expansion and evolution of the alignment to an operational HSR system.**

- Ensure the first investment forms the core of a state-wide 220 mph system that can be logically expanded and extended as additional funding becomes available
- Ensure the earliest startup of a high-speed rail service with the least funds required
- Consider connectivity of sections, availability of control centers and maintenance facilities, and phasing of future expansion

#### **II. Minimized construction risk, including:**

- Right of Way [ROW] availability and ability to reach agreement with stakeholders to acquire easements or operating rights
- Least construction complexity equating to lower cost volatility
- Least impacts to existing railroad facilities and operations

#### **III. Minimized schedule risk, to meet the ARRA criteria of completion by the fall of 2017, considering such issues as:**

- Probability of achieving ROD/NOD by fall of 2011
- Ease of construction, reduces probability of delay
- Possible risk of delay due to litigation.
- Future construction and equipment procurement sequencing

#### **IV. Builds the most useful HST infrastructure for the least cost and secures a future HSR system for California:**

- Builds HST infrastructure that will not result in unreimbursed costs to the Authority
- Builds HST infrastructure that promotes current and future connections to other modes of transport
- Builds HST infrastructure that can be expanded to complete the entire CHSR system in an efficient and logical sequence and manner
- Builds the most useful segment of HST infrastructure that does not require additional federal or state funding

These requirements and guidance provide a framework for evaluating where best to initiate construction and are included in the attached Selection Criteria matrix. Requirements and specific guidance are identified in the matrix with an arrow. Additional criteria have been developed within this framework and are identified with a bullet. Together, these provide quantitative and qualitative information that may be useful in the selection process.

## Attachments

Appendix B: Criteria for Selecting Section/Usable Segment

Appendix C: Description and Cost Estimates of the ARRA/FY2010 Sections

Appendix D: Data Sheets per ARRA/FY2010 Section

Appendix E: AB 3034 for reference

## APPENDIX B

### CRITERIA FOR SELECTING THE SECTION/USABLE SEGMENT IN WHICH TO INITIATE CONSTRUCTION OF THE CALIFORNIA HIGH-SPEED TRAIN PROJECT

<b>American Recovery and Reinvestment Act/FRA Requirements (Pass / Fail Criteria)</b>	<b>San Francisco- San Jose</b>	<b>Merced- Fresno</b>	<b>Fresno- Bakersfield</b>	<b>Los Angeles- Anaheim</b>
<i>a) Construction must be completed by fall of 2017<sup>(1)</sup></i>	<b>Pass / Fail</b>	<b>Pass / Fail</b>	<b>Pass / Fail</b>	<b>Pass / Fail</b>
<i>b) The project must have “operational independence”</i>	<b>Pass / Fail</b>	<b>Pass / Fail</b>	<b>Pass / Fail</b>	<b>Pass / Fail</b>

Note (1): This Pass/Fail evaluation addresses the ability to meet the Fall 2017 construction deadline based on today’s project status and knowledge, while Criterion III addresses the risks associated with meeting this date.

#### **Program Defined Selection Criteria:**

All sections must pass the Pass / Fail criteria above, to be considered for the Program Defined Selection Criteria evaluated in the following Table. Each of the 4 Criterion below (I through IV) carry an equal weighting of 10 points where:

- 0 equates to (a) not meeting the criteria, or (b) offering the lowest advantage or (c) resulting in the higher risk to the project
- 10 equates to (a) fully meeting the given criteria or (b) offering the highest advantage or (c) the lowest risk to the project

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<b>PROGRAM DEFINED SELECTION CRITERIA</b>	<b>San Francisco- San Jose</b>	<b>Merced- Fresno</b>	<b>Fresno- Bakersfield</b>	<b>Los Angeles- Anaheim</b>
<p>I. Logical expansion and evolution of the alignment to an operational HSR system.</p> <ul style="list-style-type: none"> <li>- Ensure the first investment forms the core of a state-wide 220 mph system that can be logically expanded and extended as additional funding becomes available</li> <li>- Ensure the earliest startup of a high-speed rail service with the least funds required</li> <li>- Consider connectivity of sections, availability of control centers and maintenance facilities, and phasing of future expansion</li> </ul>				
<p>II. Minimized construction risk.</p> <ul style="list-style-type: none"> <li>- Right of Way [ROW] availability and ability to reach agreement with stakeholders to acquire easements or operating rights</li> <li>- Least construction complexity equating to lower cost volatility</li> <li>- Least impacts to existing railroad facilities and operations</li> </ul>				

- 0 equates to (a) not meeting the criteria, or (b) offering the lowest advantage or (c) resulting in the higher risk to the project
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<b>PROGRAM DEFINED SELECTION CRITERIA</b>	<b>San Francisco- San Jose</b>	<b>Merced- Fresno</b>	<b>Fresno- Bakersfield</b>	<b>Los Angeles- Anaheim</b>
<p>III. Minimized schedule risk, to meet the ARRA criteria of completion by the fall of 2017.</p> <ul style="list-style-type: none"> <li>- Probability of achieving ROD/NOD by fall of 2011</li> <li>- Ease of construction, reduces probability of delay</li> <li>- Possible risk of delay due to litigation.</li> <li>- Future construction and equipment procurement sequencing</li> </ul>				
<p>IV. Builds the most useful HST infrastructure for the least cost.</p> <ul style="list-style-type: none"> <li>- Builds HST infrastructure that will not result in unreimbursed costs to the Authority</li> <li>- Builds HST infrastructure that promotes current and future connections to other modes of transport</li> <li>- Builds HST infrastructure that can be expanded to complete the entire CAHSR system in an efficient manner</li> <li>- Builds the most useful segment of HST infrastructure that does not require additional federal or state funding</li> </ul>				

- 0 equates to (a) not meeting the criteria, or (b) offering the lowest advantage or (c) resulting in the higher risk to the project
- 10 equates to (a) fully meeting the given criteria or (b) offering the highest advantage or (c) the lowest risk to the project