

Submission 190 (Russell Kahl, September 14, 2011)

HIGH SPEED RAIL COMMENT SHEET

Please complete and mail this sheet to the following address:

Attention: Supervisor John Pedrozo
County of Merced
2222 M Street
Merced, CA 95340

Board of Supervisors
2222 M Street
Merced, CA 95340

2
446

NAME Russell Kahl
First Last
ADDRESS 9626 E. Toews Ave Le Grand, CA. 95333
Street Address Town/City Zip Code
MAILING ADDRESS _____
(IF DIFFERENT FROM ABOVE) Address Town/City Zip Code
TELEPHONE NUMBER (209) 382-0673
EMAIL ADDRESS gkahl@sbcglobal.net

|||
DISTRICT 1 RESIDENT
9626 TOEWS AVE
LE GRAND CA 95333-9746

Please check here if you would like me to notify you via email or mail of upcoming High Speed Rail public hearings or meetings for the next 12 months.

Please check all that are applicable.

190-1

- I STRONGLY SUPPORT THE A-2 HIGH SPEED RAIL ROUTE ALTERNATIVE (UNION PACIFIC RAIL ROAD/HIGHWAY 99) AND AM AGAINST THE A-1 ROUTE ALTERNATIVE.
- I SUPPORT THE A-2 ROUTE BECAUSE IT'S CLOSEST TO A MAJOR TRANSPORTION CORRIDOR.
- I SUPPORT THE A-2 ROUTE BECAUSE IT WOULD LEAST IMPACT FARMLAND AND HABITAT AREAS.
- I AM AGAINST THE A-1 ROUTE BECAUSE IT MOST NEGATIVELY AFFECTS THE COMMUNITY I LIVE IN.

Please provide any additional reasons or comment as to why you support an A-2 route.

Please note that your comments provided on this sheet will be forwarded to the California High Speed Rail Authority for their public comment records.

Response to Submission 190 (Russell Kahl, September 14, 2011)

190-1

See MF-Response-GENERAL-10. Also see Chapter 7 Preferred Alternative of the EIR/EIS which summarizes the relative differences between the alternatives and identifies the Hybrid Alternative as the preferred alternative for the Merced to Fresno Section.

Response to Submission 191 (Richard Kilgore, September 14, 2011)

191-1

See MF-Response-GENERAL-10 and MF-Response-GENERAL-2. As discussed in the latter master response, SR 99 is not designed for travel at the speed of the HST and is not a viable alternative because of those physical limitations. Also see Chapter 7

Preferred Alternative of the EIR/EIS which summarizes the relative differences between the alternatives and identifies the Hybrid Alternative as the preferred alternative for the Merced to Fresno Section.

191-2

The design criteria for the HST must maintain extremely straight lines to maintain safety at such high speeds. Curvatures, both horizontal and vertical require miles of transition. Small undulations, as using the south bound lanes for portions are not efficient for this track design. The Authority is collaborating with Caltrans on design development and looking for opportunities to minimize right of way acquisition.

Submission 382 (Michael and Sherrine Knapp, September 23, 2011)

Draft EIR/EIS Comments

09-23-11P01:41 RCVD

Sept. 20, 2011

382-1

I have reviewed the HSRA Merced/Fresno Draft. It is with great concern that I write this letter. We DO NOT want the high speed rail to adopt the A1-BNSF alternative. The A1 alternative would cut across farm and range land. It would cross endangered species habitat, (see John Vollmar's documents and endangered species documents for Eastern Merced County) and it would divide farm property. The A1-BNSF alternative does not follow existing transportation corridors. We have lived and owned property in Merced and Madera Counties for fifty years, and strongly believe the only place for the High Speed Rail is along an existing major transportation corridor such as the A2-UPRR/SR99.

Respectfully submitted,

Michael and Sherrine Knapp
p.o. box 850, Chowchilla, CA. 93610

Michael Knapp
Sherrine Knapp

Response to Submission 382 (Michael and Sherrine Knapp, September 23, 2011)

382-1

See MF-Response-GENERAL-10.

Submission 466 (Lauren Knapp, September 30, 2011)

09-30-11P05:01 RCVB

8314 Santa Fe
Chowahella
CA. 93600

Sept. 15, 2011

Subject: California High-Speed Train

To Whom It May Concern,

It has come to my attention that the California High-Speed Rail Authority is considering using the Burlington/Santa Fe alignment between Merced and Fresno, rather than staying on the Southern Pacific alignment which parallels Hwy 99 corridor.

Let me state for the record why using the Burlington/Santa Fe alignment is **not the best** route for California's High Speed Train and why it is not the best choice for the people of California.

466-1

1. **Higher Cost.** The Burlington/Santa Fe alignment is a longer route. Even though the initial cost of the Burlington/Santa Fe alignment might be less, in reality this route will have higher operating cost and multiplied over the next several decades will more than offset any initial savings. Isn't the whole idea behind the High Speed train is to save time, fuel and reduce CO₂ emissions?

466-2

2. **Threatened and Endangered Species.** The Burlington/Santa Fe alignment traverses the designated Vernal Pool Critical Habitat (Unit 15J) and the Madera Vernal Pool Recovery Core Area (Map III-15b) identified in the Vernal Pool Recovery Plan (USFWS 2005). Additionally, the High Speed Train and the associated development would adversely affect thousands of acres of pristine vernal pool wetlands and habitat for Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp, Midvalley Fairy Shrimp, California Tiger Salamander (CTS) and Western Spadefoot Toad. The disturbance of upland grassland areas would adversely affect adult CTS and western Spadefoot Toad sheltering habitat, Western Burrowing Owl and San Joaquin kit Fox denning and foraging habitat and a San Joaquin kit Fox migration corridor.

466-3

3. **Infrastructure.** Because of its proximity to Hwy 99, much of the infrastructure that would be necessary to support California's High Speed Train system, such as food, lodging & automobile access, already exists along the Southern Pacific alignment. In contrast, using the Burlington/Santa Fe alignment would necessitate much of this infrastructure to be duplicated which again would increase costs.

4. **Urban Sprawl.** Some of the best farmland in Central California borders the Burlington/Santa Fe alignment. By removing the High Speed Train from the already impacted Hwy 99 corridor and moving it 6 miles to the east, this plan will inevitably draw development east as well and accelerate the loss of this irreplaceable resource.

Thank you in advance for your consideration in the matter.

Sincerely,

Response to Submission 466 (Lauren Knapp, September 30, 2011)

466-1

The route alternatives in the EIR/EIS were selected during the alternatives analysis process for detailed study because they meet the project purpose and need and project objectives, and avoid or minimize adverse effects on homes, farms, and businesses, as well as impacts to the natural environment, including air quality. The route alternatives vary in the degree to which they would impact the natural environment and communities, as well as in the locations where such impacts would occur. Due to the nature of this project and its unique design parameters (i.e., design standards for HST guideway), it is not possible to entirely avoid homes, farms, businesses, and environmentally sensitive areas. The Authority and FRA recognize the concerns expressed in comments that the HST may impact homes and communities, and consider this factor in selecting the preferred alternative alignment.

466-2

See MF-Response-BIO-1 and MF-Response-BIO-2.

466-3

See MF-Response-GENERAL-8, MF-Response-GENERAL-10 and MF-Response-GENERAL-3.

Submission 469 (Sherrine Knapp, September 30, 2011)

09-30-11P05:00 RCVD

Sept. 18, 2011

28551 Santa Fe Dr. Chowchilla, CA.

High Speed Rail Authority
Merced to Fresno Section
To Whom It May Concern,

Recently I attended the public meeting concerning alternative routes for the High Speed Rail alignments. As I stated at the meeting, "It makes much more sense to put the High Speed Rail from Merced to Fresno, along the Highway 99 corridor (near the Burlington Rail Road tracks). The Highway 99 corridor is already a jungle."

After I made my verbal comment, supervisor John Pedrozo stated that the small communities of Le Grand and Planada do not want a High Speed Rail running through their communities either.

Following are my written comments.

We have property along the BNSF Rail Road lines, six miles, directly East of Chowchilla. Using the BNSF alignment would fragment the endangered species habitat, here on our property and on the adjacent property. We have had a Biological Survey done, on our property, which has been published by John Vollmar Consulting, of Berkley, CA. The surveys show that there are several endangered species on our property adjacent to the BNSF Rail Road. Among these species are Fairy Shrimp, California Tiger Salamander, Western Spade Foot Toad, Western Burrowing Owl, Kit Fox and Owl's Clover. There are also several Bald Eagles nesting in the oak trees along the river bottom, near the BNSF tracks. It makes much more sense, for the sake of the country side, habitat, and the cost of mitigating, to use the Union Pacific lines and put the new High Speed Rail along the Highway 99 corridor. There is already disruption of habitat and wildlife along Highway 99, not to mention the pollution and noise already existing along the 99 corridor. A High Speed track would fit in much better along Highway 99 between Merced and Fresno.

The alternate route along the Santa Fe (A1) , does NOT follow existing transportation corridors, it cuts across farm, ranch and endangered species habitat.

Respectfully submitted,

Sherrine Knapp 559-665-2908



469-1

Response to Submission 469 (Sherrine Knapp, September 30, 2011)

469-1

See MF-Response-BIO-1 and MF-Response-BIO-2.

Submission 651 (Lauren J. Knapp, October 12, 2011)

RECEIVED

10-12-11A11:47 RCVD

From the Desk Of
Lauren J. Knapp
PO Box 850
Chowchilla, Ca. 93610

651-4

western burrowing owl and San Joaquin kit fox denning and foraging habitat and a San Joaquin kit fox migration corridor.

October 10, 2011

Subject: California High-Speed Train

To Whom It May Concern:,

My family operates a horse ranch that straddles Alignment A1, one of several routes being considered by the High Speed Rail Authority as a possible connection between Merced and Fresno. As part of the NEPA process, I have some questions that need to be addressed by the EIS before the evaluation of Alignment A1 can be completed.

Thank you in advance for incorporating the answers to my questions into the EIS.

Sincerely, *Lauren J. Knapp*

Lauren J. Knapp

PHYSICAL ADDRESS
8314 SANTA FE DR.
CHOWCHILLA, CA, 93610
559-665-1123

651-1

1. How will Alignment A1 affect my family's Horse Breeding Operation?

Horses are sensitive to loud noises and vibration. Our operation breeds over 150 AQHA and APHA mares a year and we are very concerned about the adverse impact the High Speed Train will have a on our breeding program.

651-2

2. How will we access both sides of our ranch?

We graze horses in fields on both sides of Alignment A1. If this alignment were to be utilized, the property to the west would have no other access point. These fields are critical to our operation and can not simply be sold to the High Speed Rail Authority and replaced with other property 10 miles down the road.

651-3

3. How will the loss of recreation values on our ranch be mitigated?

Currently we offer trail rides and horse drawn wagon rides on our property. Horses spook easily and the speed at which the High Speed rail travels will give these horses no warning as to the trains approach. Obviously this will endanger our guests and make this part of our business unworkable.

651-4

4. How will the loss of Threatened and Endangered Species on my ranch be mitigated?

The A1 Alignment traverses the designated Vernal Pool Critical Habitat (Unit 15J) and the Madera Vernal Pool Recovery Core Area (Map III-15b) identified in the Vernal Pool Recovery Plan (USFWS 2005). Additionally, the High Speed Train and the associated development would adversely affect thousands of acres of pristine vernal pool wetlands and habitat for vernal pool fairy shrimp, vernal pool tadpole shrimp, midvalley fairy shrimp, California tiger salamander (CTS) and western spadefoot toad. The disturbance of upland grassland areas would adversely affect adult CTS and western spadefoot toad sheltering habitat,

Response to Submission 651 (Lauren J. Knapp, October 12, 2011)

651-1

See MF-Response-NOISE-1.

651-2

See MF-Response-TRAFFIC-2.

651-3

See MF-Response-NOISE-1. Also see section 3.4.3.3, Impact Assessment Guidance, and Section 3.4.5.3, High-Speed Train Alternatives, of the EIR/EIS under the heading Noise Effects on Wildlife and Domestic Animals for further information regarding noise effects on wildlife and livestock.

The *FRA High Speed Ground Transportation Noise and Vibration Impact Assessment Manual* (2005) considers a Sound Exposure Level (SEL) of 100 dBA the most appropriate threshold for disturbance effects, such as startling, on wildlife and livestock of all types. A screening assessment determined typical and maximum distances from the HST tracks at which this limit may be exceeded. In the vicinity of the property mentioned in the comment, the CAHST would be constructed at-grade. Analysis indicated that along at-grade sections, the screening distance for a single-train pass-by SEL of 100 dBA would be approximately 100 feet from the track centerline for ballast and tie track and 160 feet in both directions from the track centerline for slab track. Because fences control access to the right-of-way, and the right-of-way would be 100 feet wide in rural locations, wildlife and domestic animals would have to be within approximately 50 feet of the edge of the right-of-way with ballast and tie track, and within approximately 110 feet of the edge of the right-of-way with slab track, to cause the animal to startle. Given this, if the horse and wagon rides do not include entering into this area, there would be no concern that the horses would be spooked (and therefore no subsequent concerns about the safety of the guests riding the horses).

651-4

See MF-Response-BIO-1 and MF-Response-BIO-2.

Submission 665 (John M. & Rosemary Lasgoity, October 13, 2011)

John M. and Rosemary Lasgoity

2310 Camden Way, Madera, California 93637
559-673-9246 Home/Office 559-661-0667 FAX

Merced to Fresno Draft EIR/EIS Comments October 13, 2011

California High Speed Rail Authority
770 L Street, STE#800
Sacramento, CA 95814
Merced_Fresno@hsr.ca.gov

We appreciate the opportunity to submit comments on the Draft Merced to Fresno Section Project EIR/EIS, Volume I: Report, dated August 2011 (DEIR/DEIS). We recognize the California High Speed Rail Project (Project) as a pivotal step in the future development of the Central Valley; however we oppose any unmitigated loss of agricultural lands, agricultural incomes, or agri-business related to Madera's County's agricultural economy. We are property owners in Madera County (Reference noted sample of APNs - Not all inclusive: 046-060-025; 042-081-004; 031-022-002; 028-180-012; 040-072-006; 040-121-006; 040-112-005; 052-030-002; 041-022-001; 052-063-003); residing in Madera County for over 80 years and have made our living producing agricultural products for over 60 years. The first APN noted in the sample provided is property our family has owned and farmed since 1904. We feel that due to the high additional burdens placed on agriculture in the County of Madera and throughout the Central Valley that the Project should seek out superior mitigation responses for the industry. Our comments are organized by DEIR/DEIS Sections

Section 3.14 Agricultural Lands

3.14.2.2 State

California Land Conservation Act of 1965 (California Government Code §51200-51295) (also known as the Williamson Act)

The Project will impact Madera County's Williamson Act Program, regardless of the Alternative selected. Our farming operations rely on the financial relief that the Williamson Act provides. The Project will bisect many parcels, specifically along the Ave 21 and Ave 24 proposed Wye Alignments, bringing them below the minimum allowable acreage for the Williamson Act, and therefore, creating a material breach of contract between the land owner's and the County of Madera. A monetary penalty exists with that breach - which is not discussed or mitigated for in this DEIR/EIS. Without being able to maintain

665-1

Williamson Act contracts, existing contract holders such as us and potentially new ones will find it more difficult to conduct profitable agricultural operations in Madera County.

We assert that the DEIR/EIS fails to adequately identify the severity of the impact on Williamson Act lands within Madera County. More specifically, with regards to NEPA, the DEIR/EIS does not identify the type of impact - a violation of NEPA's Disclosure policy [40 CFR Parts 1500-15081]. And although the document indicates significance criteria for CEQA for the conversion of agricultural lands as being significant - we assert that adequate mitigation measures are not included in Table 3.14-16 Summary of Significant Agricultural Land Impacts and Mitigation Measures.

665-2

3.14.5.3 Temporary Use of Agricultural Land and Temporary Utility and Infrastructure Interruption

We dispute the assertion in the DEIR/DEIS that the temporary use of agricultural land for staging and material laydown areas is "...negligible under NEPA and less than significant under CEQA because the land would be used temporarily and restored; the land would not be permanently converted to a nonagricultural use." Many farming operations that reside along the footprint and in the proposed staging areas of the Ave 21 and Ave 24 Wye Alignments require year-round access to equipment, fields, infrastructure, and other utilities that would be detrimental if interrupted at any point throughout the year (CHSRA Supplement Appendix, Volumes III: Section E & F - Ave 21 and Ave 24 Alignments). These operations would be borne economically unfeasible if these basic utilities or access routes were cut off for even a period of a month, potentially less. The DEIR/EIS further states that these issues will be resolved during the right of way proceedings following the conclusion of the environmental review process. Acknowledging that a dispute-resolution process exists during the right-of-way process, the DEIR/EIS stipulates that monetary compensation will provide for solutions for farming operations affected but fails to indicate where the funds will come from, how they will be dispensed, from what accounts - Federal or State, and whether an actual right-of-way for HSR even exists. To date, the State budget nor the Federal Transportation Administration have any such account dedicated for this project and given the State and Federal budget crises, we consider this form of mitigation to be unsubstantiated and a violation of CEQA §15002(a)(3).

Furthermore, with respect to this DEIR/EIS, the permanent loss of agricultural lands and lack of analysis on temporary construction activities is the most significant impact the Project's implementation possesses - yet yields the least amount of mitigation throughout the entire scope of impacts. MCFB takes issue with this disparagement and finds it disproportionate to the magnitude of significance this impact has on us and Madera County.

665-3

3.14-27 Project Impacts

We assert that the DEIR/EIS fails to identify numerous Project impacts throughout this section that will be potentially devastating to Madera County's agricultural production.

- There was no assessment on the loss of sales tax from the agricultural conversions in Madera County, which the Project is certain to cause. An estimate of these losses needs to be included as well as a description of compensatory mitigation measures.

Submission 665 (John M. & Rosemary Lasgoity, October 13, 2011) - Continued

665-3

- No analysis was performed in the DEIR/EIS regarding the increase in water costs to the agricultural community in Madera County. This increase in cost would result from the increased mileage required of local irrigation district vehicles due to the loss of existing access roads –OR, through the loss of piping, irrigation infrastructure, or –and perhaps most importantly, due to the expected population growth caused by the Project.
- Regardless of the inclusion of the East-West Wye HWY 152 Alignment, the DEIR/EIS does not analyze the impacts to agriculture that selecting either Avenues 21 or 24 would directly have on statewide agricultural delivery and goods transportation systems. Any of the East-West Wye alternatives (including HWY 152) would have extreme ramifications on the truck delivery systems used in the Central Valley. Analysis of this system, its effects on agriculture, and appropriate mitigation needs to be included in this Project.
- The DEIR/EIS does not discuss or identify how the realignment of agricultural water delivery systems will affect agriculture –an impact that is so significant to us and the Madera County farming community that farming operations may cease to exist. Mitigation measures must be included to account for this activity that are compensatory in making the delivery systems whole as with pre-Project conditions.
- The DEIR/EIS does not discuss the impact the Project will have on the Madera Right to Farm Ordinance (Madera County 1995 General Plan).
- There is no discussion in the DEIR/EIS regarding spraying activities associated with agricultural operations –other than aerial applications. There are many forms of pesticide, fungicide, insecticide applications that occur in Madera County; none of which were discussed in this document. Additionally, our agricultural operations are required under California Law to follow pesticide application plans, certifications, and other regulatory requirements associated with applications of pesticides, which the document does not address at all. This impact should be disclosed as should the set of local and State laws that affect the significance criteria. Furthermore, the effects of these applications on HSR passengers, employees, or increased population density were not discussed in the DEIR/EIS.
- A threshold of significance regarding the level of allowable impacts to farming operations has been established under CEQA. However, local thresholds of significance for Madera County are more appropriate in determining the criteria of impact in this area and the Madera County General Plan 2009 was not discussed or used in this portion of the document. Local thresholds of significance are allowable under CEQA §15064.7(b) and should have been used in this DEIR/EIS as they contain current research on local and current farming practices, versus a Statewide standard.
- Due to the nature of the large over-crossings used in HSR, the impacts these structures will have on local agricultural operations were not addressed in this DEIR/EIS. Road closures, supporting beams, and necessary right-of-way structures will be a basic component of these over-crossings and all have the ability to impact operations significantly. In addition, the sub-environments these overcrossings may create (heat, light-sources, wind breakage, subsidence and soil seismicity variations) may have effects on the crop production areas they are located in and should be analyzed in this Document.

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- Although discussed in Section 3.14.5.1, wind effects (referred to as “wake” in the Document) caused by the HSR vortex were not fully analyzed to include comparisons of typical valley floor wind patterns throughout the seasons. Disruption of these seasonal wind patterns can have drastic effects on local agricultural operations, which rely on the wind to negate frost impacts to crops. In addition, the effects of this vortex on apiary production and pollination –a \$26 million industry in Madera County (2010 Agricultural Crop Report, Madera County Department of Agriculture), which we rely upon were not analyzed in detail in the Document. In addition to being a major agricultural industry in Madera County, countless tree fruit, nut, and other specialty crops rely on cross-pollination throughout the year and would be economically distressed were there to be a disruption system-wide of the pollination process.

In addition, we feel that the following impacts, although discussed in this Section, are marginalized and their significance not adequately designated.

- The DEIR/EIS does not discuss in great-enough detail impacts related to bifurcating farmland, the effects of replacing wells, pipelines, and irrigation systems. As previously mentioned, farming operations may cease to exist if even a small portion of these activities are disrupted due to the financial strains placed on the businesses. Mitigation is not included in the DEIR/EIS and deferring to the right-of-way process is a violation of CEQA (Public Resources Code §21003.1(b)) as adequate mitigation is required in the case of a significant impact caused by a project.

665-4

Section 3.18 Regional Growth

The DEIR/EIS indicates throughout the document and again in this section that the Project would not create regional growth but would serve to enhance the planned communities of the Central Valley. We take issue with this statement as Madera County has some of the lowest housing costs in the State, contained only through some geographic isolation. There is a presumption in the Document that the thousands of HSR passengers and employees would not affect the existing population of Madera County. When higher paying jobs are a short train ride away, this presumption cannot be accurate. This impact should be included as a significant one, and one that also requires mitigation to Madera County to address this potential for rapid growth –additional urban sprawl from the communities of Merced and Fresno (to which the Project will include Stations to), and consequently roadway and highway impacts during this plausible population expansion.

Lack of Project Business Plan and Obligation under the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970

We take issue with the Authority’s judgment to publish a DEIR/EIS without having completed an operational business plan to date. Estimates of profit, loss, ridership, and feasibility of the Project are reliant on business models from other countries’ HSR systems –a situational discrepancy for the State of California, in which operational efficiency functions very differently because of the higher costs of living, permitting, and constructing a project. These discrepancies should be remedied prior to the issuance of an FEIR/EIS. In addition, mitigation measures that are applicable to the Project and its affected

665-5

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Submission 665 (John M. & Rosemary Lasgoity, October 13, 2011) - Continued

665-5

constituency –may not have been included in this DEIR/EIS, because there is no business plan. By way of example, if the Authority had developed a business plan detailing a clear definition of Project value –the costs of permitting and constructing the HSR, versus the profits generable by the Project, overall alternatives posed for consideration may change. This again, should be evaluated against all other Project impacts prior to making a decision on the most practical alternatives.

665-6

Moreover, we take issue with the Authority’s extensive reliance on Title 49, Part 24 CFR, the Uniform Relocation Assistance and Real Property Acquisition Act. Based on the Federal cost-share rules from the Federal Transportation Administration (FTA) (28 U.S.C. § 2412 (d)) for this project –the FTA is NOT ABLE to provide monetary assistance for relocation or condemnation due to the type of funds being used. Any selection of a highway re-alignment or in this case, one of several alternatives proposed, requires the FTA to defer to the Federal Highway Administration (FHWA), which is not obligated under statute to participate in the condemnation proceedings. Furthermore, NEPA does not require any Federal agency in this case to value the land or property at a high level [49 CFR 24.102(c) (2) (ii)], increasing the likelihood that condemnation proceedings and ALL funds for these efforts will be undertaken by the State of California and its tax-payers. The details of property acquisition were not included in a budget manifesto in the original Proposition 1A intent or bylaws. We stipulate that this impact is not accounted for on any level in the DEIR/EIS and has not been properly analyzed to allow the Project to move forward with the FEIR/EIS phase. As a significant, potential cost –this Project impact should be included for ALL alignment alternatives.

665-7

Although CEQA provides for minimum 45 day statutory review period for the DEIR/EIS, as well as the granted additional 15 days for review by the public of this document- we feel that the 60 day review period was far too short given the quantity of new information in the document. The alignments proposed in the Project have changed throughout time, and outreach with our affected membership takes time to make them fully aware of how they may be affected –a process which should have been taken on by the Authority with more due process.

If you have any questions or need further information, please contact me at (559) 673-9246or via email at, rlasgoity@sbcglobal.net.

Sincerely,

John M. Lasgoity

Rosemary Lasgoity

Response to Submission 665 (John M. & Rosemary Lasgoity, October 13, 2011)

665-1

See MF-Response-AGRICULTURE-7.

665-2

See MF-Response-AGRICULTURE-4. With regard to the commitment to funding the mitigation measures, see MF-Response-GENERAL-1 and MF-Response-GENERAL-18.

665-3

See MF-Response-GENERAL-4, MF-Response-WATER-1, MF-Response-WATER-4, MF-Response-GENERAL-2 (with regard to the Wye decision), MF-Response-SOCIAL-8, MF-Response-AGRICULTURE-4, MF-Response-AGRICULTURE-5, MF-Response-AGRICULTURE-1, MF-Response-AGRICULTURE-2, and MF-Response-AGRICULTURE-3. With regard to regional transportation impacts, see the analysis in EIR/EIS Section 3.1 (Transportation). With regard to the Madera County Right-to-Farm Ordinance, text has been added to Table 3.14-1 to acknowledge this law. These ordinances help protect ongoing agricultural operations from nuisance complaints, typically originating from new residential areas. There would be no conflicts with the HST project. With regard to local significance thresholds and mitigation standards, Madera County does not have a standard mitigation ratio for farmland impacts.

Impacts related to shading are considered to be minor. New roadway crossings over the proposed HST would be about 30 feet high on average; embankments would have 2:1 slopes or flatter. Therefore, adjacent crops would be greater than 60 feet from the top of the embankment at its highest point. At this cropping distance, changes to the amount of sunlight received would be minimal, and temperature changes would likewise be minimal. However, if there were shading effects, these effects would be greatest on crops planted on the north side of east-west trending roadway crossings. Where roadways run north-south, and crops are located to the east or west of proposed roadway crossings, adequate sunlight should be available to supply the needs of all crops.

Specifically with regard to almonds, photosynthesis occurs at the maximum rate in almond trees at one-half full sunlight; that is, when light levels are one-half the intensity of that at solar noon (University of California, 1996). Full sunlight only reaches leaves on the outer surface of almond tree canopies, with inner leaves being partly shaded by

665-3

outer leaves. Therefore, most leaves on mature almond trees function well with relatively little light. It is unlikely that shading effects from HST embankments would reduce sunlight received by adjacent almond trees to levels that would adversely affect photosynthesis.

With regard to grapes, sunlight and temperature are important parameters for optimum fruit ripening, and absolute requirements depend on the variety of grape being grown. Varietal differences in climatic requirements are demonstrated by the fact that grapes are grown in most areas of the state, including the Sierra foothills, coastal regions across the state, fog-affected inland regions such as Lodi, and the San Joaquin Valley. Importance of light on grape berry development and quality was shown by Dokoozlian and Kliewer (1996) for 'Cabernet Sauvignon' and 'Pinot noir' grapes. As mentioned above, shade effects are expected to be minimal for the Merced to Fresno section of the HST; if minor shading effects to grape fruit quality were to occur, these effects would be limited to vines grown closest to the embankments. On a field scale, effects would likely be negligible.

A small period of shading during the growing season may be beneficial to certain crops. This could occur through moderation of transpirational water loss, heat effects, and sunburn. Additionally, roadway overpasses may provide a wind break, which may be beneficial to growth and yields of certain crops.

665-4

See MF-Response-GENERAL-3.

665-5

See MF-Response-SOCIAL-1 and MF-Response-GENERAL-6.

665-6

See MF-Response-SOCIAL-1.

665-7

See MF-Response-GENERAL-7.

Submission 663 (Michele Lasgoity & Mark S. Peters, October 13, 2011)

Mark S. Peters & Michele Lasgoity

6410 Road 23, Madera, California 93637
559-217-2986 Michele cell/vm 559-673-6410 Hm/Office/FAX

Merced to Fresno Draft EIR/EIS Comments October 13, 2011

California High Speed Rail Authority
770 L Street, STE#800
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Merced_Fresno@hsr.ca.gov

We appreciate the opportunity to submit comments on *the Draft Merced to Fresno Section Project EIR/EIS, Volume I: Report*, dated August 2011 (DEIR/DEIS). We recognize the California High Speed Rail Project (Project) as a pivotal step in the future development of the Central Valley; however we oppose any unmitigated loss of agricultural lands, agricultural incomes, or agri-business related to Madera's County's agricultural economy. We are property owners in Madera County (Reference APNs: 044-181-003; 044-181-004) residing in Madera County and make our living producing agricultural products. We feel that due to the high additional burdens placed on agriculture in the County of Madera and throughout the Central Valley that the Project should seek out superior mitigation responses for the industry. Our comments are organized by DEIR/DEIS Sections

Section 3.14 Agricultural Lands

3.14.2.2 State

California Land Conservation Act of 1965 (California Government Code §51200-51295) (also known as the Williamson Act)

The Project will impact Madera County's Williamson Act Program, regardless of the Alternative selected. Our farming operations rely on the financial relief that the Williamson Act provides. The Project will bisect many parcels, specifically along the Ave 21 and Ave 24 proposed Wye Alignments, bringing them below the minimum allowable acreage for the Williamson Act, and therefore, creating a material breach of contract between the land owner's and the County of Madera. A monetary penalty exists with that breach—which is not discussed or mitigated for in this DEIR/EIS. Without being able to maintain Williamson Act contracts, existing contract holders such as us and potentially new ones will find it more difficult to conduct profitable agricultural operations in Madera County.

663-1

We assert that the DEIR/EIS fails to adequately identify the severity of the impact on Williamson Act lands within Madera County. More specifically, with regards to NEPA, the DEIR/EIS does not identify the type of impact—a violation of NEPA's Disclosure policy [40 CFR Parts 1500-15081] And although the document indicates significance criteria for CEQA for the conversion of agricultural lands as being significant—we assert that adequate mitigation measures are not included in Table 3.14-16 Summary of Significant Agricultural Land Impacts and Mitigation Measures.

663-3

3.14.5.3 Temporary Use of Agricultural Land and Temporary Utility and Infrastructure Interruption

We dispute the assertion in the DEIR/DEIS that the temporary use of agricultural land for staging and material laydown areas is "...negligible under NEPA and less than significant under CEQA because the land would be used temporarily and restored; the land would not be permanently converted to a nonagricultural use." Many farming operations that reside along the footprint and in the proposed staging areas of the Ave 21 and Ave 24 Wye Alignments require year-round access to equipment, fields, infrastructure, and other utilities that would be detrimental if interrupted at any point throughout the year (CHSRA Supplement Appendix, Volumes III: Section E & F –Ave 21 and Ave 24 Alignments). These operations would be borne economically unfeasible if these basic utilities or access routes were cut off for even a period of a month, potentially less. The DEIR/EIS further states that these issues will be resolved during the right of way proceedings following the conclusion of the environmental review process. Acknowledging that a dispute-resolution process exists during the right-of-way process, the DEIR/EIS stipulates that monetary compensation will provide for solutions for farming operations affected but fails to indicate where the funds will come from, how they will be dispensed, from what accounts—Federal or State, and whether an actual right-of-way for HSR even exists. To date, the State budget nor the Federal Transportation Administration have any such account dedicated for this project and given the State and Federal budget crises, we consider this form of mitigation to be unsubstantiated and a violation of CEQA§ 15002(a)(3).

Furthermore, with respect to this DEIR/EIS, the permanent loss of agricultural lands and lack of analysis on temporary construction activities is the most significant impact the Project's implementation possesses—yet yields the least amount of mitigation throughout the entire scope of impacts. MCFB takes issue with this disparagement and finds it disproportionate to the magnitude of significance this impact has on us and Madera County.

663-4

3.14-27 Project Impacts

We assert that the DEIR/EIS fails to identify numerous Project impacts throughout this section that will be potentially devastating to Madera County's agricultural production.

- There was no assessment on the loss of sales tax from the agricultural conversions in Madera County, which the Project is certain to cause. An estimate of these losses needs to be included as well as a description of compensatory mitigation measures.
- No analysis was performed in the DEIR/EIS regarding the increase in water costs to the agricultural community in Madera County. This increase in cost would result from the increased mileage required of local irrigation district vehicles due to the loss of existing access roads –OR,

Submission 663 (Michele Lasgoity & Mark S. Peters, October 13, 2011) - Continued

663-4

- through the loss of piping, irrigation infrastructure, or –and perhaps most importantly, due to the expected population growth caused by the Project.
- Regardless of the inclusion of the East-West Wye HWY 152 Alignment, the DEIR/EIS does not analyze the impacts to agriculture that selecting either Avenues 21 or 24 would directly have on statewide agricultural delivery and goods transportation systems. Any of the East-West Wye alternatives (including HWY 152) would have extreme ramifications on the truck delivery systems used in the Central Valley. Analysis of this system, its effects on agriculture, and appropriate mitigation needs to be included in this Project.
 - The DEIR/EIS does not discuss or identify how the realignment of agricultural water delivery systems will affect agriculture –an impact that is so significant to us and the Madera County farming community that farming operations may cease to exist. Mitigation measures must be included to account for this activity that are compensatory in making the delivery systems whole as with pre-Project conditions.
 - The DEIR/EIS does not discuss the impact the Project will have on the Madera Right to Farm Ordinance (Madera County 1995 General Plan).
 - There is no discussion in the DEIR/EIS regarding spraying activities associated with agricultural operations –other than aerial applications. There are many forms of pesticide, fungicide, insecticide applications that occur in Madera County; none of which were discussed in this document. Additionally, our agricultural operations are required under California Law to follow pesticide application plans, certifications, and other regulatory requirements associated with applications of pesticides, which the document does not address at all. This impact should be disclosed as should the set of local and State laws that affect the significance criteria. Furthermore, the effects of these applications on HSR passengers, employees, or increased population density were not discussed in the DEIR/EIS.
 - A threshold of significance regarding the level of allowable impacts to farming operations has been established under CEQA. However, local thresholds of significance for Madera County are more appropriate in determining the criteria of impact in this area and the Madera County General Plan 2009 was not discussed or used in this portion of the document. Local thresholds of significance are allowable under CEQA §15064.7(b) and should have been used in this DEIR/EIS as they contain current research on local and current farming practices, versus a Statewide standard.
 - Due to the nature of the large over-crossings used in HSR, the impacts these structures will have on local agricultural operations were not addressed in this DEIR/EIS. Road closures, supporting beams, and necessary right-of-way structures will be a basic component of these over-crossings and all have the ability to impact operations significantly. In addition, the sub-environments these overcrossings may create (heat, light-sources, wind breakage, subsidence and soil seismicity variations) may have effects on the crop production areas they are located in and should be analyzed in this Document.
 - Although discussed in Section 3.14.5.1, wind effects (referred to as “wake” in the Document) caused by the HSR vortex were not fully analyzed to include comparisons of typical valley floor wind patterns throughout the seasons. Disruption of these seasonal wind patterns can have

3

663-4

drastic effects on local agricultural operations, which rely on the wind to negate frost impacts to crops. In addition, the effects of this vortex on apiary production and pollination –a \$26 million industry in Madera County (2010 Agricultural Crop Report, Madera County Department of Agriculture), which we rely upon were not analyzed in detail in the Document. In addition to being a major agricultural industry in Madera County, countless tree fruit, nut, and other specialty crops rely on cross-pollination throughout the year and would be economically distressed were there to be a disruption system-wide of the pollination process.

In addition, we feel that the following impacts, although discussed in this Section, are marginalized and their significance not adequately designated.

- The DEIR/EIS does not discuss in great-enough detail impacts related to bifurcating farmland, the effects of replacing wells, pipelines, and irrigation systems. As previously mentioned, farming operations may cease to exist if even a small portion of these activities are disrupted due to the financial strains placed on the businesses. Mitigation is not included in the DEIR/EIS and deferring to the right-of-way process is a violation of CEQA (Public Resources Code§21003.1(b)) as adequate mitigation is required in the case of a significant impact caused by a project.

663-5

Section 3.18 Regional Growth

The DEIR/EIS indicates throughout the document and again in this section that the Project would not create regional growth but would serve to enhance the planned communities of the Central Valley. We take issue with this statement as Madera County has some of the lowest housing costs in the State, contained only through some geographic isolation. There is a presumption in the Document that the thousands of HSR passengers and employees would not affect the existing population of Madera County. When higher paying jobs are a short train ride away, this presumption cannot be accurate. This impact should be included as a significant one, and one that also requires mitigation to Madera County to address this potential for rapid growth –additional urban sprawl from the communities of Merced and Fresno (to which the Project will include Stations to), and consequently roadway and highway impacts during this plausible population expansion.

Lack of Project Business Plan and Obligation under the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970

We take issue with the Authority’s judgment to publish a DEIR/EIS without having completed an operational business plan to date. Estimates of profit, loss, ridership, and feasibility of the Project are reliant on business models from other countries’ HSR systems –a situational discrepancy for the State of California, in which operational efficiency functions very differently because of the higher costs of living, permitting, and constructing a project. These discrepancies should be remedied prior to the issuance of an FEIR/EIS. In addition, mitigation measures that are applicable to the Project and its affected constituency –may not have been included in this DEIR/EIS, because there is no business plan. By way of example, if the Authority had developed a business plan detailing a clear definition of Project value –the costs of permitting and constructing the HSR, versus the profits generable by the Project, overall

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Submission 663 (Michele Lasgoity & Mark S. Peters, October 13, 2011) - Continued

663-6

alternatives posed for consideration may change. This again, should be evaluated against all other Project impacts prior to making a decision on the most practical alternatives.

Moreover, we take issue with the Authority's extensive reliance on Title 49, Part 24 CFR, the Uniform Relocation Assistance and Real Property Acquisition Act. Based on the Federal cost-share rules from the Federal Transportation Administration (FTA) (28 U.S.C. § 2412 (d)) for this project –the FTA is NOT ABLE to provide monetary assistance for relocation or condemnation due to the type of funds being used. Any selection of a highway re-alignment or in this case, one of several alternatives proposed, requires the FTA to defer to the Federal Highway Administration (FHWA), which is not obligated under statute to participate in the condemnation proceedings. Furthermore, NEPA does not require any Federal agency in this case to value the land or property at a high level [49 CFR 24.102(c) (2) (ii)], increasing the likelihood that condemnation proceedings and ALL funds for these efforts will be undertaken by the State of California and its tax-payers. The details of property acquisition were not included in a budget manifesto in the original Proposition 1A intent or bylaws. We stipulate that this impact is not accounted for on any level in the DEIR/EIS and has not been properly analyzed to allow the Project to move forward with the FEIR/EIS phase. As a significant, potential cost –this Project impact should be included for ALL alignment alternatives.

663-7

Although CEQA provides for minimum 45 day statutory review period for the DEIR/EIS, as well as the granted additional 15 days for review by the public of this document- we feel that the 60 day review period was far too short given the quantity of new information in the document. The alignments proposed in the Project have changed throughout time, and outreach with our affected membership takes time to make them fully aware of how they may be affected –a process which should have been taken on by the Authority with more due process.

If you have any questions or need further information, please contact me at (559) 217-2985 or via email at, michele.lasgoity@hughes.net.

Sincerely,

Mark S. Peters

559-240-4345

Michele Lasgoity

559-217-2985

Response to Submission 663 (Michele Lasgoity & Mark S. Peters, October 13, 2011)

663-1

See MF-Response-AGRICULTURE-7.

663-3

See MF-Response-AGRICULTURE-4. With regard to the commitment to funding the mitigation measures, see MF-Response-GENERAL-1 and MF-Response-GENERAL-18.

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See MF-Response-GENERAL-4, MF-Response-WATER-1, MF-Response-WATER-4, MF-Response-GENERAL-2 (with regard to the Wye decision), MF-Response-SOCIAL-8, MF-Response-AGRICULTURE-4, MF-Response-AGRICULTURE-5, MF-Response-AGRICULTURE-1, MF-Response-AGRICULTURE-2, and MF-Response-AGRICULTURE-3. With regard to regional transportation impacts, see the analysis in EIR/EIS Section 3.1 (Transportation). With regard to the Madera County Right-to-Farm Ordinance, text has been added to Table 3.14-1 to acknowledge this law. These ordinances help protect ongoing agricultural operations from nuisance complaints, typically originating from new residential areas. There would be no conflicts with the HST project. With regard to local significance thresholds and mitigation standards, Madera County does not have a standard mitigation ratio for farmland impacts.

Impacts related to shading are considered to be minor. New roadway crossings over the proposed HST would be about 30 feet high on average; embankments would have 2:1 slopes or flatter. Therefore, adjacent crops would be greater than 60 feet from the top of the embankment at its highest point. At this cropping distance, changes to the amount of sunlight received would be minimal, and temperature changes would likewise be minimal. However, if there were shading effects, these effects would be greatest on crops planted on the north side of east-west trending roadway crossings. Where roadways run north-south, and crops are located to the east or west of proposed roadway crossings, adequate sunlight should be available to supply the needs of all crops.

Specifically with regard to almonds, photosynthesis occurs at the maximum rate in almond trees at one-half full sunlight; that is, when light levels are one-half the intensity of that at solar noon (University of California, 1996). Full sunlight only reaches leaves on the outer surface of almond tree canopies, with inner leaves being partly shaded by

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outer leaves. Therefore, most leaves on mature almond trees function well with relatively little light. It is unlikely that shading effects from HST embankments would reduce sunlight received by adjacent almond trees to levels that would adversely affect photosynthesis.

With regard to grapes, sunlight and temperature are important parameters for optimum fruit ripening, and absolute requirements depend on the variety of grape being grown. Varietal differences in climatic requirements are demonstrated by the fact that grapes are grown in most areas of the state, including the Sierra foothills, coastal regions across the state, fog-affected inland regions such as Lodi, and the San Joaquin Valley. Importance of light on grape berry development and quality was shown by Dokoozlian and Kliewer (1996) for 'Cabernet Sauvignon' and 'Pinot noir' grapes. As mentioned above, shade effects are expected to be minimal for the Merced to Fresno section of the HST; if minor shading effects to grape fruit quality were to occur, these effects would be limited to vines grown closest to the embankments. On a field scale, effects would likely be negligible.

A small period of shading during the growing season may be beneficial to certain crops. This could occur through moderation of transpirational water loss, heat effects, and sunburn. Additionally, roadway overpasses may provide a wind break, which may be beneficial to growth and yields of certain crops.

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See MF-Response-GENERAL-3.

663-6

See MF-Response-SOCIAL-1.

663-7

See MF-Response-GENERAL-7.

Submission 812 (Ed LeTourneau, October 13, 2011)

Comment Period Extended to
October 13, 2011

El periodo a hacer comentarios
está prolongado hasta del
13 de octubre de 2011

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CALIFORNIA High-Speed Rail Authority

Comment Card Tarjeta de Comentarios

Merced to Fresno High-Speed Train Section **Tren de Alta Velocidad Sección Merced a Fresno**
 Draft Environmental Impact Report/ Anteproyecto del Informe de Impacto
 Environmental Impact Statement (EIR/EIS) – Medioambiental/Declaración de Impacto
Public Hearings **Medioambiental (EIR/EIS) - Audiencias Públicas**
 September 2011 Septiembre 2011

Please submit your completed comment card at the end of the meeting, or mail to: Por favor entregue su tarjeta al final de la reunión, o envíela a una de las siguientes direcciones:

Merced to Fresno HST Environmental Review, 770 L Street, Suite 800, Sacramento, CA 95814

The comment period on the Draft EIR/EIS begins August 15, 2011 and ends September 28, 2011. Comments received after September 28, 2011 will not be addressed in the Final EIR/EIS. El periodo a hacer comentarios empieza a 15 de agosto y termina a 28 de septiembre. Comentarios recibidos después de 28 de septiembre no se responderá en el EIR/EIS final.

Name/ Nombre: Ed LeTourneau Organization/ Organización: _____

(Optional/Opcional) Address/Domicilio: 23668 Ave17 Phone Number/ Número de teléfono: 559 673-4008

City, State, Zip code/ Ciudad, estado, código postal: Madera CA 93637 Email address/ Correo electrónico: _____

812-1

It makes more sense to me to have the California High Speed Train Transportation System to travel the I-5 corridor. This surely must have been considered but I see very little studies on this. It seems to me that a lot less farm land and city properties would be impacted. The only problem I can see is no access to Merced or Fresno stations. A connection from these two stations to the I-5 Rail seems would impact less farm and city properties and would be a more feasible alternative to the present plan.

Response to Submission 812 (Ed LeTourneau, October 13, 2011)

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See MF-Response-GENERAL-2.

Submission 96 (Julie Lister, September 12, 2011)

Merced - Fresno - RECORD #96 DETAIL

Status : Action Pending
Record Date : 9/12/2011
Response Requested :
Stakeholder Type : CA Resident
Submission Date : 9/12/2011
Submission Method : Project Email
First Name : Julie
Last Name : Lister
Professional Title :
Business/Organization :
Address :
Apt./Suite No. :
City :
State :
Zip Code : 95814
Telephone :
Email : julielister@sbcglobal.net
Cell Phone :
Email Subscription :
Add to Mailing List :
Stakeholder
Comments/Issues :
EIR/EIS Comment : Yes

96-1

I am opposed to this project on many levels:
1. The cost is speeding out of control and neither the federal or state governments have money for it.
2. It is a project that is doomed to fail.
3. It was foolish to plan to begin the project from Borden to Corcoran, nowhere to nowhere.
4. My family owns a farm in Le Grand that my father spent his entire life working and developing. We do NOT want a train racing though that sacred farmland. We need the farmland to feed our country and the world.

This is too massive and uncertain a project now for our fragile economy.
Respectfully submitted,
Julie Lister

Response to Submission 96 (Julie Lister, September 12, 2011)

96-1

See MF-Response-GENERAL-14.

Submission 793 (D.B. Looney, October 13, 2011)

CAHSR Authority

770 L St. Suite 200

Sacramento, CA 95814

These questions and comments are in response to the Draft EIR/EIS on HSR in Merced and Madera Counties. I will be focusing on the Biological sections of this report.

A few years ago on my way to work I observed the carcass of a juvenile Golden Eagle about one foot from the west BSNF track a few miles south of Le Grand. I collected it as I had the appropriate federal salvage permit, called the USFW agent in Clovis, froze it, and delivered it to him later for a necropsy. It had a broken neck, both wings, and leg and no apparent bullet wounds. I concluded that it had been "Amtrak'd", and that this would be one great example of what I would define as a very "significant impact". Perhaps this letter will identify a few more of these potential negative impacts of the HSR to our area.

Although research for two of my graduate degrees focused on statistical analysis/wildlife in central Alaska, I have some general working knowledge related to the natural sciences from Yosemite area west to Monterey Bay. This general knowledge was the result of my leading ongoing introductory level field studies conducted through a mentor teacher program grant. I have active administrative/teaching credentials for k-14. I have a general level of knowledge of the watersheds from the Merced River to the SJ River and more specific knowledge from the Bear Creek watershed to the Fresno River watershed, and very specific experience of the Chowchilla River Watershed. Perhaps more importantly to this discussion, both my father and grandfather had cattle farming operations on Berenda and Ash Sloughs (branches of the Chowchilla) along part of the proposed HSR route. This is where I grew up in the 1950's. I've frequently traveled (with a camera and spotting scope) along parts of the "HSR Santa Fe Detour" route and currently average about 70 miles each week on the ground (hike, bike, or kayak) in the Santa Fe area west to and beyond Hwy. 99. I have worked voluntarily with USACE, monitoring Eagles at Eastman Lake and with CDFG monitoring Eagles and other raptors near the BNSF route and downriver from it. It has been quite awhile since I analyzed an EIR/EIS, so please be patient with my inexperience and any potential problems with the current vocabulary. I work completely independently and don't do this for a living, so please forgive and educate me, if I make any misinterpretations of your data.

General Concerns:

It seemed that some of the field studies for this EIR/EIS were driven by budgetary/funding deadlines for funding rather than thorough scientific investigations of route alternatives and actual impact on the area. I.E.: At my neighbor's request I met and spent several hours with four of your employees who were doing field studies for you (HSR). They were polite and professional, however seemed somewhat unaware of the very thorough and recent studies (some related to the UC Merced Campus) done on wildlife/vernal pool ecology etc. along the BNSF route. (I asked them very specifically about this and didn't find these listed in your study index.) More importantly, they were not present at the most opportune time (which varies dramatically with wet to dry years) to identify all the listed species of

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concern. I suspect that the rush to get this done may have resulted in some of the inaccuracies and amount of "nebulous data" used to extend the volume and complexity of this report without actually quantifying or ranking site and route impacts in a way that the public could evaluate rationally.

Q#1: Was the quality and biological accuracy of this EIR/EIS affected directly or indirectly by budgetary/funding deadlines?

793-2

In regard to "nebulous data", there seemed to be an inordinate percentage of equally defined impacts on all routes and HMFs (Maintenance Facility Sites) compared in the study. There is a major difference between just "filling in the blanks", and actually ranking the biological impacts on the routes and sites being considered. On page S-43Table S-5 (A) "Comparison of Potential Adverse Effects of HST Alternatives" all three alternatives are equally rated on 42 of 44 (95%) biological impacts. Another example in this study in the Biological and Wetlands Technical Report is Table S-21 on 5-105 (B), 37 of 40 (88%) of the impacts on 8 species are ranked equally for the five HMF sites. The site with a reservoir is ranked equally for impact on fish with a site that has no apparent water source. (On page 3.7 A2-6(C) where the potential to occur for five species of birds is ranked equally on the five HMF sites, I've recorded three separate flights of over 200 Swainson's (and many smaller ones) along the BNSF route on or near the Kojima Site since 2004 (the majority of the birds in the last one on 8-7-2011, actually roosted along the Kojima site that night), while "their potential to occur" on this appendix is ranked as moderate for the BNSF Alternate and High for the other two Alternates (?). On page 3.7A1-1(D) four plant species (one of which is more associated with vernal pools) all have the same rating for all alternatives and all sites. I suspect that a more thorough study would be able to identify more quantifiable differences between both routes and sites. Even more concerning was that in Table 3.7-30 on 3.7-132 (E), the alternatives were not considered individually and those impacts were lumped into "Construction of HSR Alternative would....", rather than making distinct route comparisons.

Q#2: If one focus of this study to compare routes and sites, for public comment, why was this part of the CEQA analysis done on combined "alternative" routes rather than individual routes, and why was there so little quantitative analysis done for comparison/contrast?

793-3

I noticed that several chapters of the report including this one used this disclaimer: "Where access was granted..." I felt this could be the reason that there was so little quantitative analysis in this report and so many potential inaccuracies, but even after reviewing the Biological and Wetlands Technical Report I was unable to determine where your employees actually had access. I.E.: This report states on page 5-64 that "Invertebrates: The BSNF Alternative contains a relatively small amount of vernal pools and other seasonal wetlands...." After reading this, I rode over to one area along the BNSF route and counted a minimum of 11 vernal pools and one playa pool on the west side and directly adjacent to the BNSF tracks and 12 vernal pools on the east side and directly adjacent to the tracks of the same area which was just over ¼ mile in length. If the area within about 150 yards was also considered, it would include at least another dozen vernal pools. The vernal pool vegetation was more pristine on the east side of the tracks (probably supported more branchiopods), but vernal pool plants were still visible on both sides of the tracks. I had encouraged the biologists I met to look at this area as much of it is visible from public roads. I believe I could see at least 16 vernal pools near the BNSF route while standing on the public

793-1

Submission 793 (D.B. Looney, October 13, 2011) - Continued

793-3 road earlier this winter. I called your office over a week ago asking where I could locate information in the report regarding where they had actually surveyed as I might have overlooked it, and have so far had no response.

Q#3: Could you provide a map of the areas to which they had access and the dates they were there?
Q#4: If this is considered a "relatively small amount of vernal pools", what statistic was used to validate this observation? Q#5: Were images of vernal pools during wet years used?

793-4 For the safety of the eagles, I don't feel comfortable writing about densities, nest sites etc., however, after I read page 5-31 (F) of the Biological and Wetlands Technical Report, I determined that your reliance on CNDDDB-reported occurrences ("However there are no CNDDDB reported occurrences of this species (BE) within 10 miles of the project footprint (CNDDDB 2003e).") to determine where species exist is totally inadequate for this one. Likewise, the "the potential to occur" on page 3.7A2-5 (G) shows them being equally rated as moderate for all five HMF sites, which is totally inaccurate compared to actual occurrence.

Q#6: Wouldn't the public be better informed on this decision if verified data was used rather than "potential" to occur? (By your criteria, grizzly, elk, and antelope all have the "potential" to occur in this habitat.)

793-5 Page 2-83 of the EIS/EIR states that the Kojima site "is conditionally offered at no cost to the Authority". I believe this is totally inaccurate regarding the owner/farmer of the rangeland on the northern part of this proposed HMF site which contains vernal pools, extensive riparian habitat, wetlands, migratory waterfowl, numerous listed species etc.

Q#7: Could you provide documentation of this owner's abrogation of his property rights?

793-6 This study makes numerous projections about efficient energy use.

Q#8: Have any calculations been done on the energy inefficiency of the added miles of travel (not minutes) on the BNSF Alternative (detour), or around it, and the daily energy consumption of employees commuting about ten miles per day off Hwy 99 to the Kojima site?

793-7 I have some concerns about statements you make in the EIS/EIR like "follows existing transportation corridors when feasible", or "avoids environmental resources to the extent practical" as these seem quite subjective (as the proposal of the "detour routes" have indicated).

Q#9: Who will ultimately get to define these terms and are rural roads and farms/ranches/riders considered transportation corridors?

793-8 Understanding the ecology of the Chowchilla River Watershed and the area near it is especially significant due to Eastman Lake/Bear Creek Connectivity corridor, the many common aspects that it shares with other watersheds along the BNSF route, and especially because the Berenda branch/Reservoir is the northern border of the Kojima site.

793-8 Connectivity issues go far beyond Eastman Lake in that the East Fork begins just west of Wawona in YNP. The three forks of the river merge above Eastman Lake. It flows in the natural channel until the northern channel is blocked about a mile above the distribution weir near the mouth of the Madera Canal. The remaining southern channel flows to the weir where the Ash and Berenda Sloughs branch and a canal goes north to redistribute water back into Chowchilla channel. The water comes from both the Chowchilla and San Joaquin and the majority (except when flooding) flows down the Berenda to the Berenda reservoir. The Chowchilla has a much smaller but steady flow, Ash Slough is used for flood control in the winter as it was this year, but unless it is a wet year, summer flows on the upper channel are limited, but there is some flow again in the natural channel above Hwy 99. This flow normally comes primarily from a canal at the end of the Berenda Reservoir.

The channels near the BNSF route, especially the Berenda, still have significant riparian habitat, and significant floodplains. This habitat diminishes as the water is diverted into canals for irrigation, before it reaches Hwy 99 (the Berenda) or just after (Ash and Chowchilla), and the channels narrow significantly (especially the Chowchilla and Berenda) until they eventually go into bypasses west of Hwy 152/Hwy 59. On unusually wet years like this one, excess water will be used in these channels to recharge the aquifer, but normally they are dry in this area especially in the summer, which greatly affects the habitat. Also, in the Hwy 99 area and beyond, the riparian habitat of the Berenda and Ash channels was heavily manipulated (bulldozed) for flood control etc. in the past, and this allowed Arundo Donax which was purposely planted in the late 40's and 50's (for bank stabilization) to dominate the riparian habitat in these areas and downriver (see Arundo pamphlet). The intensity of agricultural, freeway, train, and urban activity both increase as these riparian habitats diminish near Hwy 99.

Though mentioned but not analyzed specifically in your report, the Berenda Reservoir is about one and a half miles long and is the northern border of the Kojima site. It is a flyway, an important link to Eastman Lake, and provides varied habitats. It is a key area for a large variety of resident wildlife in spring and summer, and is also used extensively during fall and winter by migratory species (shorebirds, raptors, owls, waterfowl etc.), especially during wet years like 2006 when it remained full through the winter and the fishery built up.

Consequently, the diversity and abundance of both listed and non listed species is much greater near the BNSF route/Kojima site than the HWY 99 route/three (I'm not including Castle, as I'm not that familiar with it.) other sites, and each route and particularly each HMF site is biologically unique, I believe any thorough biological survey done over time would support this, thus yours seems inadequate. (Several of the other watersheds in this study area follow similar patters as they approach Hwy 99.)

Q#10: If a complete statistical analysis of all your comparative tables related to impacts for species for the three routes and five sites were completed, what would be the total percentage in which they were ranked equally?

793-9 I spend very little time on the BNSF tracks, however, have found carcasses of raptors (see above), owls, badgers, and even domestic dogs including a Great Pyrenees (who was guarding a flock of sheep) on or next to the tracks. These appeared to have been hit by trains, and I suspect Amtrak due to their speed

Submission 793 (D.B. Looney, October 13, 2011) - Continued

793-9 | and comparative quiet. I would suspect that the "bullet trains" traveling three times as fast and being "reportedly quieter" would have even more fatal impacts. (I'm curious about low flying insectivores like bats, nighthawks, swallows nesting on bridges, etc.)

Q#11: Was this "track mortality" on wildlife or domestic animals considered thoroughly in this study, and if fenced off how would these fences negatively affect wildlife movement patterns?

793-10 | I found only a brief reference to Fresno Kangaroo Rats, yet have seen two (I suspect) Merced Kangaroo Rat carcasses near the BNSF route this last year.

Q#12: Were Merced Kangaroo Rats considered in this study?

793-11 | Ephemeral streams which sometimes connect vernal and playa pools are numerous along the BNSF route. They were very obvious (running over and down roads) this winter during the flooding.

Q#13: Were these streams identified and the impacts of your project on them considered in your study?

This varies greatly from year to year, but I have observed some major amphibian migrations between vernal pools as they dry out in the spring.

Q#14: How will the BNSF route impact these migrations (especially spadefoot toads and tiger salamanders)?

793-12 | The Harris-DeJager HMF and Kojima HMF sites appear to have extremely different habitats.

Q#15 On Table 3.7-29(H) were the conclusions of the Harris-DeJager and Kojima sites switched?

793-13 | In table S-5 page 43, I question your findings that the biological impacts on the BNSF route would have "less than significant impact". (I agree with those you rated as "significant", however, had you actually ranked the three routes, the BNSF route would generally have a more significant impact because of the diversity of habitat and greater presence of listed species.) I believe the impact would be significant even after mitigation along the BNSF route for the following: Bio#1: The star thistle introduced from the last railroad construction project still hasn't been controlled. Bio#2: It would take out several trees with active raptor nests. Bio#5&26: It would destroy numerous elderberry bushes growing in riparian habitat. Bio#6&27: It would destroy their habitat and affect their movement (see earlier vernal pool discussion). Bio#7&28: It would destroy vernal pool habitat and restrict their movement between pools. Bio#8&29: It would restrict their movement. Bio#10&31: They utilize the riparian corridors along this route extensively and have nested on both sides of this route. Bio#11&33: It would disturb them. (This spring one adult red shouldered hawk from an active nest next to the tracks appeared to have been "amtraked".) There are several active raptor nests either on or within 100 yards of the proposed route. Also long eared owls have nested on both sides of this route. Bio#13&34: It would disrupt their feeding patterns especially over water. Bio#14&35: It would cover up some dens and affect their movement. Bio#15&36 Restriction of their movement would affect success of dens and if fenced make them more vulnerable to predation. Bio#16: Covering up vernal pools wouldn't be "temporary". Bio#23: "vernal pools" not addressed in Bio#2 as stated.

793-13 | Productive farms and ranches are positively linked and critical to preservation of natural resources. In that regard, the negative impacts to both types of resources would be much greater if the "HSR detour/BNSF route" and Kojima MF site were developed. (Under federal and state regulations and your own (S.6) "Measures to Avoid and Minimize Impacts", I would question the legality of these impacts along this route.) The Hwy 152(not Ave. 21/24)/Hwy 99 route would have less impact, and Hwy 5 would be even more appropriate to meet your stated goals.

Thank you for your consideration.

D. B. LOONEY

Bx 468
LeGrand, CA
95333

Response to Submission 793 (D.B. Looney, October 13, 2011)

793-1

See MF-Response-BIO-1. Limited access to privately owned parcels within the construction footprint(s) required all impact analysis within the EIR-EIS to assume presence for all special-status species that have suitable habitat (as identified within the Biological Resources Technical Report. Also see Section 3.7.3 of the Final EIR/EIS regarding the methodology for analyzing biological impacts.

793-2

Limited access to privately owned parcels within the construction footprint(s) required all impact analysis within the EIR-EIS to assume presence for all special-status species that have suitable habitat (as identified within the Biological Resources Technical Report). As all special-status species are treated as present within the construction footprint per USFWS/CDFG impact assessment methodology, quantitative assessment focuses on acreages of identified suitable habitat for each special-status species. Once acreage calculations are finalized for special-status species, avoidance measures as well as a Mitigation Strategy and Implementation Plan (MSIP) will be developed in coordination with regulatory agencies prior to ground disturbing activities. Preconstruction surveys will be conducted for state and federal listed species within the construction footprint and its defined buffers to effectively implement avoidance measures and the MSIP (See MF-Response-BIO-5).

Mitigation measures are discussed in Section 3.7.6.1 of the EIR/EIS. Potential affects to breeding pairs of Swainson's hawks are addressed under BIO-MM#54, Compensate for loss of Swainson's hawk Foraging Habitat. Migrating flocks of Swainson's hawks will be covered under this mitigation measure as well as those identified for native birds protected under the Migratory Bird Treaty Act. Fencing will be designed to minimize train related mortality for wildlife species, particularly special-status species (e.g. California tiger salamander, San Joaquin kit fox, Swainson's hawk). Fencing will work towards guiding wildlife towards suitable passages. Wildlife movement corridor implementation is discussed within Bio# MM #46-48.

793-3

See MF-Response-BIO-1 and MF-Response-BIO-5.

Reconnaissance level surveys which field verified habitat identified in aerial mapping

793-3

were conducted from the road if direct access was not available to parcel(s). Road surveys were not utilized to determine the presence or absence of special-status species. Full details on the methodology for habitat evaluation can be found in Section 3.3, Pre-field Investigations, of the Biological Technical Report. Special-status plant surveys were the only special-status surveys conducted to date for the Merced to Fresno HST section. Parcels that were surveyed for special-status plants surveys were limited to 10 percent of the alternatives footprint due to accessibility issues. Please see Appendix D of the Merced to Fresno Section Special-Status Plant Survey Report (Authority and FRA 2011c) for a list of accessible parcels during special-status plant surveys. Limited access to privately owned parcels within the construction footprint(s) required all impact analysis within the EIR-EIS to assume presence for all special-status species that have suitable habitat (as identified within the Biological Resources Technical Report.

As all special-status species are treated as present within the construction footprint per USFWS/CDFG impact assessment methodology, quantitative assessment focuses on acreages of identified suitable habitat for each special-status species.

793-4

See MF-Response-BIO-5.

The CNDDB special-status species search results are verified occurrences utilized within the CEQA process for identifying special-status species within a study area. As access to properties was limited, the CNDDB results provided a guideline for assessing which species had a potential to occur within the identified habitat within the Study Area. The potential for a particular special-status plant and wildlife species to occur was assessed based on the presence or absence of suitable habitat identified in the habitat study area. Each special-status species was ranked as having no potential, unlikely potential, low potential, moderate potential, or high potential to occur in the study area. The moderate potential for golden eagles acknowledges that as wide ranging predators, their foraging and nesting territories likely overlap with the Study Area. However, no supporting technical data (CNDDB occurrences/field verification) is available to confirm a high potential to occur within the Study Area. A high level would consist of documented nesting site(s) within the Study Area. Preconstruction surveys will be

Response to Submission 793 (D.B. Looney, October 13, 2011) - Continued

793-4

conducted for golden and bald eagles prior to ground disturbing activities to guide the implementation of avoidance and mitigation measures found in Section 3.7.7, Mitigation Measures.

793-5

This text has been revised as follows: "Part of the property conditionally offered at no cost to the Authority".

793-6

Energy use calculations were not conducted for each alternative, since the difference in total length of route among alternatives is small compared to the approximately 520 miles of Phase 1 or 800 miles of the full system and the difference is expected to be negligible.

Energy used to travel to or from HMF sites has not been included in the energy consumption estimates for the CA HST. This energy use is assumed to not represent a significant portion of consumption. Moreover, it is difficult to calculate the change in energy consumption since HMF employees are assumed to have been travelling to work elsewhere, and their energy use would be a shift in location not an addition.

793-7

See MF-Response-GENERAL-2.

The CHSRA is responsible for selecting the routes while balancing the competing objectives of utilizing existing transportation corridors where feasible and minimizing environmental impacts. Local roads have not been considered transportation corridors for purposes of selecting the alternative routes.

793-8

See MF-Response-BIO-2.

Wildlife connectivity is a priority mitigation objective for the Merced to Fresno HST Section. Wildlife exclusion and permeability will be addressed within the Mitigation Strategy and Implementation Plan (MISP) through the strategic utilization of fencing and

793-8

underpasses appropriate to specific special- status species. Interactions between migratory wildlife which utilize the Eastman Lake Reservoir and other aquatic habitats and the High Speed Rail will be minimized through the implementation of physical and spatial barriers along the HST Merced to Fresno Section. Physical barriers include security fencing and other devices (mesh netting, wires etc.) that will place a division between the HST corridor and the surrounding landscape. Spatial barriers are planning tools identified during preconstruction surveys that will minimize wildlife interactions through land use planning, shifts in activities, and mitigation. The integration of physical and spatial barriers within the Merced to Fresno HST Section during the design build phase will minimize impacts to migrating wildlife species within the landscape. Permeability will be situated to connect areas of suitable habit and/or specific landscape features (i.e. vernal pools, washes) as feasible with project requirements. Fencing will be designed to minimize train related mortality for wildlife species, particularly special-status species (e.g. California tiger salamander, San Joaquin kit fox, golden eagle). Fencing will work towards guiding wildlife towards suitable passages. Wildlife movement corridor implementation is discussed within BIO-MM #46-48 in Section 3.7.7 of the Final EIR/EIS.

793-9

Wildlife mortality studies on existing transportation corridors have not been conducted for the Merced to Fresno HST Section. Potential collisions between migratory wildlife and the High Speed Rail will be minimized through the implementation of physical and spatial barriers along the HST Merced to Fresno Section. Fencing will work towards guiding wildlife towards suitable wildlife underpasses which will perform. See MF-Response-BIO-2 and 3.7.5.3 of the Final EIR/EIS, under the heading, Wildlife Movement Corridors, for more information on project impacts.

793-10

Merced kangaroo rats are currently not a special-status species under federal or state jurisdiction. Merced kangaroo rats inhabit annual grasslands in the eastern portions of Merced and Stanislaus counties areas that are denuded of vegetation. San Joaquin kit fox (SJKF) and California tiger salamander (CTS) utilize annual grasslands for foraging, breeding, and aestivation. Mitigation measures 45 through 47 (EIR 3.7-126) for wildlife movement corridors will facilitate the movement of Merced kangaroo rats and mitigation

Response to Submission 793 (D.B. Looney, October 13, 2011) - Continued

793-10

measure 51: Compensate for Impacts on California Tiger Salamander (3.7-128) will compensate for potential affects to Merced kangaroo rat habitat within the Action Area. .

793-11

Ephemeral streams were identified during field reconnaissance surveys and subsequently were evaluated as ephemeral streams during impact calculations for Wetland and Waters of the US. Ephemeral streams will be delineated in preconstruction surveys during the design build phase in accordance to BIO-MM#57, Conduct Delineation of Jurisdictional Waters and State Streambeds. Once delineated, any potential affects to ephemeral streambeds will be mitigated through BIO-MM#58 Prepare and Implement a Habitat Mitigation and Monitoring Plan.

Wildlife exclusion and permeability measures will be implemented to facilitate the continued movement of amphibians along ephemeral streams that connect breeding pools. These measures will be addressed within the Mitigation Strategy and Implementation Plan (MSIP) through the strategic utilization of fencing and underpasses appropriate to specific special- status species. Permeability will be situated to connect areas of suitable habit and/or specific landscape features (i.e. vernal pools, washes) as feasible with project requirements. Fencing will be designed to minimize train related mortality for both terrestrial and aerial wildlife species, particularly special-status species Fencing will work towards guiding wildlife towards suitable passages. Wildlife movement corridor implementation is discussed within BIO-MM #46-47 (Final EIR/EIS 3.7.7).

793-12

The assessments for Harris-DeJager HMF and Kojima HMF sites were not switched within Table 3.7-29 of the Draft EIR/EIS. Table 3.7-29 does not assess acres of habitat available but focuses on the permeability of the landscape through watercourses (Ash and Berenda slough riparian corridors). Tables 3.7-23 and 3.7-24 to assess acreage of terrestrial and aquatic community impacts per HMF Alternative. The Kojima HMF site impacts more vernal pool habitat than the other HMF alternatives whose impacts are other communities such as Great Valley mixed riparian forest, coastal and valley freshwater marsh, and disturbed land cover types such as agriculture.

793-13

The area north of Chowchilla has minimally impacted by land disturbance activities and retains more biological integrity than the other alternatives. The BNSF alternative has greater impacts to biological resources due to the presence of vernal pool complexes within the Alternative north of Chowchilla. Critical habitat has been designated for six vernal pool species (three vernal pool branchiopods and three plants). The mitigation measures described in Section 3.7.7, Mitigation Measures, will minimize and mitigate effects to biological resources within the BNSF Alternative but will not prevent effects from occurring. The EIR process will determine the Least Environmentally Damaging Practicable Alternative (LEDPA) for the Merced to Fresno HST Section; this process will incorporate the biological resources within the BNSF Alternative into the decision making process.

Submission 802 (Bowman Looney, October 13, 2011)

RECEIVED

10-13-11P02:01 RCVD

To HSR Authority

10-10-11

This letter focuses on the cultural and paleontological resource section of the HSR Draft EIS in Madera and Merced Counties.

My comments here focus on the Chowchilla watershed and creeks and streams near it.

I've spent over 60 years off and on walking the watersheds in Madera and Merced counties, taught Native American Studies (focusing on the original people of California), have assisted surviving tribal members of the local watersheds with village site identification, and worked seven years on a large reservation in Northern California. Consequently, my insights into this culturally sensitive area are probably a bit unique. At my neighbor's request, I spent about five hours walking with six of your people who were sent to study this earlier this year. I learned that none identified themselves as tribal people, they were positive and polite, enjoyed meeting a real bull, yet (I assume due a deadline) were faced with the nearly impossible task of trying to locate surface artifacts in heavily vegetated rangeland, during a wet year.

802-1

Question: Did your team have access to other areas (especially watersheds) along the BNSF route (and when)?

There are both documented and also undocumented village sites along the alternative routes you are considering. Generally, water availability which affected Valley Oaks and other wildlife was a critical factor in population densities along these watersheds. My experience indicates that it lessened as the rivers flowed west until they neared the San Joaquin where it again increased. Therefore, the BNSF route alternative would affect at least three (possibly several more) relatively undisturbed and undocumented sites. There is less potential for disruption of sites along Hwy 99 and Hwy 152, because of their downriver locations, but also because the size of the "footprint" of impact has already been huge due to the lack of regulation regarding these issues during past construction projects when they widened the highways and did extensive "channel mining" in the rivers on both sides for the materials to create them. Also "flood control" measures affected the channels near Highway 99 when they were bulldozed in the past.

Consequently, due to their more pristine nature, I would completely discourage the use of the BNSF alternative route and Kojima site. The Ave 21 or 24 routes could be impacting where they cross the sloughs. Using Hwy 152 and Hwy 99 would be less disruptive to the resource because it has already been disrupted significantly there in the past.

802-2

Question: Will local tribal members (Chaushila) be involved with your people during your ongoing research on this project?

Thank you.

Bowman Looney

Bowman Looney
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Le Grand, CA.
95353

Response to Submission 802 (Bowman Looney, October 13, 2011)

802-1

See MF-Response-CULTURAL-3, MF-Response-CULTURAL-7, and MF-Response-CULTURAL-9.

802-2

See MF-Response-CULTURAL-3, MF-Response-CULTURAL-7, and MF-Response-CULTURAL-9.

Submission 809 (D.B. Looney III, October 13, 2011)

RECEIVED

10-13-11P02:01 RCVD

To HSR Authority

10-10-11

These comments will address the Agricultural Lands section of the draft EIS related to HSR in Merced and Madera Counties.

In the 1950's both my grandfather and father had different cattle/farming operations which bordered about two miles of Hwy 152. Herding Aberdeen Angus (black) off this highway at night in the fog after a vehicle had taken out our fence was one very memorable experience of farming along a "transportation corridor". In about 1970, after it became a "four lane", I received my last traffic ticket when a CHP literally followed me into a field to write it out for me after I made a (newly illegal, but safe) U-turn so I could get back quickly to shovel up a broken ditch and avoid having to turn off the pump and restart a 90 siphon set. As I stood in the mud shoveling away, I tried to explain this to him, but it soon became obvious that we had very different priorities that day. Ironically, I had used the highway rather than our parallel farm road as they had encouraged us to limit the dust across the highway for safety reasons. We lost some prime farm land (a finite resource), but adjusted to the new highway as did the other farmers along the route. This right of way exists, the impact has happened, it seems highly illogical now to use Ave. 21 or 24 and impact everyone trying to farm in those areas too. It seems even more illogical to detour off Hwy 99 (and existing right of way) on the BNSF route, destroy more farm land, substantially increase the distance of the route/tracks (energy use), create even more road closures and access issues for farmers and ranchers by not using the existing transportation corridors as mandated.

809-1

Question: Why wasn't Highway 152 considered as at least one of the alternatives?

In general, considering the tremendous importance of agricultural production to our community and country, I felt the agricultural lands section of only 39 pages was surprisingly minimal and lacked depth, particularly in the areas of actual negative impacts (like underground irrigation infrastructure) to producers when existing corridors aren't used. With your population projections and impacts, "moving" people seems important, but feeding them will be even more critical. Consequently, your project's impact on farm land at this point in time should be minimized.

809-2

Question: Was any analysis done comparing the impacts on agriculture of your proposed routes to impacts of using Hwy 5? If not, why wasn't it considered?

I've been observing Amtrak go by almost daily for years. It's a great idea, but the four to five cars usually appear to be at about 10 to 20 % capacity. Much of your report and this project which will affect farm lands hinges on speculation of levels of future use of HSR.

809-3

Question: Has an actual ratio of seats available to seats in use per mile been calculated for Amtrak?

Have you considered starting HSR in one of the population centers you are trying to connect (rather than between them) and going on from there to determine its level of use and functionality?

Thank you for your time and consideration.

D.B. LOONEY III

Bx 468 Le Grand, CA.
95333

Response to Submission 809 (D.B. Looney III, October 13, 2011)

809-1

See MF-Response-GENERAL-2.

809-2

See MF-Response-GENERAL-2.

809-3

See MF-Response-GENERAL-2, MF-Response-GENERAL-12, MF-Response-GENERAL-6, and MF-Response-GENERAL-13.

Submission 799 (Anita Lovato, October 13, 2011)

Anita Lovato
2013 Lincoln Ave
Chowchilla, CA 93610

RECEIVED

10-13-11P04:32 RCVD

October 12, 2011

Merced to Fresno Draft EIR/EIS Comment
770 L Street, Suite 800
Sacramento, CA 95814

Re: Draft EIR/EIS Comments

Thank you for an opportunity to comment on the EIR/EIS report.

I am a 29 year old Iraq War Veteran who lives in Chowchilla and works for two landowners who are grossly impacted by several of the HSR routes proposed.

When my family moved to Chowchilla 13 years ago from a big metropolitan city, my parents settled here because they were attracted to this small town environment. They liked the idea of my brother and I growing up in a community where people cared for one another, where the spirit of hard work and a healthy handshake meant something to its residents. As I pursued my education I was fascinated by agriculture and the agrarian lifestyle that was literally outside my front door.

799-1

What is going to happen to our agricultural community when quarter mile buffer zones and large overpasses impede our ability to maintain our current production?

It was in high school that I was given an opportunity to work for a landowner that showed a city girl the ropes that would lead to a career in agriculture. That same landowner welcomed me back after serving 4 years in the United States Marine Corps, and helped me achieve a degree from CSUF in Agricultural Business. I learned the meaning of a hard days work from this landowner who owns property on one of the proposed HSR routes.

799-2

How will CHSRA mitigate losses suffered by Ag employees whose jobs are threatened and revenues lost by service businesses dependent on our farmers' support?

Each day I report into work in a 1,000 plus acre haven. We fight the heat, the cold, the long harvest hours, the stress of weather disruptions, for the love of literally watching the fruits of our efforts grow. It's a beautiful sight to observe the soil as it is transformed into food; food that feeds billions. It's out there where I am apart of something bigger than myself, where I have grown up. I have listened in awe to my employers as they describe the life they grew up in; generations of families farming and building a life that stands right in the middle of a proposed rail that is suppose to improve the quality of life. Please stop this injustice.

Thank you.



Anita Lovato

Response to Submission 799 (Anita Lovato, October 13, 2011)

799-1

See MF-Response-AGRICULTURE-1.

The HST will not impose any buffer zones on agricultural activities, and certainly not a 1/4-mile buffer. Activities can be undertaken up to the fenced, access-limited right-of-way of the system. As discussed in MF-Response-AGRICULTURE-5, the California Department of Pesticide Regulation does not anticipate any new regulations that would require spraying buffers, but enforcement authority resides with the local Agricultural Commissioners.

799-2

See MF-Response-GENERAL-4, MF-Response-SOCIAL-7, and MF-Response-SOCIAL-8.

Submission 813 (Elaine Luker, October 13, 2011)

Elaine Luker
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Le Grand, CA 95333

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10-13-11P04:19 RCVD

October 12, 2011

California High-Speed Rail Authority
Merced to Fresno HST Environmental Review
770 L Street, Suite 800
Sacramento, CA 95814

To the HSR Authority:

I am a natural born citizen, farmer, residential real estate appraiser and have been a resident of this community for most of my life. The A1-BNSF, Mariposa Way Alternative is very near the family farm, which has been in the family for over 70 years. One of the older map models showed the rail actually going over my brothers house and thru the family property but today's map has it running north of our land (apn#067-050-047 & 048), this new location is equally concerning. This is a united community and we watch out for our neighbors. Our neighbors have been in this area for a long time also, some even longer than us. The HSR will negatively affect our lives and our primary way of life, farming. Our job and goal is to provide safe and healthy food products plus make enough money to feed our families and do the same thing over again next crop year. The HSR will take away thousands of acres, most is Prime Agricultural Land, a commodity that is irreplaceable.

813-1 | There has been inadequate time given for review of this EIR Draft, a document of this size should have 6 months for review. The draft was released at harvest time-our busiest time of year.

The draft does not appear to have addressed all concerns or issue:

813-2 | • Main Intent: The rail was to follow main corridors, in my definition that would be along Highway 99, not thru the farm land of Le Grand.

813-3 | • Air Quality will not improve, the rail has severed parcels – closed roads – land locked parcels, requiring more travel time and fuel with more emissions from vehicles & tractors since the land owner now

813-3 | Page 2 continued
has to drive several miles around his land to an overpass then back to the severed piece of land to farm or even pick up the mail. Each trip could add 5-8 miles of unnecessary driving. This area has rural postal delivery which could be interrupted. This added mileage could be a daily routine or even occur several times a day depending on the current task at hand.

813-4 | • Prime Ag Land will be destroyed. Agriculture is one of the highest sources of income and one of the largest employers in Merced County. Reducing the acreage will lower income – production – create higher unemployment due to loss of jobs – reduce local property tax collected since land will be eliminated from the tax roll since the Rail/government will not be paying property taxes.

813-5 | • Water Sources will be disrupted or lost. Land in this area is either irrigated by private irrigation wells or open canal systems maintained by irrigation districts. The Rail alignment runs thru deep wells and pipelines, destroys sump pump reservoirs which provide water conservation & reduces/prevents run off to other parcels, a mandatory requirement to farmers. I do not believe the authority has adequately valued the loss of these resources/improvements to the landowner in the acquisition budget. These water sources should be replaced – mitigated before construction of rail begins. The farmer can not do his job without water!

813-6 | • Transportation: Many over passes have been placed along the route, where is the dirt coming from? Will it be more destruction of prime Ag. Land? Most of our soil has clay –silt – loam, I have heard that soil with clay etc, is undesired for road construction, also some of our soils are expansive. Has the cost of the dirt – land – realignment of driveways or creating new access roads/driveways for land locked homeowners been included in the budget? Some parcels have been severed, mainly referring to property on the south side of Santa Fe Ave. on the East side of Le Grand. Their driveways and main access road is Santa Fe Ave, with the rail alignment, they have no way out. The authority will have to provide new driveways or frontage roads so the people can get to a transportation street, before construction begins not after they are land locked. Some of the area is native pasture with vernal pools and a creek running thru the area, vernal

Submission 813 (Elaine Luker, October 13, 2011) - Continued

Page 3

pools and creeks have endangered species/fairy shrimp, salamanders etc. The Rail will have added expense for bridge crossings and preservation of endangered habitat, is this considered in the budget? Some of these properties will require purchasing a road easement for access to and from their property via the neighbors land. This will be an added burden and expense to the existing landowner since properties have to be surveyed & documents recorded with the county. What will happen if the neighbor will not grant an easement?

813-8

- Land Use to severed parcels will be restricted. Your mitigation to the parcel remainder is to offer for sale to adjoining neighbor, where will they get the money to buy the land? What if the neighbor does not want the land? Parcel remainders may have no water access or the land is such a small or irregular parcel, it is undesirable and creates more blight to the area with overgrown weeds or becomes a dumping ground for unused items (furniture – refrigerators etc.) These small remainder parcels will not be suitable for residential home sites since they are in very close proximity to the rail, would have too much noise, vibration, turbulence to be a safe living environment plus the county probably will not rezone these pieces. Lenders will not want to finance these undesirable parcels. Who will maintain or be responsible for these misfit parcels? Again, unnecessary destruction of prime agriculture land!

813-9

- Hydrology / Water Quality - A large portion of land along the Mariposa Way Route (A1) is classified as Zone A Flood Zone. Additional precautions will need to be in place to prevent runoff to adjacent parcels or blocking of waterways – creeks. Consideration will be needed to address water flow/runoff during wet season, some creeks run over and flood the surrounding area. The railway probably would not be very stable if it had flood waters converging on the rails.

813-10

- Noise – Vibration –Turbulence: What will the long term affects be to livestock, Fruit & Nut Trees, water wells, or residents living in close proximity to the proposed rail? Will growth be stunted? Will Bee pollination be disrupted? Will root systems become unstable or will tree's just fall over? Will wells collapse or will water strata's naturally flow elsewhere to avoid the vibration which will eventually

813-10

Page 4

cause wells to go dry? Your mitigation is that there basically is no harm if objects are 100+ feet away. What proven studies do you have from this state (California) to support this statement? Turbulence will interfere with pesticide/herbicide applications either by ground or air, farmers have to adhere to Zero Drift! Without the spray, crop volume and quality will decrease greatly.

813-11

- Jobs - The number of jobs estimated for this project appears to be quite high or exaggerated. Most jobs will be for the initial construction, which will be mostly Union jobs which typically have a higher cost for labor, thus higher budget costs. The construction jobs will be as needed and once the rail is complete, the workers will move on down the line. Yes, they will be in a given area for say 6 months, buying food and paying for lodging in the local motel but it will not be a permanent boost to employment for Merced County. Is it written that the workers must come from the local work force or is it broad in stating they must be from California, or not stated at all? Jobs lost thru eminent domain of business's along the rail path might not be relocated or replaced, which will increase our unemployment numbers, has this been considered in the total jobs count?

813-12

- Project Costs – Appear to be grossly underestimated! They do not account for all the mitigating issues necessary for land acquisition. If costs are not covered by HSR then the burden falls on our local municipalities and they have no money for this project, let alone money to keep our schools running. Our state and local taxpayers can not afford this project that will always need to be subsidized. If Amtrak can't work, how do you expect HSR to work? Rider ship is grossly exaggerated. Dedicated funding of this project would be of better use if applied to existing Highway –Roadway Projects or just maintaining our existing county roads. Better yet, apply the funding to a much more needed project, Increasing Water Storage. You project population growth over the next 20-30 years to be an additional 20-40+-million people, we do not have adequate water sources for that amount of growth. If water sources are diminished, the growth will not happen plus farmers will be unable to grow crops to feed this country – and the domino concept continues to roll down hill!

Submission 813 (Elaine Luker, October 13, 2011) - Continued

Page 5

- Highway 99 – A2 UPRR Route
Area maps do not show recent acquisitions by Cal Trans for highway widening in order to bring Hwy 99 to Freeway status. Engineers hopefully have designed the route so it is not interfering with the highway project. The highway project was a large reduction in Prime Agriculture Land. Farmers and residents along that corridor will be hit hard once again by more destruction – noise – street closures – access issues etc. Overall, this has left the landowner – farmer with reduced property values due to a less desirable location that is impacted by an external obsolescence – in this case – High Speed Rail!

Sincerely,



Elaine Luker

Response to Submission 813 (Elaine Luker, October 13, 2011)

813-1

See MF-Response-GENERAL-7.

813-2

See MF-Response-GENERAL-2.

813-3

See MF-Response-AQ-4.

813-4

See MF-Response AGRICULTURE-1, MF-Response-GENERAL-4 and MF-Response-SOCIAL-8.

813-5

See MF-Response-AGRICULTURE-4.

813-6

Fill dirt will be provided by commercial material sites. No farmland is being acquired to provide fill.

813-7

See MF-Response-TRAFFIC-2.

813-8

See MF-Response-AGRICULTURE-3.

813-9

See MF-Response-WATER-3.

813-10

See MF-Response-NOISE-1, MF-Response-NOISE-3, MF-Response-NOISE-4, MF-Response-NOISE-5 and MF-Response-AGRICULTURE-5.

813-11

See MF-Response-SOCIAL-3 and MF-Response-GENERAL-19.

813-12

See MF-Response-GENERAL-18 and MF-Response-SOCIAL-1.

Submission 837 (Tony Machado, October 13, 2011)

Comment Period Extended to
October 13, 2011

El periodo a hacer comentarios
está prolongado hasta del
13 de octubre de 2011

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CALIFORNIA High-Speed Rail Authority

**Comment Card
Tarjeta de Comentarios**

Merced to Fresno High-Speed Train Section
Draft Environmental Impact Report/
Environmental Impact Statement (EIR/EIS) –
Public Hearings
September 2011

Tren de Alta Velocidad Sección Merced a Fresno
Anteproyecto del Informe de Impacto
Medioambiental/Declaración de Impacto
Medioambiental (EIR/EIS) - Audiencias Públicas
Septiembre 2011

Please submit your completed comment card at the end of the meeting, or mail to:

Por favor entregue su tarjeta al final de la reunión, o envíela a una de las siguientes direcciones:

Merced to Fresno HST Environmental Review, 770 L Street, Suite 800, Sacramento, CA 95814

The comment period on the Draft EIR/EIS begins August 15, 2011 and ends September 28, 2011. Comments received after 5:00 p.m. on September 28, 2011 will not be addressed in the Final EIR/EIS.

El periodo a hacer comentarios empieza a 15 de agosto y termina a 28 de septiembre. Comentarios recibidos después de 5:00 p.m. a 28 de septiembre no se responderá en el EIR/EIS final.

Name/
Nombre: Tony MACHADO

Organization/
Organización:

(Optional/Opcional)
Address/Domicilio: 23710 Road 14

Phone Number/
Número de teléfono: (559) 665-3498

City, State, Zip code/
Ciudad, estado, código postal: Chowchilla, Ca. 93610

Email address/
Correo electrónico:

To whom it may concern:

My name is Tony machado. I have been a dairy Farmer in Chowchilla, CA for more than 50 years. The major impacts my dairy, or should I say, our dairy, will have is as follows:

- The rail alignment will cut into my property, not giving me enough land to run my lagoon for the amount of cattle I own. I will be forced to down size.
- The rail alignment will destroy some of my already established dairy facilities in

837-2

which I will need to rebuild on my already decreased amount of land. The shortage of our land will eliminate our future prospective crops.

- Previously, developers offered us a large sum of money for our land. We kindly declined as this is our livelihood and the planned future livelihood of my family.

837-3

- The high speed Rail would not only violate me from my livelihood in which I've worked so hard to develop, further it will decrease the value of my remaining property in which I work long hard hours every day.

Please do not take my land from me.

Sincerely,

Tony Machado

10/8/11

Response to Submission 837 (Tony Machado, October 13, 2011)

837-1

See MF-Response-GENERAL-4, MF-Response-AGRICULTURAL-2, and MF-Response-AGRICULTURE-6.

837-2

See MF-Response-GENERAL-4 and MF-Response-AGRICULTURE-6.

837-3

See MF-Response-SOCIAL-1, MF-Response-SOCIAL-2 MF-Response-AGRICULTURE-3, MF-Response-AGRICULTURE-4, and MF-Response-AGRICULTURE-6.

Submission 748 (Michael V. Mahoney, October 12, 2011)

Michael V. Mahoney

595 Market Street, Suite 1350
San Francisco, CA 94105-2825
mmahoney@aceweb.com

California High-Speed Rail Authority
770 L Street
Suite 800
Sacramento, CA 95814

I offer the following comments on the draft environmental impact report for the Merced to Fresno section of the high-speed rail project. I would have liked to comment also on the Fresno to Bakersfield section, but time did not permit.

I represent no client and am making these comments only on my own behalf.

748-1

1. Distribution of reports.

Paper copies or DVD copies of the environmental impact reports have been distributed to public libraries and public agencies along the path of the route being studied, together with one paper copy available at the Authority offices in Sacramento. No copies have been made available outside the affected zone.

I submit that persons living and working outside the affected zone are also interested in the project, and are entitled to see the reports. The Authority will supply DVD copies to those who ask, which is appreciated, but not all citizens have access to computers, or to computers that can read DVDs, and some citizens may prefer to work with a paper copy of the report in any case. I don't doubt that the cost of printing paper reports is considerable, but I also don't doubt that, once the printing job is under way, the marginal cost of printing additional paper reports is minimal.

I would therefore suggest that, in future, paper copies of environmental impact reports published by the Authority be placed in the public libraries of all the principal cities along the high-speed rail route, whether or not they pertain to portions of the route located in those cities. I would ask to see reports in the libraries of Sacramento, San Francisco, San Jose, Los Angeles, and Anaheim, with additional

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748-2

2

consideration being paid to placing paper copies in the libraries of smaller cities along the route.

2. Noise.

Earlier environmental impact reports on noise by the Authority were subject to criticism on various grounds. Among them was the calculation of noise effect by counting the number of dwellings near the route, without stating what was meant by "near." Also critics said that it was not helpful to divide noise impacts into low, moderate, and high, without defining what was meant by these words.

The first criticism appears to have been addressed, as the Authority has apparently gone out and counted the buildings along the route and categorized them. However, the second appears to have been let slip, because the categories of "no impact," "moderate impact," and "severe impact," as set forth at page 3.4-6, appear to be the same idea, expressed in slightly different words. I understand that the Authority is drawing this terminology from FRA documents, but the Authority has an independent obligation to investigate these matters and cannot rely on FRA reports for its justification.

Figure 3.4-1 is a considerable improvement over previous efforts by the Authority, because it purports to actually measure the noise emitted by a passing train. It shows that, at 100 feet distance from the track, the high speed train running at its projected 220 miles per hour will produce 95 dbA of noise, equivalent in level to something between a rock drill and a jackhammer. A high speed train traveling a more conservative 50 mph will produce only 80 dbA, equivalent to the noise emitted by a bus going 55 mph.

It is possible to begin to build a picture of the noise level. Figure 3.4-3, if I read it correctly, shows that at any level of ambient sound, starting at a low level and going right up to 80 dbA, a train passing at full speed will impose "severe" disturbance. However, even the 55 mph train, emitting 80 dbA, will impose severe disturbance. So the report has not made it clear why it states at Table 3.4-12, on Page 29, that 1,243 residences will experience only moderate disturbance. Is it because some of these residences are beyond the 100-foot limit of Figure 3.4-1? If so, should not Figure 3.4-1 be expanded to show the fall-off in adverse effect for listeners at greater distances, e.g., 200 feet, 300 feet, and so on?

Moreover, where did the number 1,243 come from? We now return to the problem of what the report means by "near." Presumably there are 1,243

Submission 748 (Michael V. Mahoney, October 12, 2011) - Continued

748-2

3

residences near the route, but at what distance?

At Appendix 5-A, Page 9: we learn that 120 trains per day are projected. The appendix goes on to explain that some of these trains will be "bond issue" trains, going full-on from San Francisco to Los Angeles with perhaps a stop only at San Jose, in order to rescue the bond issue by making the 2 hour, 40 minute timetable. Others will be stopping trains, which, when they are approaching or leaving a stopping station, will travel at less than the line speed of 220 mph. Thus some parts of the line will be exposed to the noise of 120 full-speed trains per day, while others will have a lesser noise level consisting of a mix between high-speed and lower-speed trains.

Yet even the slower traveling trains will have a noticeable impact on their surroundings. At 120 trains per day, running over a hypothetical 12-hour running time, we would have 10 trains per hour, i.e., one every 6 minutes, inflicting "severe" disturbance.

The report would give a much clearer picture, I think, if it drew a sound map, and told us how many residences lie within the 90 dbA zone, how many within the 85 dbA zone, and so on.

The report is also opaque on the question of the "surprise" effect. It asserts at Page 3.4-40 that the surprise zone for a high-speed train traveling at line speed is only 45 feet from the track, which is within the fenced right of way; thus there is no surprise effect. I find this hard to believe, and propose that, if the Authority wants to stand behind the 45-foot distance it should be prepared to explain in more detail how that number was arrived at.

Even if the 45-foot number is correct, there are places where humans can be found less than 45 feet from the track, that is, stations. Of course, a train coming slowly into a station and about to stop does not generate appreciable noise; but remember that the "through" trains will be banging through on the central tracks at 220 mph. The distance from platform edge to track center of the high speed line at the Merced station, according to the diagram at Volume III, Section A, Page 15, is 30.75 feet.

In addition, I continue to be perplexed by the unwillingness of the Authority to look at noise mitigation measures that have been employed by the high speed rail administrations of Europe and Asia. The physics of noise is the same the world over, although other cultures may react to it differently.

748-3

4

3. Safety and Security.

The report contains a chapter on safety and security, Chapter 3.11. At first blush, safety and security would not seem to be environmental issues, although of course measures taken to cope with these problems could have environmental consequences. Nevertheless, the subject is discussed, although I think, based on the material presented, that the subject was not given much attention. This is obviously undesirable.

The two main safety issues are, first, preventing derailment of the high speed trains and, second, preventing intrusion of objects onto the high speed tracks that might foul the line and lead to derailment. The most important of these objects are conventional trains operating on adjacent tracks, such as the Union Pacific.

On the first issue, I note that Figures 3.11-7 and 3.11-8 show a curbing system designed to keep the train from jumping the tracks in the event of a derailment, and offer evidence that it worked, once, in Taiwan. The report also states that this curbing system would not be in place along the entire route, but only in areas where the risk of derailment was high or the consequences would be severe.

The report then concludes that the risk of derailment beyond the line of the curb would be "negligible" because of this system. But this is obviously incorrect, as there will continue to be some risk of derailment at areas not protected by the curbs.

The report asserts (Page 3.11-24-25) that the 1998 German derailment could have been prevented by proper maintenance of the train or by installation of the curbing system. That accident took place because a defectively designed wheel broke apart on one car, and, when the bogie holding that wheel came to a switch, the car derailed, and the accident happened shortly thereafter.

Quite likely, if the track in the area of the switch had been protected by the Taiwanese curbing system, the accident could have been avoided. It is a bit misleading, however, to say that it could have been avoided by proper maintenance. The flaw in the wheel design had already become apparent, even to someone not versed in materials design or rail systems engineering, and news of this was slowly percolating through the bureaucracy. Unfortunately, it did not get to the right people in time to replace the bad wheels.

Submission 748 (Michael V. Mahoney, October 12, 2011) - Continued

5

748-3 In addition, the report is silent as to anti-derailment measures put in place by other foreign lines. For example, Since 1998, has the DB put such a system in place?

Turning from the question of derailment of the high speed train to that of fouling the tracks caused by derailment of the adjoining Union Pacific or BNSF trains, the report proposes physical separation of a minimum of 100 feet between the two tracks. However, the report takes an alarmingly blasé attitude towards the possibility of such fouling. "Historically, train derailments in the United States have generally occurred where there is special trackwork, such as turnouts and crossovers, *or where a rail network may not have been adequately maintained at the authorized speed.*" (Page 3.11-23, italics added)

The report seems to imply that horizontal separation would only be needed at areas of special trackwork. But American railroads employ deferred maintenance as a matter of course. This is not to single out UP; they all do it. The Authority cannot risk the lives of its passengers on the assumption that an adjoining railroad, operating in the private sector under the rules of free enterprise, will maintain its track up to top standards. Therefore, the minimum mitigation must be horizontal separation, or berms, throughout the entire length of route where the high speed line adjoins a private railroad.

If the 100-foot zone is entirely on state property, well and good. But the report also proposes that some of the zone could be on UPRR property. At Page 3.11-23 the report proposes that when the HST line is parallel to existing rail there will either be a gap of 100 feet between the centerline of the HST track way and the edge of the UPRR right-of-way, or 102 feet between the centerline of HST and UPRR tracks. The diagram at Volume III, Section A alignments, Page 13, shows a minimum space of 52 feet from the HST catenary pole to the edge of the UPRR right-of-way, then a further 50 feet in UPRR right-of-way to the UPRR track, total 102 feet.

The problem here is that, while this might be adequate on the day the line is open to service, the Authority has no power to stop Union Pacific from adding a track to its existing right of way. Although the national economy is in a slump right now, as it grows the need for rail freight will grow, and with it the need by UP for extra tracks. If UP, after the construction of the high speed line, begins to add a track, the Authority as a defensive measure will have to build a protective berm. The report might consider this possibility.

For that matter, the report could justifiably spend more time on the

6

748-3 unique safety problems of this project. There was a severe fatal accident on the Belgian railways near Brussels on February 15, 2010. It involved two conventional trains that collided, possibly because a driver had passed a red signal. The train cars fouled the adjacent track, which was dedicated to high speed Eurostar and Thalys service; fortunately, all trains were stopped before they reached the scene, and the only problem for the high speed systems was that the line had to be closed for several days to clear the tracks and check for damage.

But the trains on this line would have been traveling at conventional line speed, which in Belgium is probably around 85 mph. The European high speed trains operate at conventional speed in the cities and built-up areas, and only accelerate to high speed when they are out in the countryside, far from other railways or sources of intrusion on the line. The California trains, by contrast, will travel at full line speed, 220 mph, through cities, suburbs, the Merced train station, and other areas where they confront the continual possibility of unwanted intrusion on the line. The High Speed Rail Authority has yet to acknowledge this difference between its proposal and other high speed systems that have been built.

Respectfully submitted,


Michael V. Mahoney

Response to Submission 748 (Michael V. Mahoney, October 12, 2011)

748-1

See MF-Response-GENERAL-17. Printed and/or electronic copies of the EIR/EIS were provided at several libraries and community facilities throughout the project area. A list of the locations can be found on the project website:
<http://www.cahighspeedrail.ca.gov/draft-eir-m-f.aspx>.

748-2

See MF-Response-NOISE-3, MF-Response-NOISE-9, MF-Response-NOISE-4, and MF-Response-NOISE-6.

748-3

See MF-Response-S&S-4 for derailment and intrusion concerns. Regarding future freight rail expansion, the 102 foot separation with UPRR is calculated from the edge of their property line, so their expansion plans within their property lines will not encroach. For the BNSF, a review of all their future double-tracking plans shows that their planned expansion will occur on the far side of their right-of-way, away from the HST tracks. Therefore, BNSF expansion plans would not encroach as well.

Submission 53 (marc marchini, August 24, 2011)

Merced - Fresno - RECORD #53 DETAIL

Status : No Action Required
Record Date : 8/24/2011
Response Requested :
Stakeholder Type : CA Resident
Submission Date : 8/24/2011
Submission Method : Website
First Name : marc
Last Name : marchini
Professional Title :
Business/Organization :
Address :
Apt./Suite No. :
City : MErced
State : CA
Zip Code : 95341
Telephone :
Email : mjmachini@gmail.com
Cell Phone :
Email Subscription : Merced - Fresno
Add to Mailing List : Yes
Stakeholder
Comments/Issues :
EIR/EIS Comment : Yes

53-1

After reviewing the proposed routes from Fresno to Merced and after better understanding the direction of the high speed rail authority the preferred route should be along the highway 99 corridor. The transportation corridor of highway 99 already impacts business and residence. It is also shorter in distance than the alternative route through Le Grand. Putting the rail through Le Grand along the railroad will deviate from the transportation corridor much more, destroying farmland, homes, and habitat not accustomed to rail. The high speed rail authority must remember follow these guidelines and pick the route that deviates from the best transportation corridor the least.

Response to Submission 53 (marc marchini, August 24, 2011)

53-1

See MF-Response-GENERAL-2 and MF-Response-GENERAL-10.

Submission 742 (Jeff Marchini, October 13, 2011)



October 11, 2011

California High Speed Rail Authority &
Federal Railroad Administration
Merced to Fresno Draft EIR/EIS Comment
770 L Street, Suite 800
Sacramento, CA 95814
merced_fresno@hsr.ca.gov

Re: Merced to Fresno Draft EIR/EIS Comment

Property Information: JJ&R Ranches APN#067-040-006
Fox Creek Ranch APN #067-080-039
Bona Vista Orchards APN#067-010-020
DD&C Ranches-APN#067-040-009

To the Authority and the Administration:

I am writing to express my concern about the impacts on agriculture raised in the draft Environmental Impact Report/Statement DEIR/DEIS for the Merced to Fresno Section of the high speed train project.

742-1

First and most importantly the with size, footprint and the cost of the project the general public has not been given adequate time to respond to this DEIR/DEIS. Therefore this comment period should be extended to the same as that of the Fresno to Bakersfield section to allow the working, taxpaying public adequate time to respond.

My comments our in reference to the BNSF A-1 options in which a major part of our farming operation occurs (see property information above).

742-2

Farming is a way of life for my family. My grandfather came over from Italy and began farming in 1922. I have lived my whole life in the Le Grand area. We are currently farming with three generations. My father Joe Marchini, myself and my son's Marc and Nic Marchini. This is not just a job/business to us but a way of life. The high speed rail project threatens to take away this way of life.

Our family has serious concerns about proceeding with the Project at any location, at least until there is certainty that the entire project (from Southern California to the Bay Area) will be built. Moreover, we believe that there are many other projects, such as construction of dams and repair of roadways that should be built before the state undertakes construction of a high speed railway.

742-3

Should high speed rail go forward, however, we believe the BNSF A-1 has severe detrimental impacts on the human and biological environment that far outweigh the benefit of proceeding with the project in that area. All versions of the BNSF A-1 (including, in particular, the two versions of the Le Grand Bypass will a) impose severe adverse environmental impacts on the efficient use of farm land in the Le Grand area, b) severely impact Mariposa Creek and its distributaries, a biologically and historically important water system in our area, and c) cost more to build and operate than other available alternatives.

We believe the BNSF A-1 should not be chosen for, among others, the following reasons:

1. According to the DEIR/DEIS the BNSF A-1 will affect several times more prime farmland and Williamson Act land than the other alternatives. (DEIR/DEIS Table S-4, p. S-35. DEIR/DEIS Table 3.7-17, p. 3.7-74.) This detriment to the Valley's most important and unique biological and economic resource, fertile farm land, standing alone, should compel the use of other alternatives.
2. The BNSF A-1 would cause the greatest destruction of farmlands when compared to all of the alternatives because more of the BNSF A-1 guideway diverges from existing major transportation corridors. (DEIR/DEIS p. S-19.)
3. Many passenger vehicles, trucks hauling farm products, and items of farm equipment cross the BNSF tracks at-grade in the area where we farm. According to the DEIR/DEIS, the BNSF A-1 will cause 27 to 42 permanent road closures in the Merced, Chowchilla, and Madera areas. These road closures will dramatically increase farming costs and air pollution as well as decreasing traffic safety because farmers will be required to drive substantial additional distances to reach their farms.

Submission 742 (Jeff Marchini, October 13, 2011) - Continued

742-3

4. Native Americans once had settlements in our area. There is a burial ground located on the banks of Mariposa Creek. The Bypass would destroy this historically significant area.
5. The Le Grand Bypass would pass through Mariposa Creek, destroying wetlands and wildlife resources. The BNSF A-1 will destroy native historical sites, destroy wetlands, severely disrupt the existing county road system and take hundreds of acres of prime farmland out of production. It will shut down farming businesses that have operated in the area for many generations. It will cost farming jobs and tax revenues. No public work, no matter how theoretically beneficial it might be, can justify such devastation of existing human, biological and economic resources.
6. California Agriculture is regulated like no other state in our nation and there was no mention of any consultation with the California Department of Pesticide Regulation (DPR) regarding potential drift impacts from passing rail equipment. We in production agriculture take the safe use of pesticides very seriously. Since DPR sets regulation, why weren't they included in the DEIR/DEIS report.

Thank you for your consideration of these points.

Sincerely,



Jeff Marchini
Vice-President

Response to Submission 742 (Jeff Marchini, October 13, 2011)

742-1

See MF-Response-GENERAL-7.

742-2

See MF-Response-GENERAL-21 and MF-Response-GENERAL-18.

742-3

See MF-Response-GENERAL-10, MF-Response-AGRICULTURE-1, and MF-Response-AGRICULTURE-5.

Submission 579 (Christopher Mariscotti, October 12, 2011)

Merced - Fresno - RECORD #579 DETAIL

Status : Action Pending
Record Date : 10/12/2011
Response Requested :
Stakeholder Type : Business
Submission Date : 10/12/2011
Submission Method : Project Email
First Name : Christopher
Last Name : Mariscotti
Professional Title :
Business/Organization :
Address :
Apt./Suite No. :
City :
State : CA
Zip Code : 00000
Telephone :
Email : chris@vineyardrestaurant.com
Cell Phone :
Email Subscription : Merced - Fresno
Add to Mailing List :
Stakeholder : HSR Board
Comments/Issues :
EIR/EIS Comment : Yes

579-1

The HSR would be devastating for Madera and Madera County. The route along the Santa Fe line would destroy valuable farm land. The Union Pacific route would further blight the cities of Chowchilla and Madera. There will be no economic benefit for the county after construction is finished.

I can understand why the cities of Las Angeles and San Francisco may feel that the HSR may be beneficial. That's fine, build the line along the I-5 corridor. Don't destroy our communities and valuable farm land by building the HSR through the towns of the Valley.

Christopher Mariscotti
Businessman and landowner

Response to Submission 579 (Christopher Mariscotti, October 12, 2011)

579-1

See MF-Response-GENERAL-2, MF-Response-GENERAL-14, and MF-Response-GENERAL-5.

Submission 355 (Steve Massaro, September 15, 2011)

Comments for HSR hearing in Madera 9/15/11

Gentlemen,

Although initially I was not opposed to the concept of HSR, I have become disillusioned with the probable outcome and the negative effects it will have on the Central valley.

355-1

When this project was put on the ballot in 2008 it was sold to the voting public at an estimated total cost of all phases to be 43 billion dollars. Now I hear estimates of over 100 billion. It would be financially irresponsible for this state or our federal government to carry this project forward at these amounts. There are much cheaper alternatives such as interstate 5 that should be brought back for further study.

Secondly, this project was supposed to use existing transportation corridors, which to the average voter means highways, express ways and rail ways, **not** local roadways, ditch banks and private farm roads. The EIR states that the project is to be built, **in a manner sensitive to and protective of California's unique natural resources.**

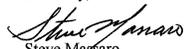
355-2

It's apparent to me that local, state and federal officials want to ignore the fact that we live in one of the most progressive, most productive food and fiber growing regions in the world. Central Valley agriculture is a natural resource in itself and should be protected as such. I think it would be criminal to slice and dice this last bastion of prime farmlands for what some call progress,, I see it as the eventual death and urbanization of our food supply and our way of life.

355-3

I would also like to hand deliver this letter in support for the J. G. Boswell Co. request for an extension of the EIR comment period to 180 days. Given the enormous size of the EIR and the coincidental fact that it was released during the peak harvest time makes it virtually impossible to go through this document in the time allotted.

Sincerely,


Steve Massaro
20754 Road 16
Chowchilla, CA 93610

Response to Submission 355 (Steve Massaro, September 15, 2011)

355-1

See MF-Response-GENERAL-14 and MF-Response-GENERAL-2.

355-2

See MF-Response-AGRICULTURE-1 and MF-Response-GENERAL-4.

355-3

See MF-Response-GENERAL-7.

Submission 555 (Steve Massaro, October 11, 2011)

Merced - Fresno - RECORD #555 DETAIL

Status : Action Pending
Record Date : 10/11/2011
Response Requested :
Stakeholder Type : CA Resident
Submission Date : 10/11/2011
Submission Method : Project Email
First Name : Steve
Last Name : Massaro
Professional Title :
Business/Organization :
Address : 20754 Road 16
Apt./Suite No. :
City : Chowchilla
State : CA
Zip Code : 93610
Telephone :
Email : steve@massarofarms.com
Cell Phone :
Email Subscription : Merced - Fresno
Add to Mailing List : Yes

**Stakeholder
 Comments/Issues :**

Comments to the Merced to Fresno HSR DEIR/EIS

Merced to Fresno HST Environmental Review
 770 L Street, Suite 800
 Sacramento, CA 95814

555-1

First and most importantly, the general public has not been given adequate time to respond to this EIR!!
 ? Given the fact that the Merced to Fresno Section EIR deals with what is to be the largest rail footprint in the system;
 And given the fact that the Merced to Fresno EIR document is in excess of some 1800 pages.
 And given the fact that the rail alignments as proposed transverses through this nations most productive agricultural valley;
 And given the fact that this EIR was coincidentally released during the busy harvest season it is impossible and almost criminal to think that our heavily impacted, farming community can go through a document this large and respond in the time allotted. Was it planned this way?
 Therefore this comment period should be extended to the same as that of the Fresno to Bakersfield section to allow the working, taxpaying public adequate time to respond!

555-2

Summary Section S.1: The document fails to mention the funding aspects of the proposed rail system, specifically Proposition 1A. In the California voters guide for the November, 2008 election it was stated that, "The authority estimated in 2006 that the total cost to develop and construct the entire high speed train system would be about \$45 billion". This was the expected cost to complete all phases of the project. The project as it stands now is estimated to exceed \$80 billion for the first phase only. This is NOT what the voters of California voted for! Additionally, this project has been operating without the required business plan mandated by Proposition 1A and passed by the voters. The public was mis-lead!

555-3

Alternatives Page 2-22: "All three east-west alignments and wyes (i.e., along Avenue 24, Avenue 21, and SR 152) will be carried forward for additional study and consideration as part of the San Jose to Merced EIR/EIS process. This approach will allow the Authority and FRA to make a decision on the north-south alignment between Merced and Fresno based on the Merced to Fresno Section Project EIR/EIS, and to make a decision on the east-west alignment and wyes based on the upcoming San Jose to Merced

Submission 555 (Steve Massaro, October 11, 2011) - Continued

555-3

Section Project EIR/EIS."

The Chowchilla area will have the largest rail footprint in the state. Given the fact that this area takes in the very important and complex wye connections it is a violation of NEPA & CEQA to make a decision on the north/south alignments without completely analyzing all possible east/west routes.

Page 2-20: "While the Alternatives Analysis process considered multiple criteria, the screening emphasized the project objective to maximize the use of existing transportation corridors and available rights-of-way, to the extent feasible."

HSRA has circumvented the will of the voting public by stating that the rail will use existing transportation corridors when feasible. The Avenue 21 alternative as presented in the Merced to Fresno EIR document does not follow an existing "transportation" corridor when it reaches the intersection with Road 16. This is also true of the west Chowchilla bypass option. The Hwy. 152 and A2 alternative are the only alternatives that utilize a viable and feasible transportation corridor.

555-4

Section S.4.1: States that HSR will be built "in a manner sensitive to and protective of California's natural resources".

The EIR fails to properly address the valley's strategic importance to this state and nations food supply. The San Joaquin valley is a "natural resource" that is not being protected. The EIR has no feasible mitigation measures that will ensure that California will remain a viable source of our nations food & fiber supply. The mitigation measure of replacing agricultural lands with equal amounts in a conservation easement does not ensure that these substituted lands will have the same unique climatic and growing conditions as those being taken by HSR here in the central valley.

555-5

2.8.2.2: "Road crossings of existing railroads, roads, and the HST would be constructed on the line of the existing road or offline at some locations. When constructed online, the existing road would be closed or temporarily diverted. When constructed offline, the existing road would be maintained in use until the new crossing is completed".

555-5

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Geographically, the Merced to Fresno Section is located in the center of California. This region

significantly contributes to the statewide need for a new intercity transportation service that would

connect it with the major population and economic centers and to other regions of the state. The major

population, economic, and political centers are located on the coasts of

Submission 555 (Steve Massaro, October 11, 2011) - Continued

555-7

Northern and Southern California
 and in the Sacramento Valley”.

555-10

Where in the document are the scores for properties that will be impacted by high speed rail alignments?

Were capital improvements made by landowners such as conversions to permanent crops and micro irrigation systems figured into the equation? One can not be expected to reach a realistic value of farmland from a generic land evaluation by the NRCS alone.

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The mitigation measure of, "could require" would lead one to believe that there is a possibility of no mitigation. Why would that term be used?

555-9

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555-12

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555-10

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Submission 555 (Steve Massaro, October 11, 2011) - Continued

555-13

555-14

the inability to properly spray his crops due to probable new regulations brought on by HSR? If the rail is running through the most productive agricultural valley in the nation why haven't you involved local agricultural commissioners in you scoping meetings?

555-19

?There seems to be very little concern or respect in trying to avoid impacts to peoples homes in the design concepts presented so far. Specifically the extremely large rail overcrossing designed for the Avenue 21 and 24 alignments. There is page after page of examples of these crude behemoths meandering into our front yards and homesteads. The fact that you can make a statement; "the level of change in visual quality from the project, combined with the level of viewer sensitivity, would result in a negligible impact under NEPA and a less than significant impact under CEQA", is asinine!

Hydrology and Water Resources 3.8:

555-15

? What measures does HSR plan to use to mitigate the potential for loss of ground and surface water due to population growth in cities like Chowchilla, Madera, Le Grand, etc. that will not benefit from the High Density developments projected for cities of Fresno and Merced that have stations?

There seems to be little regard for long years of sacrifice most of these folks endured to build their homes and family legacies. How is HSR going to avoid these problems in the future? Remember this is rural America not a high density urban community, it must not be treated as such.

555-16

Section 3.18.4.1 Population in Regional Growth section states: The economic growth study conducted for the Bay Area to Central Valley Program EIR/EIS (Authority and FRA 2008) found that the overflow of people from urban coastal areas seeking affordable housing within commuting range of major metropolitan areas drives the high growth projections for these San Joaquin Valley counties.

555-20

? I am unable to find any references or mitigation measures for the effects of rail alignments on agricultural wells, pumping stations & distributions systems. Unknown impacts caused by vibration and electrolysis on well casings, concrete irrigation lines and ditches. The alignment drawings do not show any of these infrastructures. The EIR should be halted and these improvements identified and proper mitigation measures listed.

?What measures will HSR use to control fugitive dust caused by normal farming operations from being carried down stream in the vortex of the HS train?

Other General Comments to the Merced to Fresno EIR:

555-17

? How does the CHSRA plan to deal with the subsidence of the valley floor? On the Avenue 21 alignment I have witness subsidence of approximately one foot in the last ten years. What will subsidence at this rate do to a high speed train alignment long term?

555-21

? Regarding impacts to farmhouses, service buildings, wells, irrigation systems etc, who will determine what is considered significant vs. non significant damage or impact? Who will determine the mitigation measures and will they be coordinated with the landowner?

555-18

Transportation and Air Quality:

? The road closures that will occur on the Avenue 21, Avenue 24, A1 and the west Chowchilla bypass will create a significant hardship on local school districts. As stated before, the placement of unusually large and unsafe earthen overcrossing will cause these districts to incur additional fuel and mileage liabilities to their already financially limited transportation systems. In addition there have been no provisions made for the local farming community to access their lands that have been bisected by the HS track. The cost to local agriculture will be astronomical; having to drive one to two miles to the nearest overcrossing with large farm equipment is unreasonable! The "green" aspects being touted by HSR will surely be offset by the additional miles that everyone will have to travel just to do their daily routines.

555-22

? There is no mention in the EIR of a mitigation measure for farmlands that will suddenly become un-financeable due to the infiltration of the high speed rail. How is one expected to pay for a current agricultural loan based on income projections that were made before HSR added a negative impact or took a portion of their lands? What are the mitigation measures?

? Who will be liable for damages caused by the mixture of high speed rail and production agriculture?

? How will HSR protect the Central Valley from the introduction of invasive species brought in through the importation of fill and aggregate?

Submission 555 (Steve Massaro, October 11, 2011) - Continued

555-23

? How will HSR insure that farmers are not negatively impacted by the replacement or realignment of surface and groundwater irrigation systems? There is currently a one year waiting list to have a new well drilled.

555-24

? What mitigation measures are in place to compensate landowners for the immediate devaluation of their farmland and homes once HSR certifies an EIR. Even though the project may never be built the fact that an EIR exist with rail alignments identified on ones property puts a permanent kiss of death on its ability to be sold or financed.

? How will you insure that the Central Valley will be able to keep their highly regarded small town values and way of life that now exist?

555-25

? The EIR fails to mention the fact that this project is being fast tracked, thereby not taking the proper time to evaluate all possible routes because of unrealistic time lines tied to ARRA funding.

555-26

? There is major opposition to the Avenue 21, Avenue 24, west Chowchilla bypass and the A1 route alignments as presented in the document. The Madera County Board of Supervisors, Madera Farm Bureau, Chowchilla Redtop Conservation District, Preserve Our Heritage, Merced County Farm Bureau and local School Districts have all taken a position in opposition to these routes. They all favor an alignment that utilizes the Hwy 152 and Hwy 99 recognized transportation corridors.

These comments prepared by:

Steve Massaro
20754 Road 16
Chowchilla, CA 93610
steve@massarofarms.com

EIR/EIS Comment :

Yes

Response to Submission 555 (Steve Massaro, October 11, 2011)

555-1

See MF-Response-GENERAL-7.

555-2

See MF-Response-GENERAL-6 and MF-Response-GENERAL-18.

555-3

See MF-Response-GENERAL-2 and MF-Response-GENERAL-16.

555-4

See MF-Response-GENERAL-2 regarding existing transportation corridors. See also MF-Response-GENERAL-4 and MF-Response-AGRICULTURE-1.

555-5

Regarding roadway overpasses and safety, see MF-Response-S&S-2. The Final EIR/EIS analyzes a footprint for roadway overpasses that is large enough to accommodate either an online or offline overpass location. The 30% design process will consider stakeholder input to determine the preferred alignment for each roadway overpass. Offline overpasses will be designed in accordance with design standards, which account for driver expectations (for example, roadway curves would not be abrupt) and safety standards (for example, guard rails and crash barriers would be installed on bridges).

Regarding the Wye alternatives, see MF-Response-GENERAL-16. The proposed alignment of the Ave 21 Wye is offset from Avenue 21. Avenue 21 would not be vacated or physically altered by the HST alignment, and traffic flow would continue on Avenue 21 as it does today.

555-6

See MF-Response-PUE-1.

With regard to the height of vertical HST structures and potential to interfere with aerial spraying of agricultural lands adjacent to the alignment, agricultural aircraft currently spray fields where there are utility lines of varying heights (e.g., telephone poles and electrical transmission towers). The distance that aircraft maintain from power lines and poles depends on the cropping pattern, orientation of the field, and operator-determined

555-6

safety factors. Because vertical HST structures are similar to existing utility structures in and near agricultural fields, changes in spraying patterns are unlikely to cause conversions of agricultural land, and no impact under NEPA or CEQA would occur. This determination was made through consultation with Terry Gage, Executive Director of the California Agricultural Aircraft Association, in July and August of 2010.

555-7

See MF-Response-GENERAL-4.

555-8

See MF-Response-GENERAL-3 and MF-Response-GENERAL-5.

555-9

Throughout scoping of the HST project representatives from School Districts having schools with the potential to be impacted by the project were invited to attend technical working group meetings, scoping meetings, and public information meetings. On August 10, 2011 letters were sent by the Authority to Districts with schools located within one-fourth mile of the proposed high-speed train project including a DVD of the Draft EIR, the Draft EIR Summary, Notice of Availability, and a copy of Public Resources Code section 21151.4. Meetings with School Districts following publication of the Project EIR/EIS are ongoing, and are listed in Table 8-1, Public and Agency Involvement.

555-10

In terms of how capital improvements affect the valuation of farmland for right-of-way acquisition, see MF-Response-GENERAL-4. Examination of all capital improvements that have been made to an agricultural parcel is not necessary in order to determine the quality of the farmland being affected or the significance of the project's impact. Also see MF-Response-AGRICULTURE-8. The land evaluation and site assessment scores pursuant to the federal Farmland Protection Policy Act are found in Appendix 3.14-A of the EIR/EIS. These scores include limited capital improvements as part of the site assessment criteria.

Response to Submission 555 (Steve Massaro, October 11, 2011) - Continued

555-11

See MF-Response-AGRICULTURE-4 for a discussion of the typical process for appraisal and requirements. The phrase "could require" is intended to communicate that this is a case-by-case approach and that the solution reached will be on an individual basis. It is not intended to imply that a solution will not be reached.

555-12

See MF-Response-NOISE-1 and MF-Response-AGRICULTURE-6. Loss of production will be handled similarly to a property acquisition or a loss in value, depending on the individual circumstances. See MF-Response-SOCIAL-1 and MF-Response-SOCIAL-2.

555-13

See MF-Response-AGRICULTURE-5.

555-14

See MF-Response-GENERAL-17. County agricultural commissioners were consulted during preparation of the Draft EIR/EIS and were sent notice of the availability of the EIR/EIS for review.

555-15

With regard to regional water supply impacts, see MS-Response-WATER-4, which states that regional groundwater impacts would be negligible (and potentially beneficial) due to the net reduction in water demand on land that will be acquired as part of the project compared to existing agricultural uses. Also see MF-Response-GENERAL-3 for a discussion of growth-inducing impacts.

555-16

See MF-Response-AGRICULTURE-4. The Authority has assimilated information on existing and planned utilities and will coordinate with utility owners to refine this information during the design-build phase.

General impacts to agricultural wells, pumping stations, and distribution systems are discussed in the EIR/EIS in Section 3.5 Electromagnetic Fields and Electromagnetic Interference, Section 3.6 Public Utilities and Energy, and Section 3.14 Agricultural

555-16

Lands. Utilities that remain in the HST right-of-way would be placed in a casing pipe that is strong enough to carry the HST system facilities and eliminate the potential for damage as a result of vibration from the operational HST. The potential for corrosion due to electrical current will be reduced during construction of the HST System by separately grounding pipelines and other linear metallic objects in coordination with the appropriate owner or utility. Alternatively, insulating joints or couplings may be installed in continuous metallic pipes to prevent current flow. Please refer to sections 3.5, 3.6, and 3.14 in the EIR/EIS for more information.

555-17

The EIR/EIS evaluates whether the project is located on a geologic unit or soil that is unstable, or that would become unstable, as a result of the project. One of the considerations is subsidence from groundwater or petroleum withdrawal. The EIR/EIS (see Section 3.9.4.4, Geologic Hazards) states that substantial subsidence has occurred in the San Joaquin Valley, primarily due to groundwater extraction; however, the areas with greatest land subsidence are in the western portion of the San Joaquin Valley, where subsidence of more than 28 feet was recorded between 1926 and 1970. In the area of the HST alternatives, including the north-south alignments, wyes, stations, and HMF, subsidence has been far less dramatic than on the western side of the valley, with subsidence measured at less than 1 foot between 1926 and 1970 (Faunt 2009; Galloway and Riley 1999). Over the last several decades, the use of pipelines and aqueducts for surface water deliveries from other parts of California has reduced dependence on groundwater for agricultural use, and land subsidence has slowed or reversed in some areas of the San Joaquin Valley. During drought conditions, however, increased reliance on groundwater may result in increased subsidence rates.

As described in Section 3.9 Construction and operation of the Merced to Fresno HST project would not change subsidence rates compared to existing conditions. The project does not include features (e.g., major new sources of groundwater extraction) that would contribute to subsidence. In fact, as described in Section 3.8, the project would cause up to 1,420 acres of land (under the preferred alternative) to be removed from agricultural production. Some of these lands are irrigated with groundwater, and therefore localized groundwater withdrawals would likely be reduced.

Response to Submission 555 (Steve Massaro, October 11, 2011) - Continued

555-17

The project will be designed so that geotechnical constraints (e.g., subsidence from groundwater withdrawal, soil settlement from new earth loads, etc.) do not result in premature degradation of the alignment such that speeds are reduced or operation and maintenance (O&M) costs are unacceptably high. Prerequisite geotechnical and geologic evaluations, design features, and management measures to reduce or eliminate risk from poor or unexpected geologic conditions or from long-term effects of the project on geology are described in the EIR/EIS.

555-18

See MF-Response-TRAFFIC-2, MF-Response-S&S-1, and MF-Response-AQ-4.

555-19

See MF-Response-Visual-2 and MF-Response-Visual-4.

The design details of the HST guideway and stations will take local design guidelines into account and use context-sensitive design solutions, where possible, to minimize visual impacts on the established rural residential character. The Authority's *Urban Design Guidelines for the California High Speed Train Project* briefly discusses the principles of context-sensitive solutions to guide the design of stations. This approach is equally applicable to elevated guideways and will be employed to mitigate visual impacts through context-sensitive design. *Aesthetic Guidelines for Non-Station Structures* (TM 200-06) will also guide design of the HST components.

555-20

See MF-Response-AQ-1 and MF-Response-AGRICULTURE-5.

555-21

Regarding impacts to farm infrastructure and mitigation, see MF-Response-AGRICULTURE-4. With regard to loans and income projections, see MF-Response-GENERAL-4. Also see MF-Response-AGRICULTURE-2, which discusses working with agricultural property owners when partial acquisitions are necessary. As outlined in Section 3.14 (Agricultural Lands), several aspects of project operations have been studied such as noise, winds, safety, etc., and no constraints to farming adjacent to HST have been found. There will be no limitations placed on farming operations adjacent to

555-21

the HSR.

555-22

The use of soil, aggregate, and ballast materials for construction will be selected and utilized in accordance with guidelines specified within Bio MM#4 Prepare and Implement a Weed Control Plan (see DEIR/EIS Section 3.7, page 107). To minimize the creation of open, disturbed soils that the majority of invasive, non-native weeds prefer, disturbance zones will be revegetated after the cessation of ground disturbing activities with site appropriate native species in accordance with BIO MM#6 -Prepare and Implement a Restoration and Revegetation Plan (see DEIR/EIS Section 3.7, page 107).

555-23

See MF-Response-AGRICULTURE-4.

555-24

See MF-Response-SOCIAL-1, MF-Response-SOCIAL-2, and MF-Response-SOCIAL-4.

555-25

See MF-Response-GENERAL-2 regarding the requirement to consider a range of reasonable alternatives in the EIR/EIS. See MF-Response-GENERAL-7 regarding the adequacy of the review period. The environmental review process for the HST system has been underway since the early 2000s (note that the program EIR/EIS for the system was certified in 2005). It is now 2012. That period of time does not reflect a process that is being "fast tracked" to the detriment of full analysis and disclosure.

555-26

The Final EIR/EIS reflects that there is opposition to the project and summarizes the opposing views presented during the process of developing the environmental analysis (refer to Chapter 8, Public and Agency Involvement). See also MF-Response-GENERAL-10.

Submission 659 (Steve Massaro, October 12, 2011)

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Comments to the Merced to Fresno HSR DEIR/EIS

Merced to Fresno HST Environmental Review
770 L Street, Suite 800
Sacramento, CA 95814

659-1

First and most importantly, the general public has not been given adequate time to respond to this EIR!!
• Given the fact that the Merced to Fresno Section EIR deals with what is to be the largest rail footprint in the system;
And given the fact that the Merced to Fresno EIR document is in excess of some 1800 pages.
And given the fact that the rail alignments as proposed transverse through this nations most productive agricultural valley;
And given the fact that this EIR was coincidentally released during the busy harvest season it is impossible and almost criminal to think that our heavily impacted, farming community can go through a document this large and respond in the time allotted. Was it planned this way?
Therefore this comment period should be extended to the same as that of the Fresno to Bakersfield section to allow the working, taxpaying public adequate time to respond!

659-2

Summary Section S.1: The document fails to mention the funding aspects of the proposed rail system, specifically Proposition 1A. In the California voters guide for the November, 2008 election it was stated that, "The authority estimated in 2006 that the total cost to develop and construct the entire high speed train system would be about \$45 billion". This was the expected cost to complete all phases of the project. The project as it stands now is estimated to exceed \$80 billion for the first phase only. This is NOT what the voters of California voted for! Additionally, this project has been operating without the required business plan mandated by Proposition 1A and passed by the voters. The public was mis-lead!

659-3

Alternatives Page 2-22: "All three east-west alignments and wyes (i.e., along Avenue 24, Avenue 21, and SR 152) will be carried forward for additional study and consideration as part of the San Jose to Merced EIR/EIS process. This approach will allow the Authority and FRA to make a decision on the north-south alignment between Merced and Fresno based on the Merced to Fresno Section Project EIR/EIS, and to make a decision on the east-west alignment and wyes based on the upcoming San Jose to Merced Section Project EIR/EIS."

The Chowchilla area will have the largest rail footprint in the state. Given the fact that this area takes in the very important and complex wye connections it is a violation of NEPA & CEQA to make a decision on the north/south alignments without completely analyzing all possible east/west routes.

Page 2-20: "While the Alternatives Analysis process considered multiple criteria, the screening emphasized the project objective to maximize the use of existing transportation corridors and available rights-of-way, to the extent feasible."

HSRA has circumvented the will of the voting public by stating that the rail will use existing transportation corridors when feasible. The Avenue 21 alternative as presented in the Merced to Fresno EIR document does not follow an existing "transportation" corridor when it reaches the intersection with Road 16. This is also true of the west Chowchilla bypass option. The Hwy. 152 and A2 alternative are the only alternatives that utilize a viable and feasible transportation corridor.

659-4

Section S.4.1: States that HSR will be built "in a manner sensitive to and protective of California's natural resources". The EIR fails to properly address the valley's strategic importance to this state and nations food supply. The San Joaquin valley is a "natural resource" that is not being protected. The EIR has no feasible mitigation measures that will ensure that California will remain a viable source of our nations food & fiber supply. The mitigation measure of replacing agricultural lands with equal amounts in a conservation easement does not ensure that these substituted lands will have the same unique climatic and growing conditions as those being taken by HSR here in the central valley.

659-5

2.8.2.2: "Road crossings of existing railroads, roads, and the HST would be constructed on the line of the existing road or offline at some locations. When constructed online, the existing road would be closed or temporarily diverted. When constructed offline, the existing road would be maintained in use until the new crossing is completed".

The EIR fails to address the enormous safety hazard that would be created by these overcrossings. There is no mention of the dangers in driving in the dense tulle fog that blankets the valley in the winter months. In the Chowchilla area the rural roads where designed in a straight north/south & east/west grid pattern. Having a roadway unexpectedly deviate from its normal path will surely be more deadly in a zero visibility fog situation. For this reason alone the Avenue 21, Avenue 24 the west Chowchilla bypass and the A1, should be eliminated in favor of existing highway corridors of 152 and US 99. "Existing transportation corridors!"

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Geographically, the Merced to Fresno Section is located in the center of California. This region significantly contributes to the statewide need for a new intercity transportation service that would connect it with the major population and economic centers and to other regions of the state. The major population, economic, and political centers are located on the coasts of Northern and Southern California and in the Sacramento Valley".

Submission 659 (Steve Massaro, October 12, 2011) - Continued

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659-12 | **Hydrology and Water Resources 3.8:**

• What measures does HSR plan to use to mitigate the potential for loss of ground and surface water due to population growth in cities like Chowchilla, Madera, Le Grand, etc. that will not benefit from the High Density developments projected for cities of Fresno and Merced that have stations?
Section **3.18.4.1 Population in Regional Growth** section states: *The economic growth study conducted for the Bay Area to Central Valley Program EIR/EIS (Authority and FRA 2008) found that the overflow of people from urban coastal areas seeking affordable housing within commuting range of major metropolitan areas drives the high growth projections for these San Joaquin Valley counties.*

• I am unable to find any references or mitigation measures for the effects of rail alignments on agricultural wells, pumping stations & distributions systems. Unknown impacts caused by vibration and electrolysis on well casings, concrete irrigation lines and ditches. The alignment drawings do not show any of these infrastructures. The EIR should be halted and these improvements identified and proper mitigation measures listed.

• How does the CHSRA plan to deal with the subsidence of the valley floor? On the Avenue 21 alignment I have witness subsidence of approximately one foot in the last ten years. What will subsidence at this rate do to a high speed train alignment long term?

659-13 | **Transportation and Air Quality:**

• The road closures that will occur on the Avenue 21, Avenue 24, A1 and the west Chowchilla bypass will create a significant hardship on local school districts. As stated before, the placement of unusually large and unsafe earthen overcrossing will cause these districts to incur additional fuel and mileage liabilities to their already financially limited transportation systems. In addition there have been no provisions made for the local farming community to access their lands that have been bisected by the HS track. The cost to local agriculture will be astronomical; having to drive one to two miles to the nearest overcrossing with large farm equipment is unreasonable! The "green" aspects being touted by HSR will surely be offset by the additional miles that everyone will have to travel just to do their daily routines.

659-14 | • There seems to be very little concern or respect in trying to avoid impacts to peoples homes in the design concepts presented so far. Specifically the extremely large rail overcrossing designed for the Avenue 21 and 24 alignments. There is page after page of examples of these crude behemoths meandering into our front yards and homesteads. The fact that you can make a statement; *"the level of change in visual quality from the project, combined with the level of viewer sensitivity, would result in a negligible impact under NEPA and a less than significant impact under CEQA",* is asinine!

Submission 659 (Steve Massaro, October 12, 2011) - Continued

There seems to be little regard for long years of sacrifice most of these folks endured to build their homes and family legacies. How is HSR going to avoid these problems in the future? Remember this is rural America not a high density urban community, it must not be treated as such.

659-15

•What measures will HSR use to control fugitive dust caused by normal farming operations from being carried down stream in the vortex of the HS train?

Other General Comments to the Merced to Fresno EIR:

659-16

• Regarding impacts to farmhouses, service buildings, wells, irrigation systems etc, who will determine what is considered significant vs. non significant damage or impact? Who will determine the mitigation measures and will they be coordinated with the landowner?

• There is no mention in the EIR of a mitigation measure for farmlands that will suddenly become unfinanceable due to the infiltration of the high speed rail. How is one expected to pay for a current agricultural loan based on income projections that were made before HSR added a negative impact or took a portion of their lands? What are the mitigation measures?

• Who will be liable for damages caused by the mixture of high speed rail and production agriculture?

• How will HSR protect the Central Valley from the introduction of invasive species brought in through the importation of fill and aggregate?

• How will HSR insure that farmers are not negatively impacted by the replacement or realignment of surface and groundwater irrigation systems? There is currently a one year waiting list to have a new well drilled.

659-17

• What mitigation measures are in place to compensate landowners for the immediate devaluation of their farmland and homes once HSR certifies an EIR. Even though the project may never be built the fact that an EIR exist with rail alignments identified on ones property puts a permanent kiss of death on its ability to be sold or financed.

• How will you insure that the Central Valley will be able to keep their highly regarded small town values and way of life that now exist?

659-18

• The EIR fails to mention the fact that this project is being fast tracked, thereby not taking the proper time to evaluate all possible routes because of unrealistic time lines tied to ARRA funding.

• There is major opposition to the Avenue 21, Avenue 24, west Chowchilla bypass and the A1 route alignments as presented in the document. The Madera County Board of Supervisors, Madera Farm Bureau, Chowchilla Redtop Conservation District, Preserve Our Heritage, Merced County Farm Bureau and local School Districts have all taken a position in opposition to these routes. They all favor an alignment that utilizes the Hwy 152 and Hwy 99 recognized transportation corridors.

These comments prepared by:
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Response to Submission 659 (Steve Massaro, October 12, 2011)

659-1

See MF-Response-GENERAL-7.

659-2

See MF-Response-GENERAL-6 and MF-Response-GENERAL-18.

659-3

See MF-Response-GENERAL-2 and MF-Response-GENERAL-16.

659-4

See MF-Response-GENERAL-4 and MF-Response-AGRICULTURE-1.

659-5

Regarding roadway overpasses and safety, see MF-Response-S&S-2. The Final EIR/EIS analyzes a footprint for roadway overpasses that is large enough to accommodate either an online or offline overpass location. The 30% design process will consider stakeholder input to determine the preferred alignment for each roadway overpass. Offline overpasses will be designed in accordance with accepted transportation design standards, which account for driver expectations (for example, roadway curves would not be abrupt) and safety standards (for example, guard rails and crash barriers would be installed on bridges).

Regarding the Wye alternatives, see MF-Response-GENERAL-16. The proposed alignment of the Ave 21 Wye is offset from Avenue 21. Avenue 21 would not be vacated or physically altered by the HST alignment, and traffic flow would continue on Avenue 21 as it does today.

659-6

See MF-Response-PUE-1.

659-7

With regard to the height of vertical HST structures and potential to interfere with aerial spraying of agricultural lands adjacent to the alignment, agricultural aircraft currently spray fields where there are utility lines of varying heights (e.g., telephone poles and

659-7

electrical transmission towers). The distance that aircraft maintain from power lines and poles depends on the cropping pattern, orientation of the field, and operator-determined safety factors. Because vertical HST structures are similar to existing utility structures in and near agricultural fields, changes in spraying patterns are unlikely to cause conversions of agricultural land, and no impact under NEPA or CEQA would occur. This determination was made through consultation with Terry Gage, Executive Director of the California Agricultural Aircraft Association, in July and August of 2010.

659-8

See MF-Response-AGRICULTURE-1 and MF-Response-GENERAL-4.

659-9

See MF-Response-GENERAL-3 and MF-Response-GENERAL-5.

659-10

Throughout scoping of the HST project representatives from School Districts having schools with the potential to be impacted by the project were invited to attend technical working group meetings, scoping meetings, and public information meetings. On August 10, 2011 letters to Districts with schools located within one-fourth mile of the proposed high-speed train project were sent a DVD of the Draft EIR, the Draft EIR Summary, Notice of Availability, a copy of Public Resources Code section 21151.4. Meetings with School Districts following publication of the Project EIR/EIS are ongoing, and are listed in Table 8-1, Public and Agency Involvement.

659-11

In terms of how capital improvements affect the valuation of farmland for right-of-way acquisition, see MF-Response-GENERAL-4. Examination of all capital improvements that have been made to an agricultural parcel is not necessary in order to determine the quality of the farmland being affected or the significance of the project's impact. Also see MF-Response-AGRICULTURE-8. The land evaluation and site assessment scores pursuant to the federal Farmland Protection Policy Act are found in Appendix 3.14-A of the EIR/EIS. These scores include limited capital improvements as part of the site assessment criteria.

Response to Submission 659 (Steve Massaro, October 12, 2011) - Continued

659-11

See MF-Response-AGRICULTURE-4 for a discussion of the typical process for appraisal and requirements. The phrase "could require" is intended to communicate that this is a case-by-case approach and that the solution reached will be on an individual basis. It is not intended to imply that a solution will not be reached.

See MF-Response-NOISE-1 and MF-Response-AGRICULTURE-6 regarding noise and vibration impacts on confined animal facilities.

See MF-Response-AGRICULTURE-5 regarding impacts to aerial spaying and MF-Response-GENERAL-17 regarding public involvement.

659-12

With regard to regional water supply impacts, see MF-Response-WATER-4, which states that regional groundwater impacts would be of negligible intensity (and potentially beneficial). Also see MF-Response-GENERAL-3 for a discussion of growth-inducing impacts. With regard to general on-farm infrastructure impacts, see MF-Response-AGRICULTURE-4. There would be no vibration effects on a modern, well-balanced well pump. No "electrolysis" impacts are anticipated as a result of the HST Project - see discussion of negligible intensity of impacts from stray currents and design standards in Chapter 3.5 (Electromagnetic Fields and Electromagnetic Interference).

With regard to soil settlement (including the effects of regional subsidence), see the discussion of negligible impacts and design standards in Chapter 3.9 (Geology, Soils, and Seismicity). The EIR/EIS evaluates whether the project is located on a geologic unit or soil that is unstable, or that would become unstable, as a result of the project. One of the considerations is subsidence from groundwater or petroleum withdrawal. The EIR/EIS (see Section 3.9.4.4, Geologic Hazards) states that substantial subsidence has occurred in the San Joaquin Valley, primarily due to groundwater extraction; however, the areas with greatest land subsidence are in the western portion of the San Joaquin Valley, where subsidence of more than 28 feet was recorded between 1926 and 1970. In the area of the HST alternatives, including the north-south alignments, wyes, stations, and HMF, subsidence has been far less dramatic than on the western side of the valley, with subsidence measured at less than 1 foot between 1926 and 1970 (Faunt 2009; Galloway and Riley 1999). Over the last several decades, the use of pipelines and

659-12

aqueducts for surface water deliveries from other parts of California has reduced dependence on groundwater for agricultural use, and land subsidence has slowed or reversed in some areas of the San Joaquin Valley. During drought conditions, however, increased reliance on groundwater may result in increased subsidence rates.

Construction and operation of the Merced to Fresno HST project would not change subsidence rates compared to existing conditions. The project does not include features (e.g., major new sources of groundwater extraction) that would contribute to subsidence. In fact, as described in Section 3.8, the project would cause up to 1,420 acres of land (under the preferred alternative) to be removed from agricultural production. Some of these lands are irrigated with groundwater, and therefore localized groundwater withdrawals would likely be reduced.

The project will be designed so that geotechnical constraints (e.g., subsidence from groundwater withdrawal, soil settlement from new earth loads, etc.) do not result in premature degradation of the alignment such that speeds are reduced or operation and maintenance (O&M) costs are unacceptably high. Prerequisite geotechnical and geologic evaluations, design features, and management measures to reduce or eliminate risk from poor or unexpected geologic conditions or from long-term effects of the project on geology are described in the EIR/EIS.

659-13

See MF-Response-TRAFFIC-2, MF-Response-S&S-1, and MF-Response-AQ-4.

659-14

See MF-Response-VISUAL-2 and See MF-Response-VISUAL-4. The design details of the HST guideway and stations will take local design guidelines into account and use context-sensitive design solutions, where possible, to minimize visual impacts on the established rural residential character. The Authority's *Urban Design Guidelines for the California High Speed Train Project* briefly discusses the principles of context-sensitive solutions to guide the design of stations. This approach is equally applicable to elevated guideways and will be employed to mitigate visual impacts through context-sensitive design. *Aesthetic Guidelines for Non-Station Structures* (TM 200-06) will also guide design of the HST components.

Response to Submission 659 (Steve Massaro, October 12, 2011) - Continued

659-15

See MF-Response-AQ-1 and MF-Response-AGRICULTURE-5.

659-16

Regarding impacts to farm infrastructure and mitigation, see MF-Response-AGRICULTURE-4. With regard to loans and income projections, see MF-Response-GENERAL-4. Also see MF-Response-AGRICULTURE-2, which discusses working with agricultural property owners if partial acquisitions are necessary. As outlined in Section 3.14 (Agricultural Lands), several aspects of project operations have been studied such as noise, winds, safety, etc., and no constraints to farming adjacent to HST have been found. There will be no limitations placed on farming adjacent to HSR.

As further discussed in MF-Response-SOCIAL-1 as well as throughout the EIR/EIS (see, for example, Section 3.12, Socioeconomics, Communities, and Environmental Justice) the property acquisition process will be a negotiation of acquisition costs between the land owners and Authority's right-of-way agents, including factors above and beyond base property values. For example, the future value of farmland – and the income projections and loan values based on those income projections – can be addressed during acquisition.

The use of soil, aggregate, and ballast materials for construction will be selected and utilized in accordance with guidelines specified within Bio MM#4 Prepare and Implement a Weed Control Plan (see DEIR/EIS Section 3.7, page 107). To minimize the creation of open, disturbed soils that the majority of invasive, non-native weeds prefer, disturbance zones will be revegetated after the cessation of ground disturbing activities with site appropriate native species in accordance to with BIO MM#6 -Prepare and Implement a Restoration and Revegetation Plan (see DEIR/EIS Section 3.7, page 107).

659-17

See MF-Response-SOCIAL-1, MF-Response-SOCIAL-2, and MF-Response-SOCIAL-4.

659-18

MF-Response-GENERAL-2 and See MF-Response-GENERAL-10.

Submission 560 (Martin Mazner, October 11, 2011)

Merced - Fresno - RECORD #560 DETAIL

Status : Action Pending
Record Date : 10/11/2011
Response Requested :
Stakeholder Type : CA Resident
Submission Date : 10/11/2011
Submission Method : Website
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Add to Mailing List : No

560-1
560-2
560-3
560-4
560-5
560-6

Stakeholder Comments/Issues :

To The California High-Speed Rail Authority:

This letter contains my comments on the Draft EIR/EIS of the California High Speed Rail Authority for the Merced to Fresno section of the proposed California High Speed Train Project ("Draft EIR/EIS").

The Authority's current plan for the Merced to Fresno section of the proposed high-speed rail project would have non-trivial negative impacts on California's natural environment, on the agricultural industry in the California Central Valley, and on local communities located within the Central Valley. I request the Authority to start fresh, addressing the impacts I identify in this letter, and the impacts that others have raised. After reconfiguring the project to eliminate and mitigate the negative impacts of the current proposal, the Authority should then recirculate a redrafted EIR/EIS for public review and comment and allow sufficient time for intelligent review and comment.

The 60-day comment period the Authority has provided for review of the current EIR/EIS did not provide me, or the public generally, with an adequate time to review and comment, in the way that CEQA and NEPA require. If for no other reason, the lack of an adequate comment period should convince the Authority to redraft the EIR/EIS and recirculate it, to provide a legally adequate review period, and to permit the kind of public participation that both CEQA and NEPA demand.

I realize that the Authority faces federal funding deadlines, which treat this project as if it were a short-term "job stimulus" project, instead of the 100-year plus public infrastructure project that it actually is. This is regrettable; however, these artificially short federal deadlines do not eliminate the substantive and procedural requirements of both CEQA and NEPA. Both the state and federal law require that the EIR/EIS be redrafted and recirculated.

I urge the Authority to insist on good information, and on full public participation and review. If California hopes to gain the benefits that may flow from the creation of a functional high-speed rail system in the state, "quick" decisions are not the most important thing. The "right" decisions are what are needed most. The current EIR/EIS for the Merced to Fresno section of the proposed statewide project reveals that more time and analysis are needed, in order to make it possible for the state to make the right decisions about the proposed high-speed train project.

My specific comments on the current Draft EIR/EIS are listed below:
 o The repeatedly delayed High Speed Rail Business Plan is scheduled for release in November 2011. The Business Plan is expected to contain a close look at funding, ridership and other information pertinent to the feasibility of these proposed Central Valley projects. Publication of the Business Plan will commence a 60-day comment period. Both the MF and FB DEIR/S's make clear that the benefits, including reductions in Greenhouse Gas Emissions, reduction in vehicle miles traveled, increase in high wage earning jobs and the like, rely on the completion of the HST system. Not until the Business Plan is completed should project proposals for any segments of HST whose benefits are contingent on the successful completion of the HST system be considered. The Merced to Fresno Draft EIR/EIS should be put on hold unless and until a Business Plan is approved that demonstrates the feasibility of the HST system as whole.

o A number of the HST alignments are still undergoing additional study. Because the benefits of the project will can only be realized through completion of the HST System as a whole, unless and until the HST System with all alignments is known and found to be feasible (including

Submission 560 (Martin Mazner, October 11, 2011) - Continued

560-6

560-7

560-8

in terms of timing, funding and engineering), the Central Valley Project EIR/EIS documents should be put on hold.

- o The Draft EIR/EIS fails to explain how it is properly tiered on the prior 2005 Program EIR/EIS, and how it is related to other environmental documents (for instance, the Bay Area to Central Valley EIR/EIS). A detailed explanation must be provided to the question of how these Project DEIR/S's meet the tiering requirements under CEQA. In addition, the Draft EIR/EIS fails to state how each relies on information from the first-tier programmatic environmental review documents.
- o CEQA forbids public agencies from piecemealing or segmenting a project by splitting it into two or more segments. This approach ensures "that environmental considerations not become submerged by chopping a large project into many little ones. It is unconscionable to propose a "project" that is literally a train to nowhere, which is what a section from Merced to Fresno will become, unless a unified project is possible, and actually constructed. The entire approach utilized by the Authority is non-compliant with CEQA.

- o Finally, the financial feasibility of this project has never been demonstrated. Indeed, the fundamental assumptions are deeply flawed based on the Authority's own research which assume that 80% of ridership will come from switching car passengers to HSR. Given that the cost of driving is 30% of the total cost of a HSR trip for the 2.4 passengers of the average car, the projections are totally unreliable. That means that the project is not only premature, and noncompliant with the requirements of Proposition 1A, it means that the environmental impacts cannot be evaluated, because it is not clear that any of the positive benefits or mitigation measures required can ever, in fact be provided. Please respond to the financial critiques of the project available online at: http://cc-hsr.org/assets/pdf/CHSR-Financial_Risks-101210-D.pdf

I look forward to the Authority's response.

Very truly yours,
Martin Mazner
Martin Mazner

EIR/EIS Comment :

Yes

Response to Submission 560 (Martin Mazner, October 11, 2011)

560-1

See MF-Response-GENERAL-1, MF-Response-GENERAL-7, MF-Response-GENERAL-14

CEQA and NEPA require recirculation when significant new information has been added to the draft EIR/EIS. Under CEQA, this would mean that there is either: a new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented; a substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance; a feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it; or the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. (Refer to State CEQA Guidelines Section 15088.5)

NEPA provides that a draft EIS is to be supplemented and recirculated when either the agency makes substantial changes in the proposed action that are relevant to environmental concerns; or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. (Refer to 40 CFR 1502.9)

None of the conditions that might require recirculation of the draft EIR/EIS has occurred. No new significant impacts or substantially more severe impacts have been identified. The Authority/FRA have refined the mitigation measures set out in the draft EIR/EIS, but have not needed to adopt a feasible mitigation measure that would avoid a new significant effect or reduce a more severe impact. No new feasible alternatives have been presented that would meet most or all project objectives, would reduce significant effects, and are substantially different from the alternatives already considered -- including those alternatives previously considered and not selected for further review (see MF-Response-GENERAL-2 for a discussion of the alternatives selection). The EIR/EIS is supported by voluminous substantial evidence and is not conclusory in nature. Further, it is organized in the standard format for CEQA and NEPA documents and, while large, is organized for ease of review. It was also made available in a

560-1

searchable PDF version that allows a reader to easily find discussions of interest. For NEPA purposes, there have been no substantial changes to the project. Minor changes to the alignment or to its construction reflect refinements that have resulted from continuing project design. As discussed above, although the EIR/EIS has been refined, there are no significant new circumstances or information that would require recirculation.

560-2

See MF-Response-GENERAL-7.

560-3

See MF-Response-GENERAL-6. In December 2010, the Authority, working in conjunction with the Federal Railroad Administration (FRA), identified the Merced to Fresno and Fresno to Bakersfield high-speed train (HST) sections for federal funding under the American Recovery and Reinvestment Act (ARRA). Since then, the Authority and FRA have worked to prepare the technical studies, engineering plans, and environmental documents needed to meet the substantive and procedural requirements under CEQA and NEPA and at the same time meet the project construction schedule established by congress.

560-4

See MF-Response-GENERAL-1, MF-Response-GENERAL-7 and MF-Response-GENERAL-17.

560-5

The Draft 2012 Business Plan was released on November 1st and lays out an updated phasing strategy that commences operations at much earlier stages of project development. Initial benefits from the project will flow from the jobs that will be created from construction of both the Initial Construction Segment (ICS) and the Initial Operating Segment (IOS). Once the IOS is operational, other benefits including the reductions in greenhouse gas emissions, vehicle miles traveled, and improved economic efficiencies will follow. The Business Plan describes these benefits and evaluates them incrementally as segments of the system come on line. While construction will

Response to Submission 560 (Martin Mazner, October 11, 2011) - Continued

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not begin on a segment until funding is secured for it and the environmental approvals are in place, interim operations can begin while further segments are being built out.

560-6

See MF-Response-GENERAL-21.

560-7

MF-Response-GENERAL-1.

560-8

See MF-Response-GENERAL-18 and MF-Response-GENERAL-6.

Attachment to Submission 560 (Martin Mazner, October 11, 2011) -
560_website_attachment_Financial_Risks.pdf

The Financial Risks of California's Proposed High-Speed Rail

The Financial Risks of California's Proposed High-Speed Rail Project

A Review And Assessment Of Publicly Available Materials On The California High-Speed Rail Authority's Financial Plans

October 12th 2010

"We do not oppose high-speed rail in concept. It seems to work in parts of Europe and Japan and possibly elsewhere. The 2008 Prop 1A promise that captured many voters was that the California High-Speed Rail (CHSR) would not cost the taxpayer a penny. After months of work on this report, we are forced to conclude that the Authority's promise seems an impossible goal."

We are grateful to the Community Coalition on High Speed Rail for providing a virtual 'home' for this review. For downloadable copies of this report and attachments, visit their website www.cc-hsr.org

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October 12, 2010

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Attachment to Submission 560 (Martin Mazner, October 11, 2011) -
 560_website_attachment_Financial_Risks.pdf - Continued

The Financial Risks of California’s Proposed High-Speed Rail

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The Financial Risks of California’s Proposed High-Speed Rail

CONTEXT-SENSITIVE OVERVIEW

While our findings focus only on the California High-Speed Rail (CHSR) project, they must be put into the context of a continued shortfall of State of California revenues to meet its financial obligations. State issued IOUs, employee furloughs and salary reductions, significant cutbacks to education, closed parks, a deferred proposition on water projects, unrepaired potholes, and deferred maintenance on railroad signaling systems, bridges and highways are symptoms of the State’s desperate financial situation.

As an example, the impact of financing the high-speed rail system on funding for our state’s education system is sobering. Cutting back on both public school and university funding, forcing layoffs and increasing tuition is compromising the future of what was once the model for other state educational systems. To put the real cost of the CHSR in perspective, debt-servicing costs on only the voter-approved \$9.95 billion of general obligation (GO) bonds represents more than \$60 million per month of principal and interest commitment. If California can get someone to buy those approved \$9.95 billion of bonds, servicing that debt alone will wipe out one medium-sized primary school each month, or over 100 schools before the proposed CHSR would carry its first riders in 2020.

We respectfully submit our findings for public review. We recognize that many dedicated consultants and employees have prepared the California High-Speed Rail Authority’s (CHSRA) materials. However, we find the quality of the CHSRA’s work product to verge on being promotional. CHSRA financial documents are not of a quality that would attract investors concerned about risks, returns on investments and the long term financial sustainability or economic viability of the proposed CHSR system as demanded in the Authority’s 1996 charter.

Until these financial questions are answered and Californians can be assured that the CHSR project can meet its financial obligations to produce operating surpluses, require no operating subsidy, and create the hundreds of thousands of jobs it promises, we believe the entire project must be postponed or terminated.

Attachment to Submission 560 (Martin Mazner, October 11, 2011) -
560_website_attachment_Financial_Risks.pdf - Continued

The Financial Risks of California's Proposed High-Speed Rail

PEER REVIEW & VALIDATION

This Review is the product of the efforts of experienced corporate business practitioners, economists and finance experts who volunteered their time to try to understand the California High-Speed Rail Authority's (CHSRA) documents on financing the proposed California High-Speed Rail (CHSR) project.

These individuals worked without corporate, government or private sponsorship. They read considerable materials from both proponents and opponents of the proposed California High-Speed Rail (CHSR) project. They met individually and in groups to give direction for the paper and reviewed and commented on drafts. Over several months of mid-to-Q3 2010, the paper came together to reflect the common themes and conclusions that arose in these discussions.

The authors shared drafts with professionals who understand finance and comprehend the implications of the analyses.

Over seventy Principal Reviewers have read the report and agree with the Authors' findings and endorse their conclusions.

Principal Reviewers

Michael Armacost – Shorenstein Fellow, Stanford University Asia/Pacific Research Center (PhD, Columbia)

Skip Bacon – CTO, late stage start-up; SVP, Vendavo; VP. Applications Technology, Siebel (now Oracle) (BA, Johns Hopkins; Program for Management Development, Harvard Business School)

David Barca – GM, Keller Williams Realty; Director California Association of Realtors, Director National Association of Realtors; and Special Consultant for the Privatization Effort of British Rail (MA, Santa Clara University)

Don Barnby – Co-Founder and Director (retired President and CEO) Biolog, Inc. Co-Founder, past President and CEO, Cymed, Inc; US Executive Office of the President (BS, MS Chemical Engineering, MIT; MBA, Stanford)

Joseph Baylock – Veteran Technology Analyst (BS, Rensselaer Polytechnic Institute; MBA, Wharton)

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The Financial Risks of California's Proposed High-Speed Rail

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Sheldon Breiner – Chairman, UBIQ Networks, Inc; Chairman, Founder of Potential Energy; Founder, President of GeoMetrics, Inc; Co-founder and CEO of PML, Inc; Interim CEO of 3DGeo; Founder and CEO of Syntelligence; Fellow, Explorers Club of New York; Advisory Council, School of Earth Sciences at Stanford (BS, MS and PhD in Geophysics, Stanford)

Sam Bronfman – Chair for Global Wines, Diageo, plc; Bacchus Capital Management; Board of California Cancer Center; Board Jewish Museum of San Francisco (BA, Williams College)

Kelly Bronfman – Former Director of Marketing, Photo Drive-Up; Board, Eagle Valley Land Trust (ret); Trustee to Board of Colorado Conservation Trust; Director, Gore Range Natural Science School (BA, Rice University)

Michael G. Brownrigg – Founder and Managing Partner, Total Impact Advisors; Managing Partner, ChinaVest; US State Department, Foreign Service; US Trade Representative's Office; Board, Foundation for A College Education; (BA, Economics Williams College)

Alan H. Bushell - Management consultant, McKinsey & Co.; CEO/COO/CFO of several technology companies; ret. (BA Stellenbosch University, Chartered Accountant SA; MBA Harvard)

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Scott T. Carey – Chairman and General Counsel, Cornish & Carey Commercial, Newmark Knight Frank; Former Councilman and Mayor, Palo Alto; Advisory Board for the Berkeley Center for Law, Business and the Economy (BA, LLD University of California)

Jerry Carlson – Division GM and Corporate Controller, Hewlett-Packard, ret; CFO, Triad Systems; Mayor, Vice Mayor, Councilmember, Town of Atherton (MBA, Stanford)

Peter Carpenter – EVP, Alza Corporation; Director, Federal Assistance Review, US Office of Management and Budget; Planning Commissioner, City of Palo Alto; Director, Leadership California; (AB, Harvard; MBA, University of Chicago)

Jane Shaw Carpenter – Chairman of the Board, Intel Corporation; Chair and CEO, Aerogen Inc.; President, COO, EVP, Alza Corporation, ret.; 2010 ODX Outstanding Director Award; 2009 Outstanding Woman of Silicon Valley; American Association for the Advancement of Science; holder of thirteen US patents (BS and PhD Physiology, Birmingham University, England; D.Sc. Worcester Polytechnic, Mass)

Robert C. Chiles – Senior Partner, Chiles and Prochnow LLP; Fellow, Litigation Counsel of America; (JD, Santa Clara University)

Tench Coxe – Partner, Sutter Hill Ventures (MBA, Harvard)

Thomas Lyman Chun - Board of Directors, Maxtor Corporation; Board of Advisors, Logitech International S.A.; Chairman of the Board, Corporation for Open Systems; Vice President, Tandem Computers & SyQuest Technology; CEO of several start-ups (BA Yale; JD, Harvard; MBA, Stanford)

Douglas DeVivo – General Partner of Alce Partners, LLP (Ph.D. Northeastern; MBA, UC Berkeley)

William C. Edwards – Pioneer Silicon Valley venture capitalist; ret.; Executive Committee, Hoover Institution (BS Eng. Stanford; MBA, Harvard)

Erik T. Engelson– Managing Partner, The Foundry, LLC; CEO, Cierra, Inc; CFO, Fluidigm Corp; Venture Partner, Versant Ventures; SVP, Target Therapeutics, Inc. (MS BioEngineering UC San Diego; Stanford Exec Program)

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Sanford Fitch – CFO of SanDisk, Komag, and Concept, ret., (BS and MBA, Stanford)

Norm Fogelson – General Partner, Institutional Venture Partners (MBA/JD, Harvard)

Kenneth C. Frederick – CEO, Molecular Imaging Corp; Director, Family & Children Services (BS, Engineering, University of Pittsburgh; MBA, Harvard)

Philip H. Friedly – VP International, H2O Inc; Sr. Research Mgr., Allstate Research & Planning Center; Business Research Director, Fireman's Fund; SRI International; HUD; OECD, Paris (PhD Economics, USC)

Lani Fritts - General Partner, Trumpet Ventures, Managing Director/CEO, Trumpet Behavioral Health; former VP Lockheed Martin; former CEO, Savi Performance Logistics; COO Savi Networks, Member; US Chamber of Commerce Infrastructure Security Task Force; Program Manager, Smart and Secure Tradelanes (BA Econ. Georgetown, MBA Stanford)

Will Griffith – General Partner, Technology Crossover Ventures; Associate, Beacon Group; Investment Banker, Morgan Stanley; Boards of 2Wire, Orbitz, TravelPort, and Whitepages (BA Engineering, Dartmouth; MBA Stanford)

Morton Grosser – Venture investor, founder and director of technology companies; Director of L.H. Alton & Co., Chroma Energy, Chroma Medical, I-Flow Inc., Lazer-Tron Corporation, Microfabrica Corporation, etc.; Member of Gossamer Albatross team; Associate Fellow American Institute of Aeronautics and Astronautics; Fellow American Society of Mechanical Engineers; NIH Fellow UCLA Medical Center; Multiple patent holder; NASDAQ Financial Principal (BS, MS Eng. MIT; PhD, Stanford).

J. Michael Gullard – Founding Partner, Cornerstone Management; President of the Board, Boys & Girls Club of the Peninsula (MBA, Stanford)

Steve Halprin – General Partner, OSCCO Ventures, ret.; Chair, Audit Committee Landec Corp.; Prior Board member Hybrid Networks, Oceaneering International and numerous private companies. Past Trustee Memorial Drive Trust; Founding board Peninsula Conservation Center (BS, MIT; MBA, Stanford)

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Bob Hellman – Managing Director & CEO, American Infrastructure MLP Funds; former Managing Partner, McCown De Leeuw & Co; Associate Consultant, Bain & Co. Japan; Board Member of American Midstream Partners, Stonemor Partners, OnStage Entertainment, Stanford Institute for Economic Policy Research (SIEPR), (BA, Stanford; MSc, London School of Economics; MBA, Harvard).

Tom Holt – CEO, VORT Corporation; Founder, Surfswax Inc.; holder of three US patents; past Deacon and Elder, Menlo Park Presbyterian Church; past Chairman, Menlo-Atherton High School Technology Committee; (BS Chemistry, Stanford)

Richard Holt – Founder, CEO Micro General Corporation (acq); (BS, Stanford; MBA, UCLA)

James R. Janz – Partner, Sideman & Bancroft LLP (BSCE Purdue; MSUP, Columbia; JD & MBA, University of Chicago)

Robert Jaunich II – Founding Partner Calera Capital, Chairman Palo Alto Medical Foundation, former Chairman Coldwell Banker Corporation, former President Sara Lee Corporation, Board Member Con-way Corporation, Board Member Direct General Corporation, (BA Wesleyan University; MBA, Wharton Graduate School).

Robert L. Katz – former CEO U.S. Natural Resources, Inc; former Chair, California State Parks & Recreation Commission (AB, UC Berkeley; MBA Stanford; DCS, Harvard)

Lee M. Kenna, Jr. – Chair and CEO, SIMCO Electronics; Past President, Nor Cal Chapter of World Presidents Organization; Past President, Pacific Skyline Council, BSA. (BS, Mech. Eng. Duke; MBA, Harvard)

W. Keith Kennedy Jr. – Chairman of the Board, Con-way; President and CEO, Watkins-Johnson, ret.; Former Chair, Joint Venture: Silicon Valley Network (BSEE, MS, PhD, Cornell University)

Al Krizelman – Director of Sales: Raychem; Director, Siemens Medical; Director, Acuson Corporation; Founder, Bay Area Bladder Cancer Advocacy Group (BA, University of Nebraska)

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Herbert Lechner – Senior corporate positions American Express, The Singer Company, Fireman's Fund Insurance Companies, and SRI International; CEO and Board Member of several technology start-ups (BA Math & Physics, University of Kansas; Graduate work Business and Computer Science, Stanford and Columbia)

James E. Moore – Professor, Public Policy Management, Daniel J. Epstein Department of Industrial and Systems Engineering, USC; Immediate Past President, Transportation Science and Logistics Society; Research affiliation, Norman Y. Mineta Transportation Institute (BS, Industrial Engineering, Northwestern; MS and PhD, Engineering, Stanford)

Michael J. Murray – President, Global Corporate and Investment Banking, Bank of America Corporation (ret); Director, Eloyalty Corp; Director, Con-Way Inc; Past Chairman, United Way of the Bay Area; Past Vice-Chairman, California Academy of Sciences; Advisory Council for the College of Business, University of Notre Dame (BBA, Notre Dame; MBA, University of Wisconsin)

Jami Dover Nachtsheim – Director, Affymetrix and Southwall Technologies; VP, Worldwide Marketing, Intel Corporation, ret.; Director, Tech Museum of Innovation (BA, Arizona State University)

Stephen Nachtsheim – Intel Corporation, Corporate VP ret. (Director, Intel Capital; GM Intel Mobile and Handheld Products; GM Intel EMEA.) Chairman of the Board, Deluxe Corporation; Trustee, University of St. Thomas; Former Faculty University of Minnesota and University of St. Thomas (MS and MBA, University of Minnesota)

Howard Neff – Group Vice President of Global Product Operations, Applied Materials Corporation, ret.; Board Digital Divide Data Foundation; Advisory Board, Jhai Foundation (AB Economics, Dartmouth College)

Alex Osadzinski – Member Executive Board and EVP Product & Solutions, Kudelski Group; Venture Partner, Trinity Ventures; CEO, Katmango; VP Marketing Vitria Technology; VP Marketing & Sales, Be; VP Market & Product Strategy, Sun Microsystems (UK education equivalent to US BSc Computer Science)

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Robert Saldich – CEO of Raychem Corporation, ret.; former Chair, Commonwealth Club of California; former member Bay Area Council; Visiting Committee, National Institute of Science and Technology (BS, ChemE, Rice University; MBA, Harvard)

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Bill Schroeder – Past CEO, Diamond Multimedia, Inc. (acq); past President and Vice Chair, Conner Peripherals, Inc. (acq); President & Co-founder, Priam Corporation; Management Consultant, McKinsey & Company; various high-tech boards of directors (MSEE, Marquette University; MBA, Harvard with honors)

Saram Shirazi – CEO, fotoflexer.com: Former Chairman & CEO, Teknekron Systems; CEO, Empact Software; CEO, Verification Technologies; Director, Zilog, Inc.; Consultant, Bain & Co. (BS, MS, EE MIT; MBA, Stanford)

John C. Shenk – President, Argus Financial Corporation; VP Union Bank; Board Silicon Valley NAIOP; Board of Trustees, Menlo College (BS, UC Berkeley)

Bruce D. Smith – Founder, Former Chairman & CEO Network Equipment Technology (NYSE); Executive positions at GigEpath, Silicon Wireless, Nomadic Systems and COMSAT (MEE University of Florida; MBA, Harvard)

Carol F. Smith – CEO, Exceptional Wines International National Marketing; Executive Director Hewlett Packard Grants (SV), CMO Oak Grove Enterprises; Founder, Eco Green Group; Corporate Council, United Way of America; Director, San Mateo County Parks Foundation (MBA, San Jose State)

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Timothy R. Warner – Vice Provost for Budget; Stanford University, Senior Advisor for Management Reform, State Department 2006-2008; Board, Independent 529 Plan; Board co-chair, Western Reserve Academy (BA, Wesleyan University; MBA, Stanford)

Robert P. Wayman – Interim CEO, former CFO, EVP and Member of the Board, HP (BS Engineering and MBA, Northwestern University)

J. M. "Mike" Wells, Jr. – Chairman of the Board, North Valley Bancorp 2005-Present; Attorney, Redding, CA 1966-2005 (BA Economics, Stanford; JD Hastings College of the Law)

William R. Widmer – Deputy VP, Orange Business Services-France Telecom; Deputy CEO Aerospace Systems Division, CSC; COO Cadence Design (MBA, Texas Christian)

Robert Wilkie – Investor; CEO, Continental Hydraulics, Inc. ret. (BA, Stanford)

Robert C. Wilson – Corporate Vice President, General Electric, Executive Vice President, Rockwell International, CEO, Collins Radio, CEO Memorex; Numerous Boards, including Chrysler Corp., GAF Corp., Western Digital, Teletype, and Resound; Twice named one of the top ten CEOs of the year; US Navy World War II. (BSME, UC Berkeley).

William Wilson III – Founder WMS Partners; (BS, Engineering, Stanford)

Will C. Wood – EVP-International, Wells Fargo, ret.; Principal, Kentwood Associates; Director, Pefco; Director, Banco Latino de Comercio Exterior (Bladex) (MBA, UC Berkeley)

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EXECUTIVE SUMMARY

After months trying to understand the available evidence and forecasts from the California High-Speed Rail Authority (CHSRA), our general conclusion is that there is little if any chance the system will pay for itself. That requirement is the baseline of AB3034.

The 2008 and 2009 CHSRA business plans asserted the system would earn an operating surplus, the most recent stating it would do so in the system's first year of operations. The private sector was supposed to be a financial partner, local governments were supposed to pitch in, and the Federal Government was to have funded about 45% of the presently estimated costs. The stark conclusion, of this financial Review, based only on CHSRA's Phase I plans and supported by these pages, is that CHSRA's financial promises can't be kept.

After reviewing this paper and documents in the End Notes, the Authors and Principal Reviewers cited in the Preface agree on the following specific conclusions.

1.0 Broken Promises And Unmet Demands From The Legislature Diminish The CHSR Project's Credibility

1.1 The CHSR Project That Voters Chose In 2008 Promised To Link Seven Cities, But Links Only Three.

Although San Diego, Riverside, Oakland and Sacramento were part of the official ballot description for Prop 1A, what emerged after the vote as Phase I is only for Los Angeles/Anaheim to downtown San Francisco

1.2 The Prop 1A \$33 Billion Capital Cost Promise Morphed Into A \$42.6 Billion Capital Cost. How did the CHSR project drop routes but increase its costs?

1.3 The Promised \$55 One-way SF-LA Ticket Morphed Into A \$105 One-way Ticket After Prop 1A. Voters chose what looked like an attractive fare, but a year later were presented with a fare that nearly doubled.

1.4 Five Months Before Prop 1A Passed, The Authority Knew That Private Sector Participation Was Conditioned On Near Total Federal And State Capital Building The CHSR Project. IMG told the Authority that

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private sector firms were really only interested in building the CHSR if the government paid for it.

1.5 Five Months Before Prop 1A And Three Months Before AB3034 Passed, The Authority Learned The Private Sector Would Only Operate The CHSR If Given A Revenue Guarantee. IMG and Goldman Sachs told the CHSRA Board that the private sector considered the ridership risks too high to finance CHSR without a revenue guarantee

1.6 The CHSRA Did Not Meet The Senate's Demand For An Investment Grade Business Plan Prior To The 2008 Proposition 1A Vote. Although demanded by September 1, 2008, the promotion-oriented document submitted to the Senate came after the election.

1.7 CHSR Proponents Promised Prop 1A Voters The Project Would Pay Its Way; But By Mid-2008 The CHSRA Knew The State Would Have To Guarantee The Operators' Revenue. Proponents promised "THE USERS OF THE SYSTEM PAY FOR THE SYSTEM"; that is riders, not taxpayers, would pay for the system.

1.8 Despite The Senate's Demand, CHSRA's Business Plans Have Still Not Met The Criteria Or Quality For Investment Grade. The Senate still does not have an investment grade business plan two years after demanding one.

1.9 A Year After AB3034 Passed, IMG Again Told The Authority That Private Sector Financing Would Only Become Available With A Revenue Guarantee. There was little or no change in the private sector's view of the financial worthiness of the CHSR project in the intervening year.

1.10 Although Twice Demanded By The Legislature And Promised Before September 2010, CHSRA Has Not Produced A Risk Mitigation Plan. This is the *sine qua non* of finance; what needs to be done if the scenario as presented fails to take place.

1.11 Despite The Demands Of AB3034 More Than Two Years Ago, No Independent Peer Review Group Has Reviewed And Assessed The CHSRA's Financial Plans. How the Authority can ignore that essential condition of AB3034 is a mystery.

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2.0 CHSRA's Ridership Forecasts – Central to the System's Financial Outcome – Are Far Too Optimistic

2.1 Evidence-Based Analyses Contradict CHSRA's Forecasts. Empirical precedents from the USA and Europe suggest CHSR ridership by the tenth operating year (2030) should be 5-10 million, not the 39 million annual passengers claimed in the CHSRA models.

2.2. Independent Experts' Refute CHSRA's Ridership Model. Three independent economists and transportation groups have found significant flaws in the CHSRA consultant's ridership model involving uses of coefficients and inappropriate data series. These findings have already produced calls for even more independent reviews of this critical planning element.

3.0 CHSRA's Estimated Phase I Capital Costs Should Be Significantly Higher. The history of cost overruns on megaprojects such as high-speed rail suggests the CHSRA has seriously underestimated the price tag for Phase I (Los Angeles to San Francisco). Using overruns from recent infrastructure projects as a guideline suggests the present \$42.6 billion estimate could reach \$100 billion or greater.¹

3.1 Megaproject Histories Show Costs Were Substantially Underestimated. Transport projects' build-out costs can be anywhere as high as 600% of their original estimates.

3.2 The Costs Of Phase I Of The CHSR Project Could Fall Between \$62 Billion And \$213 Billion. Comparing the CHSR's estimated costs to real world outcomes gives a sobering view of how high the build-out costs could go.

4.0 CHSRA's Revenue Assumptions Are Too High And Its Operating Expenses Too Low

4.1 CHSRA Used Inflated Auto And Airfare Prices To Capture More Riders And Revenue. A detailed analysis of actual automotive and airline ticket costs between Los Angeles and San Francisco concludes that the CHSRA's input prices to its revenue model for auto and air travel should be at least 25% lower. Even using the Authority's ridership forecasts, the CHSRA would not gain enough revenue to avoid requiring an operating

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subsidy to service its operating debt, a situation strictly prohibited by AB3034.²

4.2 If CHSRA Had Used An Evidence-Based Pricing Approach, Ridership Estimates Would Have been Lower. Empirical analysis of the per-passenger mile ticket charges for five European and Japanese high-speed rail systems suggests ticket pricing assumptions should be about \$190 for a one-way SF-LA passage, about 80% higher than the \$105 CHSRA's present model uses.

4.3 CHSRA's Assumptions On Operating Expenses Do Not Reflect Real World Practices. Many of CHSRA's assumptions about operating expenses do not conform to rigorous accounting and financial practices. CHSRA's documents fail to distinguish between variable and fixed costs, do not recognize that maintenance costs increase yearly, do not include insurance costs, and do not acknowledge that labor cost increases will be extremely difficult to manage.

5.0 Using The CHSRA's Data On Revenues and Expenses, The System Will Never Achieve Positive Cash Flow Without All The Assumed Federal Grant Monies

5.1 The Warren Financial Model Of The CHSR Highlights The Costs Taxpayers Will Have To Bear. Without independent access to the CHSRA's financial model, several of the authors built a surrogate model based on the assumptions stated in the CHSRA's 2009 Business Plan, with particular focus on the issue of 'if and when' the CHSR might achieve positive cash flow. This 'Warren Model' of CHSR's prospects for being financially self-sustaining assumes the point of view of the State of California's obligations, not the Authority's view that it can 'off-load' its financial obligations to other entities.

The model finds that unless the Federal Government supplies the CHSR with the complete package of \$19 billion of grants towards the supposed \$42.6 billion of capital costs currently needed, the CHSR will never achieve positive cash flow.

Any other finance scenario will require visible or seriously large debt servicing. Debt servicing becomes an operating expense. Therefore, if built, the CHSR will require a continual and reliable subsidy, now referred to by the CHSRA as a 'revenue guarantee'. The authorizing legislation for the system, AB3034 (Galgiani),

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explicitly prohibits such a subsidy.³ Meanwhile, the CHSRA commissioned the Infrastructure Management Group Inc. to outline how to interpret a revenue guarantee as something other than an operating subsidy.⁴

In this Review, numerous scenarios are analyzed to show the sensitivity and magnitude of the peak cumulative negative cash flows to various combinations of financing, various degrees of successful operating results, and the 'guaranteed' or 'at risk' returns for the private equity investor.

5.2. High-speed rail systems do not break even. The Director of High-Speed Rail at the International Union of Railways (IUR) stated that only two segments of two high-speed rail systems in Europe and Japan break even. A 2004 DOT study, then a the Congressional Research Service study reconfirmed this. In 2009 Amtrak's Inspector General documented the on-balance sheet and off-balance sheet subsidies European rail operators receive. Recently a World Bank report said the same thing. This reality should have been reflected in the CHSRA's 2008 promotion of Prop 1A. CHSRA's negligence of these facts is neither understandable nor excusable.

6.0. Complete CHSR Funding Has Not Materialized, Nor Is It Likely To Be Forthcoming.

As of third quarter 2010, the prospects for obtaining the funds listed in the Authority's 2009 Business Plan do not seem bright. There is a large and real funding gap between the sizes and sources the CHSR needs and what it has or is likely to get. Others have also pointed out this discrepancy. For example, within weeks of the April 2010 ARRA allocation that looked so hopeful, State Auditor Howle reported to the Governor: "*The program risks significant delays without more well-developed plans for obtaining funds.*"⁵

6.1 CHSRA's Proposed Capital Budget Sources Are Heavily Skewed To 'Free' Government Money. The 2009 CHSRA Business Plan specified four sources of capital prior to the start of operations in 2020.

Federal Grants	\$17-19 billion
State Grants (actually Prop. 1A bonds) ⁶	\$9.95 billion
Local Grants	\$4-5 billion
Private Debt or Equity Funding	\$10-12 billion

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6.2 Purchasers For The \$9.95B Of Guaranteed GO Bonds Have Not Come Forward. Even with a State of California guarantee, the future of bond sales is questionable. State Treasurer Lockyer said, *"I would be reticent to try to go to market to issue bonds to finance the state's share. The only discretion I have is to say, 'You can't sell this.'"*⁷

6.3 The Probability Of CHSRA Receiving The Full Complement Of Federal Grants Is Small. As of August 2010, the total the Authority could use for building the project is \$4.7 billion -- the sum of the \$2.34 billion ARRA grant from the Federal Government and the dollar-for-dollar match authorized by Prop 1A, less the \$400 million earmarked in the Federal grant for the San Francisco Transbay Terminal. This totals about 11% of the currently estimated \$42.6 billion projected cost. We have found no provision for financing above that projected cost.

6.4 CHSRA's Assumptions About Local Government Assistance Have No Historical Basis. CHSRA's assumptions about the ability of California's fiscally strapped cities and counties to provide \$4-5 billion 'local contribution' grants for the CHSR project fail to take into account the financial distress of those governments. They are furloughing or laying-off police officers, teachers and other employees. Local governments have almost never funded transit projects outside their jurisdiction. The prospect of gaining such local funding through grants or secured debt within the foreseeable future is doubtful.

6.5 Twenty-three Months After Passage of Proposition 1A, There Is No Private Equity Or Debt-Based Financing for the CHSR. The United States' risk capital providers, of which California-based companies are leaders, have not come forward in the past 23 months for the CHSR. This suggests there is little appetite for either a guaranteed or non-guaranteed return on investment in the CHSR project. Given the State's continued budget shortfalls, investment in California State projects, particularly of the order of magnitude of Phase I of the project (the segment between San Francisco and Los Angeles, without the Oakland, Sacramento or San Diego destinations) entails far greater risk than normal. Moreover, our analysis suggests the risk-adjusted return profile of CHSR will be highly unattractive to private investors. This further undermines the project's financial plans.

6.6 At Present California Is In The Least Favorable Position Possible To Go To Debt Markets To Fund The CHSR Project. Even if the Great Recession had not happened and the Federal Government was not purposely and rapidly increasing its debt through fiscal stimulus, the State's profligate

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spending even in 'good times' has put it at a disadvantage relative to other borrowers. Add to that the new dimensions of increased scrutiny by the State Treasurer and the SEC, and California will be hard pressed to attract bond buyers.

6.7 Discussions With Sovereign Governments Or Others About Using 'Creative Financing' To Fund CHSR May Not Be In The Best Interests Of California. Discussions by the CHSRA with sovereign financiers (such as China, France, Germany or Japan), or such sovereign financiers in combination with foreign builders, operators and private financiers, could be a dangerous foray into using 'creative financing' to fund CHSR. This could result in an excessively leveraged CHSR if the projected federal and city/county grants are indeed supplemented by foreign loans requiring ongoing debt service payments. What could be helpful to get the CHSRA's project built may be bad for California in several different ways.

7.0 CHSRA's Job Creation Forecasts Are Too Vague And Too Large To Be Credible. The CHSRA predicted 600,000 jobs would be created over the course of the CHSR construction period. Whether that is 60,000 jobs for ten years or 600,000 for one year or some other possibility is not defined. The CHSRA forecast of 450,000 permanent jobs is unsubstantiated by either methods or evidence presented in the CHSRA's reports.

7.1 CHSRA Is Silent On Exactly When Or Where Jobs Occur, Or How Many FTE Jobs Each Year Their Forecasts Represent. Promises of construction and permanent employment should be accompanied with information about whether these are Full Time Equivalents (FTE's); what the average income per job would be; what years these jobs would be created, and how long - if not forever - would these permanent jobs last.

7.2 CHSRA's Forecasted Employment For The 8-10 Years Of Construction Is Seriously At Odds With Estimates Based On Bureau Of Labor Statistics Data. The 600,000 construction jobs forecast differs significantly from other forecasts using Bureau of Labor Statistics (BLS) data.

7.3 If 'Permanent Jobs' In CHSRA's Lexicon Means Both CHSR Employees, As Well As Those Employed Permanently Because CHSR Exists, Their Forecast Is Beyond Believable. In August 2010, there were 15,968,000 jobs in California while there were 239,586 active State of

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California employees. To claim a train would create twice the number of employees as the entire State government, whether engineers, maintenance workers, local coffee shopowners or rental car agencies is highly questionable.

7.4 If 'Permanent Jobs' In CHSRA's Lexicon Means Only CHSR's Employees, Then Few Jobs Will Be Created. If CHSRA means 'permanent' to be jobs created over a 40-year life of the project, the impact – 0.1% – is miniscule.

7.5 There Are Inconsistencies In CHSRA's Forecasts That Raise Questions About The Rigor Of Their Methodologies For Computing Employment. CHSRA appears to be confused about its CHSR Phase I employment forecasts.

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INTRODUCTION

This report came about because professionals conversant with finance, economics, urban planning and business operations found claims by the California High-speed Rail Authority implausible. Extremely high ridership forecasts coupled with assertions of low fares and construction costs just didn't pass 'the smell test of my professional experience' as one executive put it. To claim the system was to have an operating surplus in its first full year of operations surpassed both historic evidence and credibility.

We believe the CHSRA Board, which successfully promoted the project to voters in 2008, has become captive to its own thinking. Consultants to the CHSRA seem to be repeating the same conclusions, despite credible challenges. This pattern has continued throughout 2009 and deep into 2010, despite serious questions from key State Senators, the Legislative Analyst's Office (LAO), the State Auditor and independent experts' publications. Once the flow of Federal time-dependent American Recovery and Reinvestment Act (ARRA) funds seemed imminent, the Authority appeared reluctant to ask the hard questions that private and public sector due diligence demanded.

This report challenges most of the key assumptions and findings that would affect the financial performance of the CHSR. To find answers we could rely on, we asked:

- Do the Authority's ridership forecasts have a chance of 'being roughly right' or are they unrealistically optimistic?
- How realistic are CHSRA's estimated capital costs for Phase I?
- How reliable are the CHSRA's assumptions about operating expenses and revenues? Are they based on real-world experience?
- Based on CHSRA's financial model, can an operating surplus of \$370 million in the first year of operations (2020), supposedly growing to \$3.9 billion by 2035, be substantiated?
- What is the likelihood that all Federal and local government grants assumed by the CHSRA will actually be made?
- Why haven't California's world-beating risk capital firms stepped forward with their share?
- How realistic are CHSRA's forecasts of temporary and permanent job creation?

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As we prepared this document, we realized we were 'peeling an onion.' The more we pursued a topic, the more we were frustrated by the lack of a data trail. Still more frustrating were the contradictions between the CHSRA's conclusions and the history and evidence of planning and operating high-speed rail systems throughout the world. We were also disturbed by the lack of precision in key aspects of fiduciary audits prepared by the Authority's consultants. Repeated instances of such poor work products also diminished our trust in their conclusions.

This report is not kind to the CHSRA or its consultants' work. It should not have been necessary to spend the many weeks we did researching documents, drafting analyses, checking conclusions with peers and editing our work. Voters in 2008 deserved a financial plan that was clear and up-front about the challenges of getting Californians to abandon their autos for a new transport mode. We expected transparency on how operating surpluses could be made when high-speed rail's history and our financial model showed otherwise. We expected that assertions of ridership and ticket pricing would be grounded in real airline fares and real high-speed rail ticket prices. Because few of those expectations were realized in the CHSRA's documents, we lost confidence in its ability to plan -- much less operate -- a financially viable system.

We do not oppose high-speed rail in concept. It seems to work in parts of Europe and Japan and possibly elsewhere. But it works in those places due to unique combinations of higher population densities, long histories of train travel, less-dominant car cultures, shorter distances between metropolitan centers, and higher tax rates that provide subsidies. The 2008 Prop 1A promise that captured many voters was that the CHSR would not cost the taxpayer a penny.⁸ After months of work on this report, we were forced to conclude that the Authority's promise seemed an impossible goal.

We hope this report is widely read and becomes a source document for others concerned with the many unsubstantiated claims the CHSRA has made. Those who believe California should have the proposed system will challenge this report. Those who think they stand to gain from rail system construction, equipment or technology sales, or operations and maintenance will scorn it. We only ask supporters and critics to take the time to read our material and the source documents. Don't take our word or those of others uncritically. Draw your own conclusions. But draw those conclusions after carefully studying the financial viability of the State's single largest infrastructure project, one that could change the State's financial future for a long time.

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**BACKGROUND OF HIGH-SPEED RAIL
IN CALIFORNIA**

In the mid-1990s the State began exploring a possible high-speed rail system. Governor Pete Wilson and the Legislature created the California High-speed Rail Authority (CHSRA) in 1996 and tasked it "to prepare a plan and design for construction of an economically viable high-speed train line linking major metropolitan areas."⁹ [emphasis added]

By 2008 the Authority had produced what it considered "investment-grade forecasts of ridership, revenue, cost and benefits of the system" for 800 miles of high-speed rail "designed to carry over 100 million people a year by 2030."¹⁰ CHSRA had also produced a certified statewide program level Environmental Impact Report/Environmental Impact Study (EIR/EIS), selected general track alignments and stations, and developed an institutional structure to manage construction and system-wide operations.

By a two-thirds vote in August 2008, California's Legislature approved AB3034 (Galgiani) to place a referendum on the ballot to commit the State to issue up to \$9.95 billion of General Obligation (GO) bonds to support the system's development.¹¹ A similar bond measure had been scheduled for the November 2004 ballot, but was postponed twice.¹²

Three months after AB3034 passed, Prop 1A received 52.7% of Californian's votes. With the exception of the California Rail Association and the Howard Jarvis Taxpayers Association, there was little organized opposition. Prop 1A's advocates largely came from labor unions, engineering and construction companies.¹³

To date the Legislature has spent about \$300 million on all types of work. This includes filings under the California Environmental Quality Act, detailed studies of right-of-ways and alignments, public relations consultants and the CHSRA's management and administration of their Project Management Team, Parsons Brinkerhoff. The CHSRA FY2011 budget request of over \$400 million was lowered considerably. However the budget is under review again because in August 2010 the Authority proposed to have the Federal Railroad Administration (FRA) select one of four of the Phase I segments for a pilot program as opposed to its Phase I plan of LA/Anaheim to the San Francisco Transbay Terminal.¹⁴

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**CONCLUSIONS AND RECOMMENDATIONS
REGARDING FINANCIAL RISKS ASSOCIATED
WITH THE PROPOSED HIGH-SPEED RAIL
PROJECT**

At the close of September 2010, the Authority had both a \$2.34 billion grant commitment from Federal ARRA funds and \$194 million from the FY2011 Fiscal Christmas. If matched with bond financing authorized by Prop 1A of 2008, currently CHSRA has about \$5.1 billion. That is not nearly enough to start construction on its \$42.6 billion Phase I plan - LA/Anaheim to San Francisco. Nor is it enough to build one of the more expensive urban segments.¹⁵

The CHSRA's prospects for meeting AB3034's requirement not to require an operating subsidy are dubious. The prospect for gaining the full \$18-19 billion of Federal grants has virtually vanished. Only with all of those assumed grant dollars can the CHSR hope to ever have a positive cash flow. California's counties and cities are struggling financially and are unlikely to be able or willing to find the \$4-5 billion the project requires of them.

Twenty-three months after Prop 1A no private lenders have come forward with an arms-length proposal for the \$10-12 billion earmarked from that source. To not have secured one private lender's commitment in a state that houses the world's largest and most successful risk capital companies speaks volumes.

Why the CHSRA finds itself in this predicament after spending over a quarter-billion dollars of State of California monies is answered by one word: credibility. The Authority successfully sold voters on a new mode of transport that would cost 'only' \$33 billion and would allow them to travel in less than three hours from Los Angeles to downtown San Francisco at a cost of \$55 for a one-way ticket. A year later the capital costs had risen by \$10 billion and the publicly advertised ticket price was \$105. Similarly, the financial model went from 'not costing taxpayers a penny' to the need for a legally prohibited subsidy, now called a revenue guarantee.¹⁶ Those changes gnawed at the CHSR project's credibility.

Many rail experts had long questioned the plausibility of what the CHSRA was selling.¹⁷ The next credibility gap came when hard questions were asked about the Authority's ridership model. To independent transport economists the forecast of 39 million annual riders for a *de novo* system in its tenth operating year

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stretched beyond their imagined possible outcomes. Ridership forecasts on both transit and high-speed rail mega projects around the world are known to be overestimated, and most with serious financial consequences.¹⁸ Since the CHSR must operate without a subsidy, the predictions should have been on the conservative side. To propose that four of every five Californians would ride the CHSR in 2030 is not plausible. Consequently, the CHSRA has faced challenges in both the popular and professional press for the credibility of their ridership forecasts.

CHSRA's ticket pricing assumptions were also scrutinized. We found that by using higher than publicly available price estimates for air transport and then pegging the CHSR ticket price at 83% of the average air ticket price, the CHSR model could always achieve a price advantage over air travel options. But these assumptions do not reflect the reality of personal or corporate budget choices, nor does the CHSRA's model reflect realistic choices for driving with several passengers. To achieve the forecasted ridership levels, the system would need more passengers and a cheaper per ticket cost. But assuming a higher than realistic airfare, and pegging the CHSR ticket at a percentage of that higher airfare is not a credible approach.

We know that every high-speed rail system in the world is subsidized. Only two segments worldwide, one in France and one in Japan, supposedly break even. By looking at the ticket prices for five routes in Japan, we found that the CHSRA's ticket pricing model used the same per passenger mile rates as Japan's Shinkansen system - \$0.24/mile. The only supposedly break even French TGV segment, Paris-Lyon, charges \$0.399/mile, two-thirds higher than the CHSRA's pricing model input. One might build CHSR, but in order to be profitable, ticket prices would have to be much higher - 80 % higher - and higher ticket prices mean fewer passengers will ride. Fewer passengers mean even less probability to operate without the prohibited subsidy.

Assumptions about the CHSR's revenues and operating expenses, coupled with their ridership forecasts, produced their projected operating surpluses - claimed to be \$370 million in their first operating year, 2020. Since there is no publicly available edition of the CHSRA's financial model, we constructed one based on the same revenue and expense assumptions provided in their 2009 Business Plan. As the Authority did, we also focused on cash flows. Our model tells us that unless the full \$18-19 billion is a non-repayable gift from the people of the United States, and the CHSR achieves 100% of its revenue and operating costs' forecasts, the project will never achieve positive cash flow. This finding stands in stark contrast to the Authority's

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assertion of an operating surplus in its first year of carrying passengers and onwards.

Similarly, any other mix of bond or equity financing to cover a portion of the \$18-19 billion will cause the CHSR project to accumulate negative cash flows with grim consequences for the State's treasury. Other forensic analyses of the CHSRA's finance statements showed that insurance, inflation, labor, maintenance and fuel costs were either poorly calculated or assumed to be minimal, in contrast to generally accepted accounting practices. Likewise, CHSRA treated all operating expenses as variable expenses, in contradiction of real world experience and standard accounting practices. These findings again stretched the credibility of the CHSRA's assertion that it would achieve an operating surplus.

Should the State Subsidize High-Speed Rail For The Public Good?

Some will ask, "Why shouldn't California subsidize the CHSR?" The obvious answer is that Prop 1A sold the project on the basis of no subsidy and AB3034 prohibits an operating subsidy. That is the law. Period.

Second, even in past times with good economic performance in California, the State ran a fiscal deficit. This has worsened during the Great Recession and no easy solution is in sight. State and local budget cuts have put many services, but particularly education, at risk. While California was once the envy of the world and its education system a major generator of prosperity, with a less-well educated workforce, State tax revenues from lower skilled labor who are paid less will decrease and business will have to turn elsewhere within or outside the US for skills. Raising taxes to close the fiscal deficit in a relatively high tax state risks the same results: fewer new businesses, fewer private sector jobs and less revenue for the State.

Any subsidy (or revenue guarantee) for CHSR must be paid for somehow. But the State doesn't even have the income to cover several prior years' or this year's budget. Any CHSR subsidy could only come from higher taxes or GO bond sales. The State's voters don't seem to be in the mood for a tax increase. And since private bond investors have put California on par with several Third World nations, more debt would make a subsidy expensive.¹⁹ And a subsidy – or short-term revenue guarantee – once granted, is likely to live forever.

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However, the point about the State's fiscally flagrant behavior is moot. AB3034 (Galgiani) disallows an operating subsidy. Prop 1A advertising promised the voters the system would make money, not lose money. The 2008 CHSRA Business Plan promised, "an annual operating surplus of more than \$1.1 billion", clearly a sign of self-confidence.²⁰ The 2009 Business Plan downgraded that assertion but promised an operating surplus of \$370 million in 2020, the first year the trains run, and four times that three years later.²¹ The CHSR was supposed to make so much money that private investors should have stood in line to get a 'piece of the action'.

If those promises could be kept, there should be no worry. But nothing the CHSRA has released to the public, nor analyses done by consultants independent of the Authority's payroll has built confidence those promises will be kept. We find evidence that the project's construction is likely to cost much more than present estimates, ticket prices will have to be lower to be competitive with air and auto travel costs, and its operating costs and ridership forecasts are highly unrealistic. Conversely, if CHSR wants to have an operating surplus, ticket prices must be raised; but that will reduce ridership. The net result of these findings is that the CHSR will require a subsidy – which is prohibited.

What Would Be The Cost To The State If It Subsidized High-Speed Rail?

The Legislature and the Governor must approach the next steps on the CHSR project as investors – investors of California's wealth. This document's analyses reveal many ways in which the current CHSRA 2009 Business Plan is overly optimistic. Like a venture capitalist (VC) asking an eager entrepreneur for a forecast, we should not be the least surprised that CHSRA continues to err on the side of optimism, notwithstanding that the Legislature has demanded peer review, an investment-grade plan, and generally more rigorous financial analyses. In our hundreds of person-years of experience running businesses, we have only rarely had the sales team *beat* their forecast at the end of the year.

As long as the entrepreneur, in this case CHSRA, does the work, we can expect the same outcome. It is not surprising that the truly dispassionate analysts with no vested interest, such as UC Berkeley's ITS and the Legislative Analysts Office, should have been so much more critical of the plan than the CHSRA's own inside panels, consultants and Board. This happens every day in

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the business world too. So we posited the question "What might happen if things go wrong for the CHSR project?"

A 'Low Case' Scenario Approach To Understanding The Impacts On California Of Underestimating Capital Costs And Overestimating Revenues. "Hope for the best but plan for the worst" is an expression heard frequently in VC and private equity boardrooms. So, if the CHSRA's business plan is the best case for the high-speed rail system, and its investors including the citizens of California, what is the low case? This part sets out and combines two 'low case' scenarios; one on the capital costs, ie the costs to build-out and equip Phase I, and one 'low case' on operations. These are not a "worst case" scenarios, which would be appreciably more dire. These 'low case' scenarios are based on real world experiences with cost overruns and revenue shortfalls. Section 5 discusses the implications of various mixes of financing and operating costs, and they all show cumulative peak negative cash flows between 2020 and 2035 in the tens of billions of dollars. The purpose of the following exercise is to generate an overview of the fiscal impacts not achieving the CHSRA's revenue and operating goals for this complicated financial situation.

Learning from a 'low capital build-out case' and subsequent debt finance costs. In Section 3 we noted that the worldwide experience with megaprojects is that they cost more, or much more, than estimated to build. The proposed rail system's regulator, the US Department of Transportation (DOT), estimates the average capital cost overrun is sixty percent. Given this is the first high-speed rail system in the US; the early evidence of litigation up and down the CHSR's proposed routing, and the high degree of technical complexity associated with running through so many built-out areas (rather than 'green-fields'), we might assume that CHSRA's capital cost overruns will be even greater than currently forecasted. This would probably be much less than Boston's Big Dig overrun (3.6 times estimates) and less even than the recent Bay Bridge rebuild (six times estimates); so as a 'low capital build-out case' scenario we believe a 100% overrun (1.0 times estimates) is a sensible analytical parameter.

How would the build-out be paid for? As discussed in Section 5, CHSRA assumes \$18 billion in "free" money from the US Government, plus local funding, and additional private sector financing (presumably financed by the CHSR's profitable operations). The cost to California of debt payments will depend on this final mix of federal grant money, foreign government money on concessionary terms (not in CHSRA's plan but clearly on the radar), and whether private investors step in.

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For the purposes of creating our 'low case' estimate, we assume no private investment for the capital (build out) budget. As cited in Section 1 CHSRA's consultants interviewed finance firms in May 2008 and found there was little appetite for this debt at that time without a guarantee from the State. In essence the debt becomes a State debt if you assume, as we have found, that the CHSRA's operations will not be a profitable train service (see 'Low Operations Case' that follows).

We do not distinguish between State bonds and local bonds - which the CHSRA does. We think it highly unlikely that local jurisdictions in today's economy can raise enough money to even make a dent in the CHSRA Business Plan's estimated \$42.6 billion of build-out and equipment costs, even if they wanted to, let alone the estimate our model uses of \$80 billion. But more to the point, for the California taxpayer, he or she is agnostic as to whether it is their city budget or their state budget that is encumbered with debt. They pay in both cases. The notion of sharing build-out expenses with localities may be appealing in Sacramento, but it's 'a wash' to the citizen. In fact, we judge that most citizens would rather lose State-provided services as a result of CHSR-induced debt expense than their local police or library services. We also believe it would be a gross blunder to assume that the current extremely low interest rate environment will exist for the next 10 years of build-out.

Here we describe the total debt payments that someone will have to make. CHSRA would argue that the robust cash flow from the operation of the CHSR will provide a significant portion of this debt payment. In our 'low operating case' scenario, and in Section 5, we foresee zero to marginal Operating Surplus, which means that there would be zero or only a marginal contribution from CHSR operations to the repayment and interest cost of the CHSR capital budget's debt.

The 'Low Build-Out Case' scenario and its implications for California. The assumptions used to understand the costs and implications of a 'low build-out case' scenario are:

- a) a near-doubling the build-out cost estimate: from \$42.6 to \$80 billion build-out for Phase 1
- b) we assumed 20% of the build-out capital is provided by grants and assumed certain concessionary features to the debt, but that this is all ultimately public debt (State or local)

Our first conclusion, based on using the same modeling as the CHSRA, but altering the build-out inputs with the above

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assumptions, is this ‘low capital build-out case’ scenario would result in \$64 billion in new debt to be issued to complete building and equipping the CHSR project.

As a point of reference, the total debt of the State of California was \$68 billion as of August 10, 2010.²² This includes all outstanding bonds issued for all for all purposes (education, transportation, clean air and water, veterans, health care, stem cells, etc). Therefore, a ‘low build-out case’ outcome for the CHSR would nearly double the State’s debt load to construct this one project.

Our second conclusion about the impact of a Phase I CHSR ‘low build-out case’ scenario is about the increase in the State’s debt-service ratio. Our ‘low build-out case’ financial mix assumptions are:

- a) 25% of the capital cost, or \$20 billion, would be priced at market rates,
- b) 25%, or \$20 billion, is raised at concessionary rates; ie 50% of market rates
- c) 30%, or \$24 billion, is raised at market rates +75% (accounts for rising interest rates), and
- d) 20%, \$16 billion, is “grant” or free money.

We also attempt to stage the debt raise over 10 years.

Under these ‘low build-out case’ assumptions, the total debt repayments and interest payments would equal \$134 billion, or \$4.5 billion of debt servicing costs per year for 30 years, assuming a flat distribution for simplicity, as shown below:

Itemized Debt Servicing From A ‘Low Build-Out Case’	
25% of the capital cost priced at market rates	\$40 B
25% raised at 50% of market (concessionary loans)	\$30B
30% raised at market +75% (for rising interest rate)	\$64B
20% is grants or ‘free’ money =	\$0B
Total debt and interest costs =	\$134B

Simply servicing this debt (principal repayment and interest costs) would increase the State of California’s Debt-Service ratio 60% – from today’s already high 6.9% to close to 11%.

The ‘Low Operations Case’ scenario of the CHSR project and its implications for California. The CHSRA Operating Plan, although devoid of the kind of detail needed to independently construct an accurate Operations Expenses model, shows a very strong cash flow forecast that leads to a robust

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Operating Surplus. Again, this must be treated as a ‘high case’. And the CHSRA has already reduced its ridership forecast after certain flaws were pointed out.²³

For a ‘low operations case’ forecast about operating revenues, we make the following adjustments:

- a) Revenues are just 50% of what CHSRA forecasted and
- b) Operating Expenses are 25% higher than CHSRA forecasted.

The reasons for these adjustments are discussed in Section 4. The CHSRA might argue that in a lower revenue model, the Operating Expenses variable should be adjusted downwards. However, lower revenue could result from fewer riders, or it could result from discounts on tickets, or both. Furthermore, operating expenses are highly unlikely to scale linearly. Whether the assumed private sector operator runs one train or a hundred a day, they still need to have customer service, maintenance operations, drivers on salary, and many other costs that are essentially fixed.

CHSRA’s model also appears to overlook a large number of Operating Expenses, insurance and wage rises above the inflation rate for example. Intuitively the model seems to also underestimate Sales and Marketing expenses. For example, the CHSRA already has spent on public relations and does not even have a operating train to advertise ticket sales. For our purposes the CHSRA Operating Model does not have enough visible data to accurately and independently compute even their ‘best operations case’ scenario. But to make an estimate in which Operating Expenses run 25% higher than forecast and revenue grows more slowly seems like a reasonable approach for a ‘low operations case’ scenario.

In Year five of this first ‘low operations case’ scenario (2025) the CHSR Phase I operations generate about \$1.28 billion (in 2009 dollars) in revenue and about \$1.28 billion (in 2009 dollars) in Operating Expenses. This is roughly breakeven on a cash flow basis. This calculation is based on the Warren model, as discussed in Section 5. This breakeven performance becomes mildly positive over the ensuing decade. This means that while the CHSR operations may be at breakeven, they make no significant contribution to debt service. It also means that private equity investors will be unlikely to participate unless they can be convinced in due diligence that this ‘low operations case’ is too pessimistic, or unless the State of California guarantees a return on their investments.

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A second way to generate a 'low operations case' cash flow forecast would be to assume that CHSR operations might generate 60% of its Operating Costs from the fare box. This is above what the DOT reports across the country for transit operations, that is fares pay for 40% of the Operating Expenses; but we use a 60% revenue generation target since the CHSR service is to be a premium service.²⁴ In our 'low operations case' we hold Operating Expenses constant, as does the CHSRA Plan, and revise revenues downwards; assuming either lower ticket prices, and/or lower ridership as the cause for lower revenues.

In Year 5 (2025) of this second 'low operations case' scenario, there would be \$1.02 billion (in 2009 dollars) in operating expenses and \$0.60 billion (in 2009 dollars) in revenue; leaving an Operating Deficit of \$400 million.²⁵ This breakeven performance also becomes very mildly positive over the ensuing decade. But again this means there is no significant contribution to any debt service. Again it also means that private equity investors will be unlikely to participate unless they can be convinced in their due diligence that this "low operations case" is highly unlikely, or unless the State guarantees a minimum return for their investment.

Implications for the State from combining 'low build-out case' and the 'low operations case' scenarios. Many astute and experienced investors are among this document's Authors and Principal Reviewers. They know, and perhaps have learned the hard way, that failures happen even with good financial backing and the best possible management. In their practices they require entrepreneurs, like the CHSRA is for this totally new-to-the-USA rail system, to set up combined build-out and operations low case scenarios to understand what could happen if or when things don't go according to plan.

As one can see from looking at the two types of low case scenarios; servicing debt from the build-out is costly but would need be done without a contribution from operating revenues. Therefore, the combination of both low case scenarios could create significant negative impacts to the State of California's budget. With a negative cash flow of \$4 Billion to \$5 Billion every year for the next 30 years to service the costs of construction, and no 'Operating Surplus' to reduce the impact of these debt repayment requirements, the impact on the State's budget is massive.

Using the Warren model, as discussed in Section 5, we see that in the period between 2020 and 2035, that negative annual cash flow could reach a cumulative peak negative cash flow of \$70 Billion to \$80 Billion. Given the great difficulty the State has

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raising taxes, and assuming that the State's leadership will not want to 'turn off' the CHSR's operations a few years after it is running, one is left to presume that the necessary subsidies in the combined low case scenarios will come from the General Fund. This would have to displace other spending. But as shown in this combination of both build-out and operation low cases, with higher than planned construction costs, 'turning off' CHSR operations would financially do no good. So much financial damage will already have been done by spending construction dollars that there is no way to repay the debt from a non-existent operating surplus.

A logical target of displaced spending could be other transportation services. But providing CHSR operations with that subsidy the State would have to significantly reduce spending for new or maintained roads, commuter rail, buses and other transportation systems. However, as no such subsidies are authorized by AB 3034 and Prop 1A, bond or taxation measures would have to be taken back to the voters to solve this CHSR cash flow problem.

PRACTICAL RECOMMENDATIONS TO BRING DISCIPLINE TO THE CHSR PROJECT'S FINANCIAL PLANS

As investors, the Legislature must act as the fiduciaries to the State and taxpayers of California. Independent reviewers of the CHSRA's ridership, revenue and expense assertions have asked enough serious questions and received no or vague answers that serious action needs to be taken soon. Every day hundreds of thousands of CHSRA dollars are funding studies, surveys and public relations efforts that are possibly the wrong priorities if the financial plans for the construction and operation of the CHSR are not realistic. It is the Legislature's responsibility to protect the financial well being of the State; and if the CHSR project is not financially sound, that responsibility is not being executed.

We offer four modest recommendations to bring more rigor into the strategic as well as practical aspects of financial planning for the State's largest infrastructure project.

First, slow the spending rate until the CHSRA has a credible financial plan. Much of the 'rush' of 2009-2010 has been predicated on the possible availability of free-to-the-CHSRA federal grants. Now that it is clear that fiscal issues have overwhelmed the Obama Administration the Legislature should recognize that the chances of ever getting \$17-19 billion in federal grants is a remote possibility. We believe the CHSRA has

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recognized this. Otherwise why would they have changed course in August 2010 and made separate applications to the Federal Railroad Administration for four separate segments and not the entire Phase I project? The reasoning behind the rush to gain federal grants before their application deadlines expire is now void.

In line with the need to more deliberately take stock of the question "Where is the CHSR project financially" is the need to compare the Authority's budget with what they now have to manage. If the Authority is to manage only one of the four segments that will be chosen by the FRA, why would they need the several hundred million dollar budget discussed in mid-2010? The CHSRA might need only a fraction of that. But to pay to continue studies of alignments up and down the state, and to finance statewide community outreach programs and public relations seems disproportional to the tasks of planning for one segment.

Second, the Legislature should immediately nominate and convene an independent peer review panel with deep financial expertise. SEC. 2. Section 185035 of the Public Utilities Code demands a peer review panel, but none has sat in deliberation. AB3034 says the Treasurer is to nominate two members, the Controller two, the Director of Finance one, and the Secretary of Business, Transportation and Housing nominates one. While four of the six-person panel are elected officials' nominees, the Treasurer and Controller, and only two are nominated by the Governor's appointees, the Legislature is not represented at all. It seems curious that neither the Senate nor Assembly committees responsible for transportation or budget are able to exercise fiduciary oversight on a project this large, and on which they have no representation.

Since there has been no peer review panel meeting, the Legislature should establish its own, through its appropriate committee structure. That panel would be independent of the Governor and should have a budget large enough to do serious work including its own research staff and administration. And that panel should convene and develop an agenda focused on the CHSR project's finance in an expeditious and professional way.

Third, bring in a high-speed rail builder and operator to advise the Legislature on the financial realities of building and operating a system. We hope it is common sense that the entrepreneur who wants money from an investor does NOT have an incentive to make low forecasts. But most

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often they succumb to what has been called 'optimism bias'. The sales team always thinks they are going to hit a home run. On the other hand, we know that our 'low case' analysis will be criticized as biased or uninformed.

If the Legislature and Governor share our concerns that perhaps CHSRA is ignoring the potential downside risks, then it may be appropriate to insist that CHSRA find a private sector Operating Partner who would be prepared to invest their capital in this plan, or else help craft a plan the private sector can believe in and get behind. We could feel that there was more discipline being brought to the financial plan and forecasts. At present, the only "skin in the game" is the California taxpayers' and that of their children's future – and with the federal grants, Americans in general.

The Legislature needs to insist that CHSRA find a credible potential Operating Partner and ask this Operator to develop a business model for the operation. While this is still not ideal since, with no investment at stake, the private operator will not bring the same discipline to the analysis as would someone about to invest their money, at least it would create the sort of dispassionate analysis that we would do as private sector investors.

Fourth, California and its municipalities should contain the growing financial risk and stop funding for the CHSR project. The environment for raising debt financing for California is clearly going to be tougher, likely limiting California's ability to market its bonds while raising the cost of servicing new debt. This is a time some economists are calling 'The New Normal' where California's political leaders and citizens need to make priorities about what can be afforded by State's taxpayers today and tomorrow. As discussed in this report, the CHSR project clearly does not meet the legislated standard of not requiring a subsidy. Therefore it does **not** merit funding on an absolute, stand-alone basis.

It also does not make sense to fund the CHSR project on a relative basis in the context of the State's other, more pressing needs and existing liabilities. Arguments by the CHSRA that the debt contemplated by their business plans is a worthwhile risk for the State to assume based on the California-based jobs that the project purportedly will create are tenuous if not facetious. The limited number of *net new jobs* that CHSR will create for Californians is overstated, as discussed in Section 7. And as discussed in detail in Section 5, the benefit of such few jobs pales in comparison to the demonstrated downside financial risks posed by to the State's financial future.

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In summary what every California voter should be asking themselves and their elected representatives in Sacramento and Washington? At least two relevant questions should be in the public arena.

What reasonable milestones exist to make realistic Go/No Go determinations in order to guard against continuing to waste desperately needed State funds on a project that might become partially completed; unfinanceable, inoperable, and stranded?

How much planning, public outreach and design expense will be consumed without sufficient committed financing to complete the optimistic \$42.6 billion required to bring Phase I to operational status?

This is a dangerous time for the CHSR project since its assumed financing sources have not materialized. The Federal grant funds and AB3034-initiated GO bonds, if buyers for those bonds can be found, bring the project's available capital to about 11% of what it needs for Phase I. But there are no known local government and no private sector monies in the project at present. New federal grants will be a fraction of the Obama Administration's FY 2010 bold plans. The CHSR could be desperate for funds to keep their project alive and the temptation to promise more than the law allows high. Without the money, and with diminishing confidence in the CHSR's plans, this becomes a dangerous time to risk the State of California's financial future.

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1.0 BROKEN PROMISES AND UNMET DEMANDS FROM THE LEGISLATURE DIMINISH THE CHSR PROJECT'S CREDIBILITY

During the course of promoting high-speed rail for California, and afterwards in its planning, the CHSR made certain promises to Californians and were required by the Legislature to complete certain tasks. The following eleven items describe how CHSR has come up short on meeting its promises and the demands of both the law (AB3034) and the Legislature.

1.1 The CHSR Project That Voters Chose In 2008 Promised To Link Seven Cities, But Links Only Three

Although San Diego, Riverside, Oakland and Sacramento were part of the official ballot description for Prop 1A, what emerged after the vote as Phase I is only for Los Angeles/Anaheim to downtown San Francisco.²⁶ While the official ballot description promised connections to seven metropolitan areas, Phase I links only three.²⁷ The promise to connect seven cities, given to California's voters by CHSR proponents and repeated in the CHSR's 2008 Business Plan (submitted after the ballot) was broken.²⁸

1.2 The Prop 1A \$33 Billion Capital Cost Promise Morphed Into A \$42.6 Billion Capital Cost

The Federal Railroad Administration (FRA) is the CHSR's benefactor and regulator and the two have worked together for years. In December 2009, the capital costs of Phase I, not the entire system as proposed in Prop 1A and the 2008 business plan, increased by thirty percent. While there were some new capital elements, the CHSR attributes most of that \$10 billion increase to having to meet FRA rules that capital expenses must be calculated in the year of expenditure, thereby accounting for inflation.

Two questions remain unanswered between 2008's capital cost promise and the 2009 cost estimate. First, since the 2009 project was only for a portion of what was promised in 2008, why didn't the cost estimates decrease instead of increasing? Second, if FRA and CHSR have worked together for years, why didn't the CHSR use the FRA cost estimate guidelines in the run up to AB3034 and Prop 1A?

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1.3 The Promised \$55 One-way SF-LA Ticket Morphed Into A \$105 One-way Ticket After Prop 1A

Voters were promised they could go between the state's metropolises for about \$50.²⁹ That sounded like an inexpensive way for families and the budget-minded to travel between SF and LA. Yet, thirteen months later the one-way fare estimate had increased ninety percent. And the fare is unlikely to decrease. With the State's Attorney General increasingly aggressive about companies' price promises not reflecting their final prices, the Legislature might ask when the CHSRA knew the ticket price would increase.³⁰

1.4 Five Months Before Prop 1A Passed, The Authority Knew That Private Sector Participation Was Conditioned On Near Total Federal And State Capital Building The CHSR Project

In May 2008, near the peak of the worldwide credit bubble, CHSRA had the Infrastructure Management Group (IMG) survey private sector firms' interest in helping finance the project. Thirty firms and individuals – builders, equipment makers, financiers and operators responded. Only five of the firms were from financial institutions – Babcock & Brown, Carlyle, Goldman Sachs, HSH Nordbank, and Meridiam. IMG and Lehman Brothers compiled, reviewed and analyzed the data.

Five months before Prop 1A passed, the Authority's Board heard the survey conclusions.³¹ In that June 2008 Board presentation, CHSRA learned that all the operators and equipment manufacturers, and nine out of ten builders, were reluctant to invest unless a large portion of the capital costs were from State and Federal sources; "Nearly all RFEI respondents noted that they would be unlikely to commit the resources necessary to participate in a procurement of this magnitude until after strong financial backing for the Project was provided by the public sector." In other words, 'off-load all the project's capital risks onto the public and we'll come aboard'. This doesn't seem consistent with the Authority's later claims of support for public private partnerships (P3).³²

1.5 Five Months Before Prop 1A And Three Months Before AB3034 Passed, The Authority Learned The Private Sector Would Only Operate The CHSR If Given A Revenue Guarantee

In the same June 2008 presentation, IMG reported that private firms were reluctant to take risks based on the Authority's then-ridership forecasts; ". . . respondents argued that interest in equity investment would increase if the risk to the concessionaire

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were decreased, perhaps through some form of revenue guarantee . ." This mention of the need for a subsidy, the first of four in that presentation, is most dramatically shown on top of a table as "Public Funding/Guarantees" in the IMG report.³³

Therefore, nearly five months before Prop 1A went to the voters, the Authority knew the CHSR P3 participants wanted public monies to cover nearly all the capital costs. And they knew the then-\$33.6 billion project would need a revenue guarantee to attract private equity and operators.³⁴ Despite the CHSRA's later claims of thirty private firms' expressions of interest, the Authority knew when AB3034 was under deliberation, that private sector participation was conditioned on a forbidden subsidy – aka a revenue guarantee.³⁵ If the CHSRA Board knew in mid-2008 of the problems of attracting private participation in both CHSR's capital funding or operations, why wasn't the Legislature aware of this major missing element to the project's feasibility prior to passing AB3034?

1.6 The CHSRA Did Not Meet The Senate's Demand For An Investment Grade Business Plan Prior To The 2008 Proposition 1A Vote

While debating AB3034, both the Senate and Legislative Analyst's Office (LAO) called for an investment grade business plan by September 1, 2008.³⁶ CHSRA submitted its 2008 Business Plan shortly after the November vote on Prop 1A.³⁷ Only six of that Plan's thirty-two pages addressed capital and operating costs and sketched out possible mixes of public and private finance.³⁸ That *sine qua non* of public and private investing is still absent, despite the demand in AB3034 that such be presented to the Legislature by September 1, 2008.³⁹

1.7 CHSR Proponents Promised Prop 1A Voters The Project Would Pay Its Way; But By Mid-2008 The CHSRA Knew The State Would Have To Guarantee The Operators' Revenue

Part of what sold voters in 2008 on Prop 1A was that the project would not depend on the government after they approved the \$9.95 billion bond authorization. Proponents promised "THE USERS OF THE SYSTEM PAY FOR THE SYSTEM"; that is riders, not taxpayers, would pay for the system.⁴⁰ But the June 2008 presentation by IMG showed that none of the then-expected \$6.5-7.5 billion from the private sector would be forthcoming. The thirty surveyed builders, equipment makers, operators and financiers essentially said 'no private capital for construction and no participation unless we are guaranteed an income by the government.'⁴¹ All five of the operators who participated in the

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survey were very clear about this point.⁴² If the operators weren't willing to risk their firms' futures on the data supplied them in the May briefings and survey, that is a good indication they didn't believe the CHSR project would at least break even. And in June 2008, IMG told the CHSRA this result. Why the operators' distrust of the promise of a profit for operators wasn't passed on to the Legislature prior to the vote on AB304 remains unanswered.

1.8 Despite The Senate's Demand, CHSRA's Business Plans Have Still Not Met The Criteria Or Quality For Investment Grade

Thirteen months after Prop 1A's passage, the Authority submitted its 2009 Business Plan on a project of more than \$40,000,000,000. In sixteen pages of text and summary tables, the CHSRA made no reference to spread sheets, or how results were calculated. The Senate seemed less than satisfied with the Plan's vagueness, "*The business plan of the HSRA points to the risk that the project may not be found creditworthy by banks or private equity funds. ...the HSRA correctly acknowledges, but does not discuss, some of the critical risks involved for both government and private sector funding.*"⁴³ The Legislative Analyst's Office was less circumspect, citing fifteen deficiencies of that 2009 Plan to address either financing sources, assumptions or risk mitigation techniques.⁴⁴

CHSRA's answers to these criticisms were in an April 2010 Addendum.⁴⁵ Shortly afterward, the State's Auditor found significant problems both with the way CHSRA managed its funds and the Authority's assumptions concerning the system's funding sources.⁴⁶ Since then, little has been done to expand publicly available information or clarify finances for the CHSR project.

1.9 A Year After AB3034 Passed, IMG Again Told The Authority That Private Sector Financing Would Only Become Available With A Revenue Guarantee

Eighteen months after the IMG's survey, in a September 2009 IMG-Goldman Sachs workshop, the CHSRA Board learned:

*"Private appetite for ridership risk is limited without revenue guarantee or until ridership proven
Potential for substantial **non-recourse financing is likely to be limited** to the Anaheim-San Francisco section, based on forecast of operating surplus (emphasis theirs)
It is unlikely that a private partner will take ridership risk at this early juncture"*⁴⁷

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That presentation goes on to point out a logical fallacy. It says "*Earlier this year, the Board adopted San Francisco to San Jose, Merced to Bakersfield, and Los Angeles to Anaheim as "stimulus sections" . . . While none of these sections are forecast to generate significant operating surplus to attract P3 financing, vendor financing may be available for rolling stock and core systems requirements"* If each of those segments are not able to generate an operating surplus to attract private capital, then how can the sum of those segments – presently Phase I – generate an operating surplus and avoid a subsidy?⁴⁸

Supposedly, and without reference to how this would happen, additional financing would be provided for the other segments in Phase I, ie San Jose to Merced, Bakersfield to Palmdale, and Palmdale to Los Angeles. If that happened the entire corridor could be built and be operational by 2020. This would then allow the forecasted ridership to occur between San Francisco and Los Angeles/Anaheim; thereby producing an operating surplus. To any investor, these preconditions represent insurmountable risks without a guarantee of income. That is what CHSRA knew fifteen months before the September 2009 presentation.

1.10 Although Twice Demanded By The Legislature And Promised Before September 2010, CHSRA Has Not Produced A Risk Mitigation Plan

Any business seeking investors must address financial risks – and offer remedies to each identified. The investors' fiduciary responsibility is to perform due diligence on such a proposal. Without that investigation they stand liable to shareholders. For them it is essential to ask, "What specifically is Plan B if one or more assumed variables in Plan A fails?" The Legislature foresaw this need in 2008, and Section 185033 of California's Public Utilities Code, i.e. AB3034, demanded that the Authority's "*business plan shall also include a discussion of all reasonably foreseeable risks the project may encounter.*"⁴⁹

A technical memorandum was all that constituted a risk management plan in the 2008 plan. When finally submitted after Proposition 1A was passed, it was not acceptable even to KPMG, the Authority's auditor contractors.⁵⁰ This should have 'raised flags' in the Legislature that something was seriously amiss.

When no such risk mitigation strategy was forthcoming in the 2008 plan, the Legislature instructed the Authority once again that its 2009 "*business plan should be modeled on a financial prospectus of the type that is required to be prepared for investors in new stock or bonding offerings.*"⁵¹ It was to address

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the types and level of risk the State of California would be assuming for the CHSR project.

The Legislative Analyst's Office (LAO) commented on the 2009 Plan: "To avoid the risk of failing to win credit approval from investors, the Authority's strategy is to 'clearly communicate the project and obtain up-to-date feedback'."⁵² The LAO said of the 2009 risk strategy, "The Authority plans to avoid the risk that governments are not able to follow through on their commitments 'by carefully assessing how each government funding source affects the build-out of each segment'."⁵³

Four months later, in April 2010, the Addendum to the 2009 Business Plan stated that mitigating risk "will require on-going communications efforts with the financial markets,"⁵⁴ and the "Authority needs to continue to monitor the federal budget process."⁵⁵ It further stated, "To mitigate state risk, the Authority needs to monitor both the State's [sic] overall financial situation and its continued ability to sell GO bonds."⁵⁶ The Authority's risk mitigation plan "can be summarized to be as flexible as possible on which segments it funds and when."⁵⁷

The Amended Plan repeats the same 'communicate and monitor' approach found wanting by the LAO in the December 2009 document. Monitoring and communicating are not mitigation. There is no outline of what the Authority will do in case one or more financial source fails to provide part or all of their funding. In short there is no 'Plan B' in any submission or amended submission by the Authority. Despite promises to have quantitative risk analyses done in 15-18 months (June - September 2011), to date it is impossible for private investors - on whom the project depends for \$10-12 billion - to perform their due diligence.⁵⁸ And it is impossible for the Legislature to exercise reasonable fiscal prudence without a risk mitigation plan.

1.11 Despite The Demands Of AB3034 More Than Two Years Ago, No Independent Peer Review Group Has Reviewed And Assessed The CHSRA's Financial Plans

AB3034 and Section 185035 of the Public Utilities Code, demand the CHSRA establish an independent peer review group that, among other tasks would review the finances for the project and each segment of the project. The law clearly requires ". . . the authority to establish an independent peer review group for the purpose of reviewing the planning, engineering, financing, and other elements of the authority's plans and issuing an analysis of appropriateness and accuracy of the authority's assumptions and

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an analysis of the viability of the authority's funding plan for each corridor."⁵⁹ (emphasis added) The peers were to include a representative from a financial services or consulting firm and to have reported to the Legislature no later than 60 days after receiving the Authority's business plans⁶⁰

The CHSRA website documents a peer review, done ten years ago (2000) by the French national rail carrier (SNCF), Japan Railway's Technical Services (JRST) and DE Consult, a Berlin-based engineering company controlled by DB, the German national rail company.⁶¹ No report on their findings is available and none of these companies are considered financing experts.⁶² Moreover SNCF, JRST and DE Consult have potential conflicts of interest as their parent companies are in the business of building and operating high-speed rail systems.

The CHSRA also mentions a pre-Prop 1A peer review by the Metropolitan Transportation Commission (MTC) but confined its focus to the ridership model with a "panel comprised of local, national, and international travel model experts to provide an objective and independent review of the modeling assumptions, methodologies, and results". The CHSRA web site does not say a report was issued. Nor does CHSRA mention any financing expertise on the MTC panel.⁶³ Although the Senate has once again called for an independent peer review, none had been convened by early October 2010, more than two years after it was demanded by AB3034.

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**2.0 CHSRA'S RIDERSHIP FORECASTS –
CENTRAL TO THE FINANCIAL OUTCOME – ARE
FAR TOO OPTIMISTIC**

At the heart of any financial forecast for a high-speed train are two issues: how many riders will there be, and what each is expected to pay. The CHSRA added on to those the benefits of job creation. Ridership, price and job creation forecasting techniques are not an exact science. However, one should expect that plausible estimates be made on the basis of surrogates or prior experience. The Authority's ridership assumptions drive many of our questions on financial sustainability.

**2.1 Evidence-Based Analyses Contradict CHSRA's
Forecasts**

Perhaps the first alarm that something was questionable about the ridership forecasts on which CHSR income projections were based was the 2008 assertion that about 94 million riders annually would board the CHSR by the system's completion date in 2020.⁶⁴

Since California's population in 2030 is projected to be about 46 million, that CHSRA ridership forecast suggested that every man, woman and child in the state would ride the train at least two times each year, whether they lived near or hundreds of miles from a CHSR station.⁶⁵ This 2008 CHSRA ridership projection for its tenth operating year constituted slightly less than one-third of the 2008 United States population.

Even a year later, when CHSRA downward-adjusted its 2030 ridership number to 39 million, something still seemed amiss. The U.S. experience with accelerated rail service is telling. In 2009, about twenty years after its inception, the combined ridership on all segments of the Boston-NYC-PHL-WDC Acela route was 3.02 million.⁶⁶ Acela draws riders from combined metropolitan populations over 28 million, attracting about 11% of the residents of its market catchment area.⁶⁷ If the CHSR were to achieve after a decade what Acela has attracted in a generation, it might draw 11% of all of California's residents – about 5 million, not 39 million riders.

CHSRA claims that population and employment growth in California will "increase interregional travel by 65 percent to 911 million trips a year . . . including a nearly five-fold increase in conventional rail trips".⁶⁸ Even starting from the minuscule basis

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of California's interregional rail trips today, such a percentage increase is difficult to understand.

**2.1.1 CHSRA's forecasts don't account for technology
changes that are diminishing commuting and business
travel.**

Nowhere do the Authority's ridership forecasts account for relative downward shifts in commuting due to technologies such as telecommuting, video conferencing, etc. These technologies have increased productivity and lowered capital costs, with fewer dollars spent on space for offices, office equipment (HVAC, office furniture, etc) and parking areas. Today, fewer and fewer corporations have 'fixed' offices for their sales forces, or dedicated workspaces for those who spend only part of their time at a 'home' site. And because fewer on-site employees require less office space, these innovations have also decreased operating expenses through lower utility bills, lower physical plant maintenance charges, and fewer administrative support and security personnel.

Likewise, such technologies have already decreased both short-haul and long range business air travel, even without the presence of high-speed rail. Business travel represents the second or third largest operating expense for many medium and large corporations. Corporate finance officers are keen to see that expense category decrease in relative importance. Relatively fewer business trips per employee also suggest that the CHSRA's extrapolation from the growth of air and auto-based travel over the past few decades may itself be a logical fallacy. Both commuting and business travel are undergoing radical changes. Deploying these new technologies – regionally and globally – is and has been a priority. But nowhere does the CHSRA report on this shift in paradigms about where and how work gets done.

Nor does the Authority address the ramp-up of corporate social responsibility – shown in the annual reports of Cisco, Symantec, Intel, etc – to decrease the environmental impacts of business travel by all modes. This includes the growing importance of hybrid and soon-to-be electric autos as part of Californians' options. To assume Californians will travel to work in autos or vans with today's mileage and at dramatically increased percentages in an age of telecommuting and environmental sensitivity is a questionable proposition.⁶⁹

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2.1.2 The CHSRA's ridership forecasts also fail to take into account the absence of a history of rail travel in California or the impact of low population densities on use of the CHSR.

These urban geography factors could easily make or break the system. The only train currently operating between the two metropolises (San Francisco and Los Angeles) is an Amtrak coastal route service, a leisurely and partly scenic ride, but not one that has generated enthusiasm for train travel. More importantly, any successful rail system depends on significant densities per square mile to help its fare box revenues. While much can be said about the importance of trains and high-speed trains in Europe and Japan, those nations' densities per mile are higher than California's. In Japan, density is 880 people per square mile; it's 653 in Britain and 611 in Germany. By contrast, plentiful land in California has led to suburbanized homes, offices and factories. Density in the Golden State is 236 per square mile.⁷⁰ Thinking that safer, faster and reliable high-speed rail will attract riders is not the same as actually getting them out of their autos or reducing their need to use autos once they arrive at a CHSR destination.⁷¹

2.1.3 CHSRA's forecasts fly in the face of real world evidence of actual versus forecasted ridership.

Actual experience with high-speed rail ridership forecasting is also instructive. Flyvbjerg, Bruzelius and Rothengatter stress the lack of reliability of those forecasts: "*(rail) forecasts were overestimated on the average by 65%.*"⁷² Using the average 'overshoot' from the prior forecasts analyzed by those authors suggests the CHSR should attract about 11 million riders in 2030, its tenth operating year, not 39 million as the CHSRA forecasted.⁷³

Eurostar's actual versus projected ridership through the Channel Tunnel provides further perspective. In 1992, the Eurostar Business Case Forecast projected "*15 million passengers per annum in 1995 and growing.*"⁷⁴ In 2009 Eurostar carried 9.2 million passengers, only 60% of what forecasters said it would carry at its start fourteen years earlier.⁷⁵ In *Mega-projects and Risk*, Flyvbjerg and colleagues conclude, "*Rail passenger traffic forecasts are consistently and significantly inflated.*"⁷⁶ The World Bank's recent report on high-speed rail concluded that, "*High-speed projects have rarely met the full ridership forecasts asserted by their promoters, and in some cases have fallen woefully short. A whole new area of behavioral research has been generated by the phenomenon of over-forecasting in transport, known as 'optimism bias.'*"⁷⁷ Whether the CHSRA's forecasts are the result of optimism bias, poor modeling methods

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or some unstated motive, their published results need more critical scrutiny than the Authority has been willing to concede.

2.2 Independent Experts Refute CHSRA's Ridership Model

Forensic analyses by a macro-economist and two transportation planning organizations have brought to light possible reasons for the divergence between CHSRA's ridership forecasts' and other model builders' findings and methods.

2.2.1 Findings from Californians Advocating Responsible Rail Design (CARRD) on CHSRA's ridership are disturbing.

In late 2009 and early 2010, statistician and macro-economist Elizabeth Alexis of Californians Advocating Responsible Rail Design (CARRD) analyzed why the CHSRA ridership model seemed to disproportionately favor a Pacheco Pass routing. What she and other CARRD members found was also applicable to the general CHSRA ridership model.

After repeated attempts to obtain what was supposed to be publicly available data, Ms. Alexis secured a visit to the SF Metropolitan Transportation Commission (MTC). She later stated, "*CARRD recently made a site visit to MTC and was able to obtain what are believed to be the actual headways [time between trains] used in the analysis It is clear, however, that the headways in the publicly available documents are NOT those used in the ridership study.*"⁷⁸

Other concerns expressed by CARRD concerning the ridership model include:

- *Sampling issues: There were only 27 long-distance commuters surveyed, which resulted in a decision to constrain the long distance commute market to the same coefficients as the business model.*
- *Reliance on stated preference data for main mode choice model: Stated preference data has known issues that bias estimation results. Because of this, the study design specifically stated that both revealed preference and stated preference data would be used. For some reason, only stated preference was used. In the calibration process, this resulted in very large mode specific constants that highlight the bias that in fact was present in the study sample.*
- *Frequency coefficient: The frequency coefficient was arbitrarily constrained to be the same as the time coefficient.*⁷⁹

In late January 2010 CHSRA's Deputy Director, Jeff Barker emailed CARRD the final coefficients, along with a surprise -- a transmittal memo from George Mazur of Cambridge Systematics (CS). The CS memo placed direct blame on the MTC for

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withholding these documents from the public for the prior thirty-three months and said: *"The client, MTC, elected not to update the Task 5a report nor to include the final coefficients and constants in the final project report."* This is a remarkable assertion for Cambridge Systematics. The final coefficients and constants were substantially changed from those peer reviewed and published. The revised coefficients and constants never had been seen by the public. Nor, according to CHSRA, had they been seen by the CHSRA's internal peer review group. Mr. Barker continued *"... this material as presented did not previously exist and significant amounts of sub-consultant staff time went into preparing it."*⁸⁰

Why the data provided to the public were different than used in the CHSRA model, why various coefficients were changed, and why stated preference data were used inappropriately are serious questions that have yet to be answered. These answers should be in the public realm before the State provides further funding for the CHSR project.

2.2.2 Smart Mobility's work challenged both the CHSRA model's methodology and findings.

Later in the spring of 2010, Norman L. Marshall of Smart Mobility Inc, a transport planner with 25 years experience, provided expert testimony in which he challenged the CHSRA's model. He claimed the variables available for the ridership peer review were not the same as those later used and published by the CHSRA. Specifically Mr. Marshall said:

- 1) *The model coefficients used in developing the ridership and revenue forecasts are different from those disclosed to the public during the environmental review period;*
- 2) *The final frequency (headway) coefficients used in developing the ridership and revenue forecasts are invalid;*
- 3) *The use of these invalid frequency (headway) coefficients biases the alternatives analyses in favor of the Pacheco alignment (PI) as compared to the Altamont alignment (AI);*
- 4) *Mode-specific constants were misrepresented during the public review process;*
- 5) *The mode-specific constants in the final model that were used to forecast ridership and revenue are invalid.*⁸¹

Mr. Marshall concluded, *"The California high-speed rail ridership and revenue forecasts used in the selection of a preferred alignment were based on modeling that was misrepresented and invalid."*⁸²

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2.2.3 The ITS-UC Berkeley review and report should have made those responsible for fiduciary aspects of the CHSR project suspend its funding.

In April 2010, after a critical report by the State Auditor of the CHSRA's operations and funding assumptions, the Senate Transportation Committee empowered the Institute for Transportation Studies (ITS) at UC Berkeley to analyze the CHSRA's model.

At the end of June 2010, the ITS reported, *"The forecast of ridership is unlikely to be very close to the ridership that would actually materialize if the system were built. As such, it is not possible to predict whether the proposed high-speed rail system in California will experience healthy profits or severe revenue shortfalls."*⁸³

Other problems highlighted in the ITS-UC Berkeley report include the use of inappropriate data at inappropriate points in the Cambridge Systematics (CS) model. For example the ITS says the CS model used:

- *A sample of long-distance travelers that was not sufficiently representative, and of a statistical method to adjust for that difference that has since been proven unreliable*
- *Statistical adjustments that were valid for intra-regional ridership models, but not for inter-regional ones, thereby exaggerating the importance of having frequent service*
- *A structure that predetermines which high-speed rail station travelers will choose rather than allowing travelers to make the choice themselves*
- *Restrictions that were based on professional judgment instead of on observed data"*⁸⁴

At the July 2010 CHSRA Board meeting, Professor Brownstone, representing the ITS-UC Berkeley review, criticized the sampling procedures used in the CS projections and the failure to include a potential error range in the estimates. He said such methods have *"... caused, I think, a lot of problems when it turns out later on the actual ridership is way off from the forecasts. This is a problem with almost all existing work."*⁸⁵ Lance Neumann, President of Cambridge Systematics, emphatically supported the methods and results in the ridership forecasts and stands behind the projections "without reservation."⁸⁶ The CHSRA Board declined to seriously question the methods or results of their consultant's ridership forecasts.

At best, the Cambridge Systematics (CS) model's output is not reliable for such a large investment in the CHSR. Tens of billions

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of dollars will be risked based on a forecast that is counter-intuitive, and that doesn't agree with common sense or with empirical and historical analyses. Nor are the CS methods in accord with recent professional methods and standards of rail transportation model experts not dependent on the Authority. It is dangerous to continue to assume the CHSRA model's outputs are not inflated and that they can be used to support financial due diligence.

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3.0 CHSRA'S ESTIMATED PHASE I CAPITAL COSTS SHOULD BE SIGNIFICANTLY HIGHER

Megaprojects are notorious for cost overruns, and the CHSR is probably no exception. Within a year, CHSRA increased its Phase I, pre-Prop 1A cost estimate of \$33 billion by thirty percent - to \$42.6 billion. CHSRA claims most of the extra \$10 billion was due to Federal Railroad Administration (FRA) demands that costs be inflated to their estimated value in their year of expenditure.

CHSRA assumes three percent annual construction cost inflation during the 2012-2020 build-out of Phase I, which is in line with manufacturing construction cost rises over the past seven years.⁸⁷ However, that assumption might not stand, as the CHSR will "create the equivalent of 600,000 full-time, one-year jobs over the course of its construction" between 2012 and 2020.⁸⁸ If these jobs are located in California, the project would surely increase local demand for materials and workers, stimulating inflation. While no one knows what Phase I construction inflation will be, the Authority did not assume the impact would be above average while continuing to assert the project's job creating virtues. The assumption that construction inflation would be the average of the last few years is certainly questionable.

3.1 Megaproject Histories Show Costs Were Substantially Underestimated

However difficult it may be to forecast increased prices for Phase I, hard evidence illustrates how much a high-speed rail system's estimated costs can go askew. Some examples:

The Channel Tunnel - "Total investment costs for this originally privately financed project were estimated at GBP 2,600 million (1985 prices). Upon completing the project in 1994 actual costs had turned out to be GBP 4,650 million (1985 prices) resulting in a cost overrun of 80 percent"⁸⁹

This financial history should make private sector investors pause. Share prices, originally at GBP3.50 in 1987, rose two years later to GBP11.0; then fell to 65p in 2001, a loss for investors at the peak of between 95% and 80% from the opening price.

Germany's Intercity Express (ICE) - The high-speed rail between Cologne and Frankfurt was also to be a private for-profit system. Originally estimated to cost DM5.4 billion, then

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DM7.8 billion, then DM10 billion, the net result of almost twice the estimated costs meant fewer passengers due to higher ticket prices. The cost for the Nuremberg-Munich link of ICE was originally estimated at DM3.8 billion, but ended up being about DM5.4 billion. The final costs for these sections of ICE were 42% to 85% higher than their original estimates.⁹⁰

US Department of Transportation – A DOT study of transit projects in 1990 concluded the median of total cost overruns for ten rail projects was 61%, ranging from -10% to +106% of the original estimates.⁹¹

3.1.1 Construction cost escalation is likely to be higher than assumed and jobs not likely to come before 2012.
 The wage inflation impacts of such a surge of construction workers is difficult to estimate. However, they would probably increase the CHSRA’s cost estimates above their universally assumed 3% per annum. The proposed system will need professional high-speed rail design, estimation and construction expertise; the proposed system’s operators will need skills that don’t exist in California or the US. Foreign-owned companies such as Parsons-Brinkerhoff, the CHSRA’s current project management contractors, will need to import these types of workers, at best only partially alleviating California’s unemployment problem.

While we can sympathize with construction workers suffering from high unemployment rates, hiring probably won’t begin until construction starts, which is planned to begin during 2012. By that point, the US economy probably will be growing again, and construction unemployment decreased. That will put wage pressure on construction estimates; a danger if builders or operators require cost-plus contracts. We also wonder about the purpose of using ARRA monies if unemployed construction workers have to wait for two more years to work?

These findings from actually building large projects, not estimates by engineering firms, should cause financiers and Legislators to pause and ask probing questions about the underlying assumptions of the CHSRA’s financial models.

3.2 The Costs Of Phase I Of The CHSR Project Could Fall Between \$62 Billion And \$213 Billion
 In the absence of cost histories for US high-speed rail projects, we must turn to surrogates.⁹² Figure 1 gives a few examples of overruns in construction megaprojects.⁹³

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Megaproject Name	Estimated Costs (\$Bs)	Actual To Date (\$Bs)	Actual as a Multiple of Estimated
SF-Oak Bay Bridge	\$1.3	\$6.4	5
Boston 'Big Dig'	\$4.0	\$14.5	3.6
Dever Int. Airport	\$1.7	\$5.0	2.9

In their seminal survey of 210 transport mega-projects (27 rail, 183 road), Flyvbjerg, Bruzelius and Rothengatter found that "For rail, actual costs are on average 45 percent higher than estimated costs."⁹⁴ A look at what the range of possible overrun costs might imply is sobering. Figure 2 shows what the Phase I of the CHSR (presently estimated at \$42.6B) costs would be if it were to increase like that of other, real world examples.

1. Flyvbjerg et al Study	\$61.8 billion
2. The DOT 1990 Study	\$68.5 billion
3. The Channel Tunnel	\$76.7 billion
4. Germany’s ICE (CGN-FRA)	\$92.4 billion
5. Denver International Airport	\$123.5 billion
6. Boston’s 'Big Dig'	\$153.4 billion
7. Oakland Bay Bridge	\$213.0 billion

Some may argue that project costs estimates have improved. Engineers have computers, previous histories have established benchmarks, and planners are more cautious about prices than in the past. But Flyvbjerg et al conclude ". . . cost overrun has not decreased over time. Cost overrun today (2003) is in the same order of magnitude as it was ten, thirty or seventy years ago."⁹⁵

The consequences of cost overruns on the finances of a project of this size can be devastating; particularly true for a project that in 2008 declared that ""The current financial plan assumes that an annual operating surplus of more than \$1.1 billion . . ."⁹⁶ While a year later the Authority decreased its estimated operating surplus to \$370 million in its first operating year, it increased the estimated surplus to \$1.5 billion in its third operating year.⁹⁷

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The history of cost overruns does not bode well for these CHSRA claims. Other governments have suspended interest payments, refinanced the projects, stretched out private sector operators' bond payments, and extended the operators' concessions. However, those options are not available to CHSRA; since according to the provisions of AB3034, they would be considered a prohibited operating subsidy.

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4.0 CHSRA'S REVENUE ASSUMPTIONS ARE TOO HIGH AND ITS OPERATING EXPENSES TOO LOW

Ticket sales will constitute nearly all of CHSR's revenues. If tickets were free or nearly so, we could safely assume that more people would choose high-speed rail than if costly. When the Authority changed its assumptions on ticket prices from 55% to 83% of the average airline ticket price between Los Angeles and San Francisco, ridership estimates for the tenth year of operations (2030) fell from 94 million to 39 million.

In 2008 the Cambridge Systematics' (CS) ridership model proposed 94 million riders for 2030, although a model prepared in 2000 by Charles River Associates had proposed only 34 million riders.⁹⁸ A year later CS had dropped the 2030 estimate from 93 to 39 million riders when the ticket price assumption for the CS model for one-way LA-SF ticket increased from \$55 to \$105. Clearly, higher fares thwart ridership.

The CHSRA ticket price is not computed from an operating and capital cost basis, or from a large-scale random sample survey of what a wide spectrum of potential riders in different places would pay for air, auto or high-speed rail. It is based on unproven assumptions with dangerous financial impacts. The Authority assumed that ticket prices would be less than both airlines' fares and automobile transport between the two major metropolitan destinations, and used those assumptions to build its ridership forecasts. The lower the price, the more riders.

But more riders riding cheaply would require higher operating costs, so ticket prices must still be high enough to keep the system with an operating surplus, since no subsidy is allowed. Here the CHSRA's pricing model faces a conundrum: to seek a balance between attracting enough riders and a price that will produce an operating surplus, but not deflect riders to other transport modes. A lower ticket price will gain riders but not meet the legal mandate to not require an operating subsidy. A higher ticket price could perhaps make the CHSR financially sound, but will in turn divert price-sensitive riders – families, tourists, business travelers – to travel by other means.

4.1 CHSRA Used Inflated Auto And Airfare Prices To Capture More Riders and Revenue

William Warren, in a model of the Authority's financial plan

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shown in Appendix A, has concluded that the way the CHSRA's prices were constructed results in an unrealistically high \$72 average ticket charge for both interregional and shorter-distance travel. This CHSRA assumption, geared to 83% of the average airline fare, makes annual revenues stronger than they might otherwise be by using inflated base data on airline fares and auto operating costs.⁹⁹

By using actual airline ticket prices and reviewing how the Authority's automobile trip costs were determined, Mr. Warren calculated more realistic prices for air and auto travel. He then applied the CHSRA's 83% rule – that CHSR prices would be 83% of the price of competitive alternative transportation modes – to those more realistic costs. Warren's work concluded, "*CHSRA's planned prices will need to be reduced at least 25% to reflect the competitive market's actual pricing and costs.*"¹⁰⁰

To put it another way, in order to get the market share the CHSRA says the high-speed system can get at 83% of the competition's prices and costs, the train's fares would average only about \$50 per ticket, not the \$72 per ticket selected by CHSRA's consultants. That decrease in revenue, a risk not counted in their analysis, would do serious damage to CHSRA's revenue assumptions and therefore their ability to operate without a subsidy. This is because, while the price per ticket would drop, the operating costs per ticket would not decrease. Higher operating expenses coupled with lower ticket prices equals financial trouble. This pricing analysis was incorporated in the financial analysis discussed in Sections 4.1.3 and 4.1.4.

In its Addendum to their 2009 Business Plan, the Authority recognized that airlines can and do drop their prices when facing economic downturns or competition. The Organization for Economic Co-operation and Development (OECD) also recognizes this: "*Low-cost carriers might respond to the emergence of a high-speed rail alternative by increasing the frequency of service. A similar improvement on the rail side would be very costly given the cost of trains, and this would reduce rail's market share and profitability.*"¹⁰¹ But CHSRA did not incorporate this new (to them) finding into their ticket-pricing model, which appeared a year before and has yet to be altered.

Since CHSRA does not know what its real ticket prices are to be, high-speed rail is vulnerable to a price war, one that Southwest, United and other airlines can cross-subsidize in California through other domestic or international fares. A mid-2010 television advertisement by Southwest Airlines offers a peak season one-way SF-LA ticket at \$49 (\$54 with taxes and fees).

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It is difficult to see how high-speed rail, whose one-way ticket price assumption is 83% of the LA-SF airfare, ie \$105.00, would be able, as claimed in the Addendum, to cut prices and meet its expenses without a prohibited operating subsidy.¹⁰²

The Authority assumes the cost of an automobile trip between the two metropolises – representing 95-96% of all trips – is \$118.¹⁰³ The probable cost is somewhere between \$70-\$85 counting depreciation, maintenance and operations of the auto. While it is not clear how many passengers the Authority assumed per vehicle, it was probably only one. If that were the case, then the high-speed train would have to compete with trips being made by groups like families in vehicles with three to six occupants. In those cases, the marginal cost of another passenger is small, perhaps \$10-\$15 per trip. For a family of four traveling the same route, the probable total cost by auto would be less than \$160, while even using the CHSRA's fare assumptions, high-speed rail tickets would be more than three times that amount.

4.2 If CHSRA Had Used An Evidence-Based Pricing Approach To Be Financially Sustainable, Ridership Would Have Decreased

One way to look at how much the CHSR must charge to be profitable – as opposed to attracting riders – is to compare actual subsidized or unsubsidized fares in Europe and Japan with what the Authority proposes. In their 2009 Business Plan, the model input on pricing for a one-way SF-LA ticket had increased to \$105.¹⁰⁴ For the 432-mile distance of the planned Phase I route, the average per mile charge would be \$0.24.

Since there are no high-speed rail systems in the U.S. of the type envisioned by CHSRA, surrogates suggest what a ticket should cost to make the system financially self sustainable. The closest 'cousin' in the USA is public transit, where on average 'fare box' collections represent about 39% of operating costs.¹⁰⁵ While these are regional or city transit systems and not strictly comparable, the evidence that, on average, the taxpayers have to subsidize riders by about 60% of the operating costs suggests that, despite the CHSRA's claims and AB3034's demands, the system will require a subsidy.

Throughout other parts of the world subsidized high-speed rail fares are the norm. Iñaki Barrón de Angoitia, the Director of High-speed Rail at the International Union of Railways (IUR) said that, with two exceptions (Paris-Lyon and Tokyo-Osaka), high-speed routes are subsidized worldwide.¹⁰⁶ Practically every high-speed rail system is subsidized since those two routes alone do

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not generate enough revenues to carry their entire high-speed rail systems. Subsidies – whether only operating costs or operating and capital costs – may come in the form of pre-purchased tickets for government employees, free or subsidized capital investment, debt cancellation, or some other means. Or, as in the 2009 case of Eurostar, the EU approved a UK Government subsidy of \$7.9 billion because of poor economic conditions.¹⁰⁷

Evidence on whether a subsidy is only for operations, or covers capital servicing as well as operations, is so thin that we decided to disregard whether a system is subsidized or not, and look at actual ticket prices per mile to understand what other systems charge. A look at five inter-city rail examples of one-way fares, translated into the one-way 432 mile SF-LA journey, suggests approximately how much the CHSR must charge per mile to possibly break even.

- 1) Using the Shinkansen's average price of \$0.24/km, or \$0.384/mile, a one-way HSR ticket for the 432-mile SF-LA trip would be \$165.89.¹⁰⁸ There is some evidence that the Shinkansen received capital subsidies.¹⁰⁹ The World Bank says of Shinkansen's passenger mile costs, "In Japan there is a surcharge for high-speed rail which doubles the fare on conventional services."¹¹⁰
- 2) An economy level ticket on Germany's Intercity Express (ICE) from Frankfurt to Berlin is \$168 for that 269-mile trip.¹¹¹ At the ICE per mile rate of \$.6245 per mile, the 432-mile SF-LA trip would be \$270.
- 3) Spain's high-speed rail, the AVE, charges \$153 for the 390-mile Madrid-Barcelona trip.¹¹² This fare rate is \$0.392/mile, suggesting a LA-SF ticket price of \$164.47.
- 4) Italy's high-speed rail system (Trenitalia) charges \$122 one-way for the Milan-Rome 296-mile route.¹¹³ If that \$0.41/mile rate were applied to the 432-mile SF-LA route for the CHSR, the ticket price would be \$178.05.
- 5) Data from the Paris-Lyon TGV route, one of two segments that Iñaki Barrón de Angoitia claims is profitable, are telling.¹¹⁴ A second-class seat on the Paris-Lyon TGV is \$115, and the land distance is 288 miles.¹¹⁵ The ticket rate per mile on this TGV segment is US\$.399/mile. Using the same per mile rate for the one-way LA-SF trip would imply a fare of \$172.50.

Using the empirical evidence from high-speed train routes in Japan and Europe, it appears that California's high-speed rail per mile rate should be about 80% higher than presently used in the CHSRA's ridership and financial models. This average of nearly

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\$0.44/mile – making a one-way SF to LA ticket price of about \$190.00 – may bring the proposed system closer to financial sustainability than their present model input of \$0.24/mile.

Harvard urban economist Edward Glaeser calculated that operating expenses alone for high-speed rail vary between \$0.10 and \$0.50/mile. Using his average of \$0.30 per mile, \$.06 per mile more expensive than CHSRA uses, for the 432 mile LA-SF route would suggest a fare of \$130 per passenger.¹¹⁶ But even this would not cover any debt servicing costs -- not the State's \$9.95 billion bonds dedicated to the CHSR, nor the \$4-5 billion from cities and counties if not grants, nor any of the \$10-12 billion expected from the private sector. The need to service debt in the CHSR project precludes using the assumed \$.24/mile assumption of ticket cost.

4.2.1 The CHSRA cannot have it both ways -- lower fares and no operating subsidy AND financially sustainable fares and fewer riders.

The Warren pricing analysis, shown in Appendix A, from actual air ticket and auto costs suggests the SF-LA fare should be at least 25% lower to maintain the 39 million riders. Yet the above evidence-based high-speed fare analysis implies that ticket prices have to increase about 80% to reach the legal requirement to break even financially.

An increased per-mile rate would wreak havoc on CHSRA's ridership forecasts. What CHSRA's modeling might produce is unknown. However, if we use the impact of the Authority's fare increases between 2008 and 2009, with its decreases in ridership between 2008 and 2009 we learn a great deal about what actual ridership may be. The 2008 forecast of 94 million riders decreased 58% (39 million) with a 90% increase in the SF-LA fare (\$55 to \$105). If the financially sustainable one-way SF-LA ticket price of \$190 (a 80% increase) were to follow this same linear relationship, ridership would fall about 42%. That pragmatic mathematics suggests CHSRA ridership in 2030 would be about 16 million, or only 40% of the Authority's projection of 39 million riders that year. And that calculation is dependent on believing the near-mythical projection in 2008 of 94 million riders. Something has to be done to put the Authority's pricing model on a realistic footing.

4.3 CHSRA's Assumptions On Operating Expenses Do Not Reflect Real World Practices

In the CHSRA's operating expense plan, no distinction is made between fixed and variable costs. The CHSRA 2009 Business

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Plan treats almost all costs as variable and directly linked to their projected ridership figures. This is fallacious. Two examples: the fixed cost of running a train from Los Angeles to San Francisco does not depend on the number of riders on that train. Nor is the frequency with which trainsets must be maintained dependent on the number of riders. Investment grade accounting must recognize this difference between fixed and variable costs and incorporate them in the model. To date there is no indication that the CHSRA's financial plan recognizes this crucial point.

Once construction is finished, operating costs and debt servicing take over. The history of projecting these kinds of costs is improving, but not yet good. A dated DOT study concluded that operating costs for rail transit systems are, on average, 80 percent greater than expected.¹¹⁷ A more recent study found that transit operators had greatly improved their forecasts of operating costs, but actual costs for some heavy rail systems, like Atlanta's MARTA, were still twice their planners' estimates.¹¹⁸ Compared with other public transit modes, operating costs per passenger mile on America's intercity passenger rail lines are three and a half times higher than for airlines and four times greater than for intercity buses.¹¹⁹

To be financially responsible, the assumptions of the CHSRA's 2009 Business Plan should have erred on the side of caution and assumed operating expenses would be larger than expected. A Transportation Research Board report estimated the operating costs of the now defunct Texas TGV at nearly 70 percent higher than the CHSRA's operating cost projections.¹²⁰ There is even contradiction between the CHSRA's claims about operating costs and those of the U.S. Federal Railroad Authority (FRA), an important regulator of California's CHSR project. *"The operating cost per seat mile from the FRA study for the California corridor (2006\$) is approximately 40 percent higher than that of the CHSRA projections."*¹²¹ This significant difference should give pause to the FRA and others who are considering financing the project.

Details in the CHSRA's 2009 Plan show some glaring examples of understated or missing operating expenses. For example, by its fifteenth year of constant operation, the CHSR's equipment maintenance costs should be significantly higher than the average per year and increasing due to cumulative wear and tear on the rails, the carriages and the overhead electric grid. Speed costs. However, the 2009 Plan says, *"Thereafter, from 2023 (\$1.01 billion) through 2035 (\$1.07 billion), a span of 13 years, operating costs are projected to be essentially flat."*¹²² The

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CHSRA plan holds equipment maintenance costs constant for thirteen years at approximately 42% of total operating costs. As a paper by private investor Alan Bushell [Appendix C] points out, *"Assuming that all costs from 2023 through 2035 will be almost constant when expressed in 2009 dollars and that all operating costs experience the same average rate of inflation runs counter to past experience."*¹²³

The Bushell paper on operating costs, Appendix C, also notes well-documented facts such as, *"Medical insurance and fuel will be major cost items for a system such as this. In the past twenty years no business operation has been able to successfully contain these two expenses to anything near the general rate of inflation."*¹²⁴ Medical expenses and medical insurance costs alone increased at about twice the CPI rate, and fuel costs (as inputs to electrical generation) have kept ahead of the CPI for over two decades. To assume otherwise is to ignore history.

Other operating cost omissions in the CHSRA's Plan were property, casualty and liability insurance. The Authority says, *"Insurance is assumed to be handled by the Authority and the state in the initial phase, through an owner-controlled insurance program (OCIP)."*¹²⁵ Again, Bushell points out that assets *"will need to be insured even if self insured, and there are costs associated that need to be revealed. . . . and no mention is made with respect to whether liability insurance is 'handled' also means that unlimited cost will be absorbed by some entity other than the HSR system itself."*¹²⁶ Such costs of doing business are universally recognized as corporate operating expenses, but the CHSRA doesn't clarify who will pay for these in their proposed operations.

4.3.1 CHSR operations will incur security costs, still missing from CHSRA's business plans and operating costs.

One aspect of Prop 1A's appeal to voters was the implication that HSR passengers would avoid the extra time and inconvenience of airport security systems. But a high-speed train is a high visibility target, as acknowledged by the airport-like security on the Paris-London Eurostar.¹²⁷ However, security costs were not mentioned in any of the CHSRA's business plans. Excluding these costs ignores both the 2004 terrorist attacks in Madrid and the following year's in London. To thwart such attacks takes considerable capital investments such as security cameras, sensors on tracks, bridges, trenches and tunnels. It also requires operating costs, including personnel to train and manage staff engaged in passenger boarding security checks and those monitoring and maintaining the security technologies. These costs have added time and financial burden to airline

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passengers; it is unwise to assume they won't be part of the costs of operating California's high-speed rail system.

4.3.2 CHSR is unlikely to keep union labor rates from inflating or work rules from punishing productivity.

Finally, and most salient, labor will be the single largest operating expense for high-speed rail, probably accounting for about half of its total operating cost. Most likely, employees will be unionized, with collective bargaining rights and the ability to cripple CHSR by 'sick outs' or walk outs and demands for higher wages and benefits.¹²⁸ Federal laws governing labor-management relations will restrict the ability of the operator to increase productivity. For example, current union work rules specify that most Amtrak employees cannot perform tasks outside their enumerated work duties for more than two hours per day. And while Amtrak executives have sought to expand this to four hours per day, the unions have held firm.¹²⁹ The history of Amtrak is replete with Congress' frustrations in trying to bring the system's unions under control. All efforts have failed. This year Amtrak's union managed to get a 15% raise over the next five years, astonishing during the Great Recession.¹³⁰ There is no fundamental reason to believe the CHSR operator will be able to withstand union pressure on wages, benefits or work rules.

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5.0 USING THE CHSRA'S DATA ON REVENUES AND EXPENSES, THE SYSTEM WILL NEVER ACHIEVE POSITIVE CASH FLOW WITHOUT THE ASSUMED FEDERAL GRANTS

5.1 The Warren Financial Model Highlights What Taxpayers Will Have To Bear

Absent the basic information that would be in an investment grade business plan, William Warren, a former executive of several Silicon Valley companies, reviewed and built a surrogate CHSR project financial model.¹³¹

The Warren model and accompanying explanations of its findings are Appendix B. His model's baseline revenues, capital and operating expenses are taken from those in the CHSRA's 2009 Business Plan for the period 2010 to 2035. This approach shows the potential impact before reviewing any of the CHSRA's Business Plan's numbers, as is done in other sections of this report. And like the CHSRA's results, the Warren model focuses on when and how much cumulative positive or negative cash flow the project will produce.¹³²

The Warren financial model, like the CHSRA's Plan, is a cash flow analysis model. Cash left over, or cash required to break even from operations, is counted by both models as an Operating Surplus (or deficit). Neither model is a Profit and Loss statement. For example, the CHSRA plan does not take an annual depreciation charge. Instead CHSRA starts a Capital Replacement Fund in the eleventh year of operations to accumulate enough funds to replace the rolling stock starting in the fifteenth to twentieth years (2035-2040). This Capital Replacement Fund is also accounted for in the Warren financial model.

The Warren model also goes several steps further than either CHSRA's model or a basic cash flow analysis done by CARRD in May 2009.¹³³ It considers the cash flow implications of various mixes of grants, debt and equity on the CHSR's financial performance as well as its impacts on the State of California and its taxpayers. Additionally, it allows for sensitivity analyses on two variables; changes in prices and changes in ridership.

There is, however, a fundamental difference between the CHSRA's 2009 financial point of view and the Warren model's point of view. Both assume Federal grants do not have to be

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repaid. But the CHSRA model assumes their organization is not obligated to service debt on the project; that is 'laid off' on some other entity: namely the State of California. Solely for calculations purposes, the Warren model assumes that California’s taxpayers will be responsible for paying for any hidden subsidy (aka a revenue guarantee) and to service possible private, Federal, state, or local loans or equity positions.

As shown in Figure 3, five clear findings emerge. The various results are based on the key (and possibly illegal) assumption that private debt/loans and the private equity investments will be guaranteed a rate of return, as defined in the 2009 Business Plan.¹³⁴ The result of this requirement is that cash contributions to "Sinking Funds" will be needed every year to allow for the scheduled retirement of debt/loan obligations, and to allow for the repurchase of the equity investment plus the agreed upon rate of return.

Figure 3
Economic Impact on the State Of California Of Different Funding Cases And Different Operating Results For The Period 2020 to 2035

	Mixes Of Finance Sources		
	Mostly Grants As Per '09 Plan	More Debt Than Grants	Mostly Private Debt and Equity
Revenues & Costs As A % Of 2009 Business Plan	A	B	C
Case 1 —100% of 2009 Business Plan	(\$4)	(\$14)	(\$25)
Case 2 —75% of Ridership and Op Expenses	(\$9)	(\$25)	(\$35)
Case 3 —Ticket Price Is Down By 25%	(\$16)	(\$32)	(\$43)
Case 4 —75% of Ridership and Op Expenses AND Ticket Price Down By 25%	(\$22)	(\$38)	(\$49)

5.1.1 Even under CHSRA’s most favorable financing scenario, the State is likely to be liable for \$4–25 billion of shortfall in CHSRA’s cash flow.

First, we explore the three results in the first row of Figure 3. As Case 1A shows, without the full \$19 billion of interest-free, non-repayable Federal grants, there is little chance the project will ever be financially viable on a cash flow basis, much less produce a long-term cumulative positive cash flow. This is based on using the results stated in the CHSRA 2009 Business Plan, i.e.

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100% of the revenues, ridership, and operating costs for the 2020 to 2035 time period.

For the taxpayers of California, even the most favorable scenario of full federal funding has a negative cumulative cash flow that peaks at over (\$4 Billion). This point is shown in Case 1A, the first row of the 'Mostly Grants' column. This point also stands in direct conflict with the CHSRA’s assertion that the project will produce a net operating surplus from cash flow of \$370 million in its first year of operations since the CHSRA model does not speak to the impacts of financial obligations.¹³⁵ The Warren model shows the CHSR is not able to meet AB3034’s demand to not require an operating subsidy.¹³⁶

As it is extremely unlikely that the 'Mostly Grants' scenario (Case 1A) will occur (gaining \$19B in Federal grants), it is important to understand the outcomes of the other two scenarios (Case 1B and Case 1C) in the top row. In Case 1B, the 'More Debt Mix' case, more Federal loans and private investment are assumed while a smaller amount of Federal grants are assumed. In Case 1C, called 'Mostly Private' monies, Federal Grants are limited to \$4.5B. For Case 1C, \$29B in Private Debt and Equity is assumed to provide the bulk of the required financing. As one moves from the 'best-for-CHSRA' scenario (Case 1A) on the left side of Figure 3, with a peak cumulative negative cash flow of \$4 billion, to the Authority’s 'worse' case on the right, Case 1C, the peak cumulative negative cash flow grows to \$25 billion.

5.1.2 A simple 'stress test' of decreasing ridership by 25% (and an equal decrease in Op Ex) shows the State’s liability increases even further.

Second, the Warren model adds a stress test by examining the risks of reducing fare-based revenues and operating expenses by one-fourth. The results of even this favorable-to-CHSRA scenario, Case 2A with a 25% revenue and expense decrease, show that the proposed project can never create a positive cash flow for the State of California. And if the mix of financing decreases Federal grants, as in Case 2B and Case 2C, the cumulative negative cash flow increases to \$25 billion, then \$35 billion (2C). This feature of the Warren model analyzes a risk scenario, a crucial element of financial due diligence, demanded by the Legislature, but not yet produced by the CHSRA.

The Warren model grants the CHSRA the assumption of simultaneous and equal revenue and operating expense reductions solely to maintain consistency with the CHSRA’s assumptions. However, the model’s author recognizes that in day-to-day practice, reducing operating expenses by 25% within

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the same time frame as a 25% revenue reduction is an impractical assumption, except over protracted periods.

Third, these first six scenarios in Figure 3 (Cases 1A to 2C) mix various levels of debt financing with equity financing in order to understand the impacts of various types of debt obligations the State might have to assume. This even more comprehensive analysis shows that the State's treasury would never accumulate cash from the CHSR project if any funding scenario other than the CHSRA's most favorable scenario (Case 1A) occurs —because in Case 1A, the negative peak cumulative cash flow is reduced to zero by 2033. Therefore, without the \$19 billion of Federal grants, the high-speed rail project has almost no chance to ever have a positive cash flow when viewed from the point of view of California's taxpayers.

5.1.3 If ticket price inputs had been more realistic than the CHSRA Plan assumes, the State could be liable for a \$16-43 billion of cash flow shortfall.

Fourth, the Warren model offers even more insights into risks by analyzing the price per ticket assumptions in CHSRA's 2009 Business Plan. This test was developed as part of the pricing analysis discussed in Section 3.1. In Appendix A the author analyzed more accurate and current (2010) airfares between the San Francisco Bay Area and Los Angeles metro area and automobile operating costs on a per passenger basis. This analysis shows that the projected per passenger ticket HSR prices in the 2009 Business Plan (\$105 each direction) need to be reduced by 25% to achieve the market penetration that is targeted in that Plan, and simultaneously achieve the volume of passengers in the Plan.

When the Warren model is used to look at the consequences of a 25% reduction in per ticket prices, with 100% of the passenger boarding volumes and operating costs — shown in Figure 3 cases 3A, 3B and 3C — there is a major increase in peak cumulative negative cash flows, as revenues are reduced, without a reduction in operating costs. These results of the "best" scenario Case 3A results in \$16B of cumulative negative cash flow, and the "worst", Case 3C of \$43B of cumulative negative cash flow.

5.1.4 Assuming the risks of both fewer riders and lower ticket prices increases the State's liability to nearly \$50 billion.

Fifth, the Warren model can then be used to measure the consequences of combining two major factors — as shown in Figure 3 cases 4A, 4B and 4C. These factors are 1) the need to reduce "the per ticket prices" by 25% (as shown in the third row,

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cases 3A, 3B, and 3C) to be competitive in the marketplace, and 2) simultaneously having passenger volumes only achieve 75% of their Plan forecast, (as shown in the second row, cases 2A, 2B, 2C). [The model still grants CHSRA the unrealistic assumption that operating costs can be reduced by 25%.] The results of this combination of the second row and the third row are shown on the fourth row. Changing the mixes of financing shows a dramatic increase in peak cumulative negative cash flows, with a "best" scenario (Case 4A) result of \$22B of cumulative negative cash flow, and a "worst" case result of peak cumulative negative cash flow of \$49B.

When one looks at the details behind the numbers in Figure 3 one sees that only in Case 1A, the (\$4B) peak cumulative negative cash flow could possibly be paid off by 2033 so that by the end of 2035 the State of California has no outstanding loans, or subsidies, to the HSR Authority. In all of the eleven other cases, these subsidies required to keep the system operating will still be outstanding. And it is reasonable to assume that the monies spent on these subsidies will never be recovered.

There is an additional risk case that needed to be quantified. The Warren Model can also be used to understand the consequences in cost over-runs during the period of construction, of 2012 to 2020. If, for example, the \$43B that is projected to be required to construct the Phase I corridor from San Francisco to Los Angeles/Anaheim, and to purchase the trains sets, grows by 20%, to \$50B, each of the negative numbers in Figure 3 can be increased by an additional negative (\$14B). While not addressed, the consequences of even higher construction costs on cumulative negative cash flow are even more dire.

5.1.5 If California guarantees the debt and equity obligations needed to cover CHSRA's revenue shortfalls, the State would be in the untenable position of violating AB3034; but if 'at risk' equity replaces 'fixed return' equity as the major equity finance vehicle, equity owners end up with a miniscule or negative return on their investment.

Finally, the previous discussions are based on a key — yet presently disallowed — assumption that the returns to the private debt and private equity investors are, in effect, guaranteed. If the position of the private equity investor were one of an 'at risk' return rather than a 'guaranteed' return, the implications for the State of California finances should be significantly less negative.

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If the private equity investor is also the operator of the system and that entity’s return of its equity capital, and any return on this equity could be defined to be all of the cash available in the HSR’s cash accounts, on a certain year, such as 2035 or 2045, the amount of the subsidy required by the State of California would drop significantly. For example, in Figure 3 the amounts in the left hand column – Scenarios 1A, 2A, 3A and 4A – would drop by \$11B. Column’s B’s losses would drop by \$15B. And if ‘at risk’ equity capital replaces all guaranteed equity capital, Column C’s losses would drop by \$29B. In effect, all three of Row 1 and one of Row 2 cases would be cash positive by 2035.

However, it seems unlikely that any operator or investor will agree to a condition of putting their equity ‘at risk’, as the Internal Rate of Return the operator/equity investor will achieve, based on the cash available in 2045 will be, at the most, 9% to 7%. And as shown in Figure 4 (Column B and Column C) in many cases, it will be negligible or negative. This does not look like an attractive investment opportunity if compared with the guaranteed internal rate of return of 10% for the “Fixed Return” (guaranteed return) equity investor, which was assumed for calculating the sums in Figure 3.¹³⁷

Figure 4
Internal Rate of Return For The ‘At Risk’ Investor’s Investment
Based On An ‘All Available CHSR Cash In A 2045 Total Payout

	Mixes Of Finance Sources		
	Mostly Grants	More Debt	Mostly Private
	As Per ‘09 Plan	Than Grants	Debt and Equity
Revenues & Costs As A	----- Billions of \$s -----		
% Of 2009 Business Plan	A	B	C
Case 1–100% of 2009 Business Plan	9%	7%	5%
Case 2–75% of Ridership and Op Expenses	8%	5%	2%
Case 3–Ticket Price Is Down By 25%	6%	-0.50%	-4%
Case 4–75% of Ridership and Op Expenses AND Ticket Price Down By 25%	4%	worse than -5%	worse than -5%

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5.1.6 If The CHSR Project Continues, The State Of California Is On The Horns Of A Financing Dilemma.

If the State government provides a ‘fixed return’ (i.e. guaranteed) to the equity investor, and the private debt and equity investors provide a substantial portion of the capital required to build the system, as shown in Figure 3, column C, the State of California’s subsidies to a CHSR project would be in the tens of billions of dollars.

On the other hand, if the State provides no guarantee, and stays with the ‘at risk’ return that AB3034 demands, then for private debt and equity investors, who provide a substantial portion of the capital required to build the system (Figure 4, column C), the rate of return for these equity investors (Cases C1 and C2) is minimal, at best. If Figure 4 Case C3 or Case C4 occurs, the investors’ rate of return is negative; that is, they will never recover even their initial investment.

Why is this happening? The root of the problem is that as the source of financing moves in Figure 3 Column A, with \$19 billion in Federal ‘free money’ – without interest and not paid back – towards Figure 3 Column C, where a substantial portion is private debt and equity which requires paying investors, the negative cash flow cannot be serviced by the operating margins projected in the 2009 Business Plan.

Herein lies the State’s conundrum. If the equity return is ‘guaranteed’ the cumulative negative cash flow is very large, as seen in Figure 3, and the investors are happy with their investment. However the taxpayers are subsidizing the return of the investor’s capital and its interest and dividends – clearly forbidden by AB3034. However, if the equity return is at risk, the amount of the negative cash flow is reduced by about \$30B in Figure 4 Column C, as discussed in Section 4.1.5, but the remaining cash left as a return to the investor is extremely poor if it exists at all.

It’s not clear this dilemma can be solved. The requisite operating conditions in the ‘best case’ (Case 1A) are that the CHSR must attain 100% of its ridership forecasts and ticket prices while keeping operating costs within the CHSRA’s estimates. As already argued, this is unlikely to happen. Even if those conditions were met, a great deal of Federal ‘free money’ over the next 10 years is required, as Figure 4 Column A shows. Without perfect knowledge of both of these ‘best-for-CHSR-conditions’ occurring (i.e. Column A financing and Row 1 operating results), the odds of financial success, as measured by no need for an operating subsidy (or revenue guarantee) and

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from the point of view of California’s taxpayers, are very small, if not zero.

5.2 High-speed Rail Systems Do Not Break Even

All forms of public transportation require subsidies. Whatever the ticket prices, per mile costs are generally more, and sometimes far more, than collected at the ‘fare box’. A 2004 US DOT study found that rail and mass transit are considerably more subsidized by the Federal government on a per passenger-mile basis than other forms of transportation. DOT found that subsidies for various public transport modalities, using year 2000 dollars, are as follows:¹³⁸

Mode of Transport	Subsidy per 1,000 passenger miles
Intercity Rail & Mass Transit	>\$100
Aviation	appx \$10
Intercity Buses	appx \$4

Highway transport actually more than pays its own way due to gasoline taxes. In contrast, federal rail passenger subsidies increased nearly 50% between 1990 and 2002 (the last data year of the study), while commercial aviation subsidies decreased nearly 20% in that period.¹³⁹

Projections about high-speed rail’s ability to make a profit depend on non-US evidence, since there is no US high-speed rail of the type proposed in California. To repeat, in 2009 Iñaki Barrón de Angoit, Director of High-Speed Rail at the International Union of Railways (IUR), said, “Only two routes in the world — between Tokyo and Osaka, and between Paris and Lyon — have broken even.”¹⁴⁰

The CHSRA and California’s high-speed rail supporters claim their system will be profitable. But even the subsidized Acela operator disagrees with that claim. In April 2008, Amtrak’s Inspector General said “When all revenues and expenses for the entire passenger train system are taken into consideration, European Passenger Train Operations operate at a financial loss and consequently require significant Public Subsidies.”¹⁴¹ The study of six European nation’s operations showed their annual rail subsidies to average \$42 billion. This ranged from Germany’s high of nearly \$23 billion annually to Denmark’s low of \$900

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million. And the operators employ off-balance sheet accounting, the same financial engineering techniques that helped bring the Great Recession. As a whole, each year (1996-2006) \$26 billion of the \$42 billion subsidy was on the operators’ balance sheets, but nearly \$ 16 billion was off-balance sheet accounting.¹⁴²

Then in December 2009 the US Congressional Research Service (CRS) reinforced the IUR Director and Amtrak’s Inspector General’s statements: “Experts say that virtually no HSR lines anywhere in the world have earned enough revenue to cover both their construction and operating costs, even where population density is far greater than anywhere in the United States. Typically, governments have paid the construction costs, and in many cases have subsidized the operating costs as well.”¹⁴³ While repeated in both their 2008 and 2009 business plans, the CHSRA’s claims of profitability are contrary to worldwide experience.

Legerdemain aside, those knowledgeable about rail systems both here and abroad were skeptical of the CHSRA’s promises in 2008 and 2009 to make profit. An independently-produced due diligence report, released prior to the Proposition 1A vote, put the point about subsidies another way: “. . . to claim that HSR systems are not subsidized when much of their capital costs (and perhaps even operating costs) are paid for by government is akin to claiming a household budget produces a surplus without including the mortgage on the house.”¹⁴⁴

In July 2010 a World Bank report cautioned against assuming high-speed rail systems will be profitable or require no subsidies: “Governments contemplating the benefits of a new high-speed railway, whether procured by public or private or combined public-private project structures, should also contemplate the near-certainty of copious and continuing budget support for the debt.”¹⁴⁵ These sources – DOT, IUR, Amtrak and World Bank – of empirical, independent evidence should be impossible to ignore.

The Authority is forbidden by AB3034 to require an operating subsidy. Its projection of a \$370 million operating surplus in the first year of CHSR operations should be evidence that no subsidy would be needed.¹⁴⁶ However, the need for a ‘revenue guarantee’ of limited duration appeared five times in the Authority’s 2009 Business Plan.¹⁴⁷ Despite assertions to the contrary in the Authority’s Amended Plan, a revenue guarantee is a commitment by the State of California to subsidize the shortfall between income and expenses. Once started, this subsidy will be extremely difficult to reverse after the proposed CHSR system is built and operating.¹⁴⁸

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While the name may change, a revenue guarantee is in effect a subsidy, and a disincentive to operate in an efficient and effective manner. AB3034 is the law and must be obeyed in both letter and spirit. To ignore the potential impacts of a continued shortfall of revenues in the model is inconsistent with risk analysis in an investment grade business plan.

Promising the Legislature and the people of California that the high-speed rail system would not require an operating subsidy was necessary in order to promote the CHSR system to Prop 1A voters in 2008. To reiterate that promise a year later using a financial model that forecasts a \$370 million operating surplus in its first year was misleading.¹⁴⁹ To promise an operating surplus in the 2009 Business Plan, and less than twenty pages later begin discussion of the need for a 'revenue guarantee', a mask for illegal operating subsidies,¹⁵⁰ was inexcusable.¹⁵¹

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6.0 COMPLETE CHSR FUNDING HAS NOT MATERIALIZED, NOR IS LIKELY TO BE FORTHCOMING

In April 2008, Legislators working on AB3034 required an investment grade budget plan from the California High-Speed Rail Authority (CHSRA). In November 2008 the voters of California approved Proposition 1A, which allocated \$9.95 billion in State General Obligation (GO) bonds for the proposed \$33 billion construction of a high-speed rail system running between Oakland, Sacramento, San Francisco and San Diego.¹⁵² No business plan of any quality was provided by the CHSRA prior to the November 2008 election, despite being required by its authorizing law.¹⁵³

To date, only three publicly available sources describe the finances of the proposed \$42.6 billion CHSR system: page 12 of the Authority's 2008 Business Plan, provided after the legislated required date and the November 2008 election; pages 92-108 of the Authority's 2009 Business Plan; and the April 2010 Addendum to the 2009 Plan. For a project of this magnitude, these pages offer little detail on whether the project will meet its financial claims and its legal obligation to require no operating subsidy.¹⁵⁴

The 2009 Plan projected a \$370 million operating surplus the first year the trains run, without providing a detailed financial model to support that claim.¹⁵⁵ Ticket price estimates were not grounded in detailed revenue and operating cost projections. Rather, ticket prices quoted in the Authority's 2008 and 2009 business plans – 55% and 83% of the average airline ticket prices – were selective inputs to the Authority's ridership model. These inputs are unsupported or verified by independent market research as being investment grade data. The CHSRA's assertion that the project meets investment grade standards is without an independent basis of proof. In short, the plans offered by the CHSRA do not qualify as investment grade finance plans.

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6.1 CHSRA’s Proposed Capital Budget Sources Are Heavily Skewed To ‘Free’ Government Money

The 2009 CHSRA Business Plan specified four sources of capital prior to the start of operations in 2020:¹⁵⁶

Federal Grants	\$17-19 billion
State Grants (actually Prop. 1A bonds)	\$9.95 billion
Local Grants	\$4-5 billion
Private Debt or Equity Funding	\$10-12 billion

While the CHSRA may count federal and local funds as interest-free non-repayable grants, all monies, including State and possible private investor funds, will cost the taxpayers of California principal and interest. Debt servicing on the \$9.95 billion of authorized California state general obligation (GO) bonds at the present California GO bond rates would be over \$60 million a month. This cost to the CHSR is nearly double the \$370 million of operating surplus claimed by the Authority for its first year of operations (2020).¹⁵⁷

As of July 2010, the CHSRA had potential access to the \$9.0 billion of the \$9.95 billion of GO bonds authorized by CA Prop 1A. The Authority also had been granted \$2.34 billion from the \$8 billion that Congress awarded in FY2010 for intercity passenger rail through the American Recovery and Reinvestment Act (ARRA), widely known as the stimulus funds.¹⁵⁸ The state GO bond funds under AB3034 can only be used to match other non-state funds on a dollar-for-dollar basis. Assuming the entire FY2010 ARRA funds are allocated, the total of funds secured by CHSRA to date, \$4.7 billion (\$2.34B in federal grant dollars matched by \$2.34B of state bonds), represents about 11% of the \$42.6B the Authority presently projects as the cost of the first phase of CHSR construction between Los Angeles and San Francisco.¹⁵⁹ This state of funding is much less promising than anyone anticipated in 2008 or 2009.

6.2 Purchasers For The \$9.95B Of Guaranteed GO Bonds Have Not Come Forward

The market for the \$9.95 billion of CA General Obligation bonds authorized by AB3034/Prop 1A has yet to emerge. Even with the full faith and credit of the State of California, the future of selling these bonds is questionable. In mid-July, State Treasurer Lockyer weighed in on the ‘salability’ of State GO bonds: *“I would be reticent to try to go to market to issue bonds to finance the state’s share. The only discretion I have is to say, You can’t sell this. No one will buy this bond, certainly not at any reasonable price.”*¹⁶⁰ Investors’ reluctance to purchase the state’s GO bonds is intimately linked to the risks associated with

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California’s repeated inability to balance its budget. The Treasurer has been ‘testing the waters’ and found little receptivity to buying into an indebted State’s future. If that is the situation for guaranteed return investments, then what do finance-savvy investors think of buying into the non-guaranteed debt the Authority needs?

6.3 The Probability of CHSRA Receiving The Full Complement Of Federal Grants Is Small

In Fiscal Year (FY) 2010, the Federal ARRA (P.L. 111-5) allocated \$8 billion for intercity passenger rail projects, including high-speed rail. Forty-five applications were submitted from 24 states to the Federal Railroad Administration (FRA) requesting a total of approximately \$50 billion in FY2010 ARRA funds.¹⁶¹ California requested \$4.7B, nearly 59% of the total federal allocation. The State received \$2.34B, about half of its request, but still a hefty 28% of the national total. That grant includes \$400 million specifically for the San Francisco Transbay Terminal in addition to CHSR construction, equipment and technology purchases.

The CHSRA assumes it will get \$3 billion in additional federal grants each year for the next 5-6 years, for a total of \$17-19 billion. Within weeks of the 2010 ARRA allocation, California’s Auditor pointed out, *“... the Authority’s spending plan includes almost \$12 billion in federal and state funds through 2013, more than 2.5 times what is now available.”*¹⁶²

The CHSRA might assume that a potential alternative source of Federal grants is the Federal Highway Trust Fund, a pool of \$27B provided to the states. If the CA State Legislature authorized it, some or all of the state’s highway funds could be used for intercity rail.¹⁶³ But, as a Congressional Research Service report notes, *“... the dedicated funding source for federal highway and transit programs—the Highway Trust Fund—is unable to sustain even the current level of program funding, and had to be supplemented by \$8 billion in General Fund appropriations in FY2008 and another \$7 billion in FY2009.”*¹⁶⁴ That does not seem like a likely source of future funds.

6.3.1 The FY2011 Federal budget is constrained by an unsustainable fiscal deficit and neither Congress nor the Administration seem ready to again generously fund the national high-speed rail program.

The Federal deficit for FY2010 is estimated to be \$1.3 trillion. The Congressional Budget Office estimates that \$9.7 trillion will be added to that over the next decade, raising Federal debt to above 80% of the nation’s Gross Domestic Product.¹⁶⁵ It seems unlikely the Federal government will be searching for expensive

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new infrastructure projects in the foreseeable future, a situation that questions the continued financial viability of the CHSR.

On July 1, 2010 the House Appropriations Subcommittee earmarked \$1.4B for high-speed rail in FY2011.^{166,167} On July 22 the Senate Appropriations Committee and the Administration's Office of Management and Budget (OMB) requested \$1B for high-speed rail and intercity passenger rail development, a drastic reduction from the initial \$8B in FY2010.¹⁶⁸ These requests need to be reconciled, and will surely not increase. In FY2010 the state governments could also use \$1.5 billion of ARRA discretionary grants for projects "that will have a significant impact on the Nation, a metropolitan area, or a region."¹⁶⁹ However, those discretionary grants are not in the FY2011 budget. A good 'guesstimate' of the outcome of reconciled requests would put the total national high-speed rail program's funds for FY2011 at about \$1.2 billion.

In August, CHSRA applied for some of the roughly \$2 billion of intercity rail funds that the FRA did not spend in FY2010 (which ended on September 30, 2010). It 'won' \$194 million, about 9% of that 'Fiscal Christmas' FY2010 monies, not the 28% of the FY2010 national intercity rail grants it won in April.¹⁷⁰ Matching the April \$2.35 billion award and \$194 million Fiscal Christmas grant with equal GO bonds from Prop 1A; as of October 2010, the CHSRA has slightly over \$5 billion to spend on an estimated \$42.6 billion project. That's about 12% of what is probably an underestimated Phase I capital cost.

Congress and the White House seem reluctant to continue a now-criticized high-speed rail program.¹⁷¹ With the CHSR project competing with many other intercity rail projects and a national trend towards fiscal reduction, it seems unlikely the CHSRA will receive anything near the full \$17-19 billion in federal grants projected in their 2009 Plan.

6.4 CHSRA's Assumptions About Local Government Contributions Have No Historical Basis

In addition to the 'free-to-CHSRA' Federal grants and the State's ability to match those equally with GO bonds, the CHSRA assumes that the cities and counties of California will provide \$4-5 billion of interest-free grants.¹⁷² However, this is a time of severe fiscal constraint at all levels of government, and the Authority does not address several critical questions about this assumed source of funds:

- How are financially strapped local governments going to produce these anticipated monies?
- How willing will California's local governments be to put the

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CHSR project's needs ahead of their own local needs?

- Why should city and county governments give the CHSR project interest-free grants, when the municipalities and counties themselves must borrow at market rates?

Suggestions have been made that local communities will be able to join public-private property development partnerships and reap income from building at or near CHSR stations. However, the statewide CHSR project is limited to twenty-four such stations, including in less populated portions of the CHSR's route. Even if the cities' average revenue per station from such projects were an unlikely \$100 million, the aggregate would be only half of that assumed by the CHSRA's funding plan (\$2.4B vs. \$4-5B).¹⁷³ The assumption that local governments' grant contributions can be made through co-participation in development projects is both vague and unrealistic.

No precedent exists for local government funding of inter-city transport or other infrastructure projects that are not under their direct control. Local governments look to overlying jurisdictions to plan, build and operate transit projects that cross their borders. There is no record of such a claim being made on local governments in any past transport project, and the CHSRA should certainly have known that during their financial planning. The logic behind the CHSRA's assumptions about local government financial contributions to HSR construction remains a mystery.

6.5 Twenty-Three Months after Proposition 1A, There Is No Private Equity Or Debt-Based Financing For The CHSR

The CHSRA assumed that private lenders would come forward with \$10-12 billion, about one-fourth of their estimated total Phase I CHSR capital cost. The 2009 Plan asserted the need to provide investors with a 16% after-tax internal rate of return, roughly equal to a pre-tax return of 21%.¹⁷⁴ This is an attractive return, but only if the risk-reward ratio is moderate.

By mid-July 2010, the State Treasurer was doubtful whether the private sector would come forward to provide the \$10-12 billion to construct the project. Treasurer Lockyer commented ". . . they're convinced that no one can finance the routes from L.A. to the Bay Area, that it just will never work economically, certainly in the foreseeable future. . . . So there's financing potentially available if it's a good deal. I'm just not yet convinced the investors are going to think that's a smart investment to make."¹⁷⁵

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As of early fourth quarter-2010 it is not known whether any private equity or fixed income lender has done due diligence on the CHSRA financial plan. But it is clear that no private lender has yet been willing to commit to what is represented as an attractive return. The closing of the much-touted Shanghai-to-Nanjing high-speed rail, losses by Taiwan's high-speed rail, and the bankruptcy of the Las Vegas monorail might have dampened whatever initial enthusiasm there may have been from private capital sources.¹⁷⁶ Twenty-three months after Proposition 1A passed, the lack of any commitment of private equity or risk-based debt financing raises doubts about the private sector's view of earning any return on risk-based lending for California's proposed high-speed rail project.

6.6 At Present California Is In The Least Favorable Position Possible To Go To Debt Markets To Fund The CHSR Project.

Even if the Great Recession had not happened and the Federal Government was not purposely and rapidly increasing its debt through fiscal stimulus, the State's profligate spending even in 'good times' has put it at a disadvantage relative to other borrowers. Add to that the new dimensions of increased scrutiny by the State Treasurer and the SEC, and California will be hard pressed to attract bond buyers.

6.6.1 While today's municipal bond market is relatively benign, inflation and the Federal deficit are likely to change that.

California depends on the 'kindness of strangers' every time it goes to the bond market to fund operations (with short-term revenue-anticipation bonds) or infrastructure projects, such as CHSR, (with long-term GO bonds). The current demand for bonds is relatively healthy, making the interest income return, or 'carry', on municipal bonds relatively low. However, recent trends indicate dramatic changes for the State's ability to secure debt financing.

Many economists and investment advisors believe that historically low interest rates (driven by nearly zero inflation) will rise in the intermediate term. Gold's recent meteoric rise is a sign that the markets see higher inflation coming.¹⁷⁷ Once interest rates are expected to go up, the value of existing bonds go down; which increases the perceived risk of buying bonds today.¹⁷⁸

The large Federal government deficit, funded through the bond market for US Treasury securities, is likely to continue for at least several more years. If the current high demand for GO

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bonds lessens, then the current, record-high US Treasury bond sales will likely 'crowd out' borrowers like the State of California which have lower credit ratings and higher perceived risk.

6.6.2 California's ability to raise Prop 1A-Authorized GO Bonds is and will be seriously challenged.

California's structural budget deficit and faltering economy have driven the State's credit rating, presently at A- (with a negative outlook) by Standard and Poors, to be the lowest credit rating among the 50 states.¹⁷⁹ It's like a family that has 'maxed out' on its credit cards. The more debt that California carries, the greater the downward pressure on the State's credit rating and therefore the greater 'spread' between what California and the US government must pay to attract investors. And the more debt the State has, the higher the interest rate the State must offer on its GO bonds. California's current debt load stands about \$68 billion. Prop 1A's \$9.95 billion of GO bond funding, plus the \$4-5 billion from local governments, plus any of the \$10-12 billion that might come by private financing would add materially to the debt burden, making the deficit that much harder to close and risking further damage to the State's already low credit rating.

These very real and large financial risks faced by California are starting to be noticed by investment advisors, who could start to steer their clients away from supplying California with needed debt capital. In September financial analyst Meredith Whitney reported that the states represent the new systemic risk, paralleling the role she first warned of that banks played in the 2008 financial crisis. California was the worst credit risk Whitney's firm found.¹⁸⁰

6.6.3 More rigorous Securities Exchange Commission (SEC) oversight and the CHSR project's risks will exacerbate California's weakness in the bond markets.

The 'wild card' in state's debt, unfunded pension liabilities, is getting increased attention.¹⁸¹ New and vigorous SEC oversight raises the bar on how transparent California and other states will need to be in future debt offerings. The SEC and the State of New Jersey recently settled federal civil fraud charges of failing to inform bond investors that it had not met obligations to its pension plans. The chief of the SEC's municipal securities and public pensions unit said, "We want to make sure that states and municipalities are adequately disclosing" their pension fund liabilities.¹⁸²

The future environment for debt financing for California will be more demanding. California's political leaders need to make

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choices about what is deserving of being funded by the State's taxpayers and what its citizens cannot afford. As presently structured, the financial plans of the CHSR project are sufficiently questionable to ask whether California can absorb their unknown risks on ridership, capital and operating expenses.

6.7 Discussions With Sovereign Governments Or Others About Using 'Creative Financing' To Fund CHSR May Not Be In The Best Interests Of California

6.7.1 How CHSR gets financed matters a great deal.

Over the past two decades global financial firms and sovereign nations have developed a variety of sophisticated financing techniques. Many such financing techniques included instruments whose value was questionable or not easily ascertained, were not exchanged or recorded in an open market, or were not secured by Tier-I assets. Moreover, widespread use of this kind of 'creative financing' led to overleveraged institutions, overleveraged housing, and an overleveraged economy that was not resilient in the face of unexpected stress.¹⁸³

This level of financial engineering helped bring the global economic system to near financial Armageddon in the latter part of 2008 and brought on the Great Recession, with which the world is still coping. California has shown concern, and the State's Treasurer has asked major finance houses to report on whether their use of such financial engineering is undermining the State's financial standing.¹⁸⁴ Clearly, how our institutions are financed matters a great deal!

6.7.2 The CHSRA's current business plan requires \$10-12 billion in private financing.

As described earlier in this Review, the CHSRA plans to raise \$10-12 billion in some combination of private debt and equity financing. The choice of debt versus equity will be critical in this 'final' tranche of funding for CHSR. On the one hand, debt must be serviced with regular interest payments and principal repayments, which will put a negative cash flow load on the operations of CHSR. On the other hand, equity is a relatively permanent form of financing that does not generally require consistent or periodic servicing. Most probably, one of the sales pitches that the CHSRA is making to prospective debt or equity investors is that California is going to provide, via a proposed general-obligation bond offering, a \$9.95 billion financing tranche, the Federal Government a \$17-19 billion tranche, and California cities and counties a \$4-5 billion tranche; the latter two in repayment-free grants. In total, this provides a potential 'free gift' of \$32-33 billion to the Authority to underpin any

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investment by private investors, giving investors a higher probability of achieving a return on their investment. This is the 'investment subsidy' to which California voters and legislators *implicitly* agreed in return for getting an *explicit* agreement that there would be no operating subsidy (i.e., AB3034).

6.7.3 Additional private debt or equity financing beyond the contemplated \$10-12 billion may be sought by the CHSRA.

Several nations have established offices in Sacramento to sell high-speed rail equipment, technology, services or operations skills to the proposed project.¹⁸⁵ Some have the expertise and lengthy records of building and running state-owned high-speed rail systems. Their objectives are to sell equipment and services at a profit, generate jobs in their home countries, and mitigate risks to their private or government-backed companies. If backed by one or more national treasuries, these companies or state entities can become formidable resources to configure financial deals to assist in securing equipment or services contracts.

In April 2010 Assembly Member Galgiani (District 17) told the Assembly Budget Subcommittee that the Chinese were willing to finance forty percent of the CHSR project.¹⁸⁶ In September Japan's Transport Minister, Seiji Maehara, said the Japan Bank for International Cooperation was prepared to lend funds to make the project happen and a few days later China's national railway ministry offered a "complete package" to build the CHSR system - both offers the result of Governor Schwarzenegger and the Authority's promotional tour.¹⁸⁷ What terms, conditions and stipulations there were to such financing offers are unknown.¹⁸⁸ While it is troubling that we know little or nothing of their substance, we can only assume such conversations addressed how to implement the CHSRA's plans and, at the same time, both mitigate risk for the foreign financiers and generate profitable business for the foreign companies or entities. What is not clear at this juncture is whether any deals under discussion are in the best financial interests of citizens of the State of California.

There are indications in the press, and by the Authority's four applications in August to the FRA to fund only one segment, that the CHSRA has concluded that it is unlikely that they will be able to raise the federal (\$17-19 billion) and local (\$4-5 billion) government tranches of the planned grant monies and are now turning to foreign governments to make up for the potential shortfalls. Unless such funds were to come in the form of equity - a highly unlikely scenario - the CHSR project would become

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more financially leveraged with debt and saddled with unplanned debt service payments, further raising the risk of an already highly risky project.

6.7.4 CHSR will become an even riskier project should the CHSRA leverage the project beyond the current financing plan.

If the CHSR were to actually generate an operating surplus, as optimistically projected in the 2009 Business Plan, then the CHSR might be an acceptable investment for the operator.¹⁸⁹ But, as already shown in this Review, an operating surplus – even with the entire amount of the planned \$22-23 billion of repayment-free grants from the federal and California city/county governments – is extremely speculative. Without the full complement of such grants, which are highly unlikely to be secured by the CHSRA, the CHSR may be saddled with additional debt service payments and become even less likely to achieve the legal requirement to financially breakeven. Several questions must be answered to protect the 'no operating subsidy' provision of AB3034 and, therefore, California's fiscal health:

1. Will lenders to CHSR – or equity shareholders that may arise – require a revenue guarantee from the State of California, a subsidy, or any other forms of risk-reduced finance techniques?
2. What happens if Phase I of the system does not produce an operating surplus as claimed?
3. Is the State of California prepared to make up the difference between revenues and expenses; and if so how?
4. If the operator is a private company – or a quasi-private company with sovereign government participation – who owns the assets of the system if there is an ongoing operating deficit, as seems likely; i.e., the system goes bankrupt?
5. Will any of these lenders or shareholders require any form of *quid pro quo* on the exclusive use of their or their nation's technology?
6. Does the State of California, possibly the 'last-resort' owner-operator of the system and possibly a source of (illegal) operating subsidies in the case of a CHSR bankruptcy, become 'locked in' to the former operator's technologies?

6.8 The CHSR Project's Financial Risk Might Be Borne By Californians

The risk of a scenario in which Phase I of the CHSR system doesn't break even financially, and where the private or public sources of financing are protected – and possibly equipped with an advantageous position vis-a-vis their technology in return for their financial support – may be acceptable to the CHSRA in

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order to achieve its 'get-it-built-and-they-will-come' agenda. Such added risk to the CHSR project should not be acceptable to the State of California and its taxpayers, particularly in light of the 'no-operating-subsidy' provision of AB3034. We are concerned that the probable lack of Federal and local government funding in the amounts projected, and the continued hesitation of arms-length debt and equity investors, make a 'creative financing' package attractive to the CHSRA to further its agenda. As part of a 'game of nations,' such a scenario is not out of the question, but should be firmly resisted by the Legislature and the citizens of California since the financial risks and attendant subsidies will most likely end up being borne by them in the case of the financial failure of CHSR.

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7.0 CHSRA'S JOB CREATION FORECASTS ARE TOO VAGUE AND TOO LARGE TO BE CREDIBLE

Job creation estimates, as cited most recently by the CHSRA, would be enormous if the claims could be backed by more data or more transparent data.

7.1 CHSRA Is Silent On Exactly When Or Where Jobs Occur, Or How Many FTE Jobs Each Year Their Forecasts Represent

We have no underlying analyses by CHSRA to determine the veracity of their claims. The scarcity of CHSRA data or underlying calculations and assumptions undermines the CHSRA's employment assertions. Such large promises of construction and permanent employment should be accompanied with information about whether these are Full Time Equivalents (FTE's); what the average income per job would be; what years these jobs would be created, and how long – if not forever – would these permanent jobs last.

During the Prop 1A campaign, proponents officially committed that "These are American jobs that cannot be outsourced".¹⁹⁰ Yet since then the Authority is silent about where – whether in California, elsewhere in the US, France, China, or Germany or another country – these jobs will be created. Very few of the highly-skilled operations-relative jobs could be taken by Californians today. The state simply doesn't have the history in high-speed rail to produce those job skills. We also know that once those jobs are taken, they are likely to be held on to by union members, and as in the case of Amtrak, difficult to change over to others who may be Californians. Even sourcing materials will be difficult, since today the developing nations' rapid growth absorbs a large amount of the world's steel. This problem is exemplified by the long wait for specialty steel from China for the SF-Oakland Bay Bridge. CHSRA doesn't address those questions of job location.

7.2 CHSRA's Forecasted Employment For The 8-10 Years Of Construction Is Seriously At Odds With Estimates Based On Bureau Of Labor Statistics Data

Without access as to how CHSRA calculated its forecasted employment figures, we are forced to use the 2009 Plan forecast, "In California, the initial system is projected to create the equivalent of 600,000 full-time, one-year jobs over the course of its construction" at face value.¹⁹¹

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This forecast differs from one year earlier, when the Authority predicted 160,000 construction-related and 320,000 permanent jobs.¹⁹² If it had been totally built in just one year, in 2006, at the peak of the state's building boom, the CHSR would have absorbed over half of the 966,300 construction workers then employed. If all the jobs were to occur in a single year, the 600,000 CHSR construction jobs would exceed California's presently employed construction workforce of 556,100.¹⁹³

However, both the earlier 160,000 and the 600,000 (3.75 times larger) 2009 forecasts differ significantly from those using Bureau of Labor Statistics (BLS) data. BLS data show that every \$1 million invested creates three construction jobs. CARRD used that baseline and deducted for the costs of rail train sets and equipment manufactured outside California. CARRD said, "The \$25 billion (\$42.6 billion less non-California related expenditures) will generate the equivalent of 75,000 years worth of employment using the 3 jobs/\$1 million ratio. Over the 10 years that planning and construction are expected to last, this would mean about 7,500 more Californians at work each year. In addition, some of the raw materials used in construction might be produced in California. The total number of construction-related jobs could be 100,000-120,000 one-year jobs, equivalent to 10-12,000 jobs that last the 10 years that construction is expected to last."¹⁹⁴ This is certainly not the 600,000 full time one-year jobs CHSRA implies for California's hard-hit construction workers.

Who to believe? CHSRA's forecasts use 20,000 jobs per \$1 billion spent on construction.¹⁹⁵ The Bureau of Labor Statistics uses a ratio of three construction jobs per \$1 million, which is equal to 3,000 annual jobs created per \$1 billion spent. The difference of 17,000 jobs per year per \$1 billion spent on construction is not trivial. Since CHSRA doesn't use a BLS-based ratio, and we have no access to how CHSRA arrived at ratio more than six times that of BLS, this key aspect of the construction job-creating possibilities of CHSR must be better understood before proceeding with the project.

7.3 If 'Permanent Jobs' In CHSRA's Lexicon Means Both CHSR Employees, As Well As Those Employed Permanently Because CHSR Exists, Their Forecast Is Beyond Believable.

In August 2010, there were 15,968,000 jobs in California.¹⁹⁶ The CHSRA promises to create 450,000 permanent jobs in Phase I of CHSR, the Los Angeles to San Francisco Transbay Terminal.

If they were all employed in a single year or, if the CHSRA

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means that such jobs are actually there permanently – in theory forever – this would represent almost 3 percent of the state's workforce.¹⁹⁷ It is terribly difficult to understand the basis for claiming that a train that speeds between metropolitan areas with so few stops can create so many jobs.

Looked at another way, the Authority's permanent employment forecast is nearly twice the number of total active State of California employees – which stood at 239,586 in May 2010.¹⁹⁸ It is hard to believe the CHSR will create 3% of California's workforce or twice the number of State of California employees.

7.4 If 'Permanent Jobs' In CHSRA's Lexicon Means Only CHSR's Employees, Then Few Jobs Will Be Created

If we assume that CHSRA only meant 'permanent' to mean jobs created for the CHSR's operations during the first twenty years of its operations – 2020 to 2040 – then dividing the 450,000 assertion by twenty years suggests about 23,000 permanent jobs. Consequently the impact of such permanent job creation is minor – something between one-tenth of one percent and one-twentieth of a percent of California's employment. If CHSRA means 'permanent' to be jobs created over a 40-year life of the project, the impact – 0.1% – is miniscule.

If these 23,000 permanent jobs are the real facts of CHSR permanent employment, then CHSR will create only about as many jobs as presently at Google Corporation. And on the basis of jobs created per dollar of investment, CHSR doesn't look like a winning proposition for the allocation of capital resources.¹⁹⁹

7.5 There Are Inconsistencies In CHSRA's Forecasts That Raise Questions About The Rigor Of Their Methodologies For Computing Employment

CHSRA appears to be confused about its CHSR Phase I employment forecasts. On one page of its 2009 Plan, CHSRA claims that the (presumed) 23,000 permanent CHSR employees will, in 2009 dollars, earn an average of \$93,600 including benefits. On the following page of their Plan, a Table shows maintenance costs in 2009 dollars, to be \$1.071 billion; of which \$634.6 million is labor costs. Dividing labor costs by average benefited compensation per employee lowers the total number of 2035 employees to 6,800 – not 23,000. Again, this assumes CHSRA is speaking of permanent employees being their employees.²⁰⁰ Once again we are left wondering what does CHSRA mean by permanent jobs.

CHSRA also does not discuss the offsetting losses of jobs in the

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airlines and auto-related industries with the creation of their high-speed train. If the CHSR replaces other modes of travel – which it proposes to do – and is not creating net new jobs, but rather replacing one form of transportation services for another, what is the net effect on employment? Even if the new CHSR services are 'better, faster, cheaper and safer', there will be job losses in one or more transport industries for gains in another. It could be a 'net wash' of no new job gains. Or the outcome might be a net loss of jobs, if the new services are more efficient than the old ones. The results are truly unknown and to assert such high gains of jobs created by the high-speed rail system is speculative.

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REFERENCES

¹ For purposes of this document, we are using only CHSRA's estimated Phase I capital cost of \$42.6 billion. However, this number fails to include several items, not the least of which right-of-way acquisition costs, including eminent domain takings.

² AB3034, Chapter 267, as approved by the Governor on August 26, 2008 and filed with the Secretary of State that same day says in Chapter 20 "(J) The planned passenger service by the authority in the corridor or usable segment thereof will not require a local, state, or federal operating subsidy."

³ Ibid

⁴ See: Minimum Revenue Guarantee; a memorandum to Curt Pringle, Medhi Morshed, Jeff Barker, CA High-Speed Rail Authority; from Sasha Page and Alene Tchourmoff; Infrastructure Management Group Inc; dated February 21, 2010. Among other approaches the memorandum suggests that the operator "could be eligible to have part of its capital costs defrayed. **This type of capital cost-only limitation has been employed both in federal and state highway and transit projects and cannot in any sense be considered an "operating subsidy."** Unlike transit that often requires long-term guarantees, the revenue guarantee would be designed to be **limited in duration (5-10 years)** . . ." (emphasis in the original)

⁵ Elaine M. Howle and Doug Cordiner, Chief Deputy State Auditor; California State Auditor Bureau of State Audits; Report 2009-106; April 29, 2010. Public Letter

⁶ The CHSRA continues to list both State of California monies and local government monies as non-repayable grants. However, the State of California (and its taxpayers) will be responsible for repaying those monies with interest; a reality not reflected in the Authority's funding map. See: California High-Speed Rail Authority (HSRA): [Report to the Legislature](#); December 2009; page 108

⁷ [San Diego Union-Tribune](#); Sign-on; July 14, 2010
<http://www.signonsandiego.com/news/2010/jul/14/u-t-editorial-lockyers-straight-talk/>

⁸ Op.cit The Official Voter Information Guide says "Proposition 1A is a \$9.95 billion bond measure for an 800-mile High-Speed Train network that will relieve 70 million passenger trips a year that now clog California's highways and airports WITHOUT RAISING TAXES. . . Proposition 1A will protect taxpayer interests." (emphasis in original): See <http://www.voterguide.sos.ca.gov/past/2008/general/argu-rebut/argu-rebut1a.htm>

⁹ Op. cit California High-Speed Train, Business Plan, November, 2008; pg.1

¹⁰ Ibid; pg.2

¹¹ Only \$9 billion of AB3034's \$9.95 billion of Government Obligation bond enabling legislation will go to high-speed rail. Another \$950 million was allocated for transport projects with 'independent utility'. While not directly part of the CHSR, the State must also service debt from bonds sold for that purpose. Therefore, debt servicing is on \$9.95 billion.

¹² Legislative Analyst's Office; Analysis of the 2008-09 Budget Bill: Transportation High-Speed Rail Authority (2665) "The bond measure was initially scheduled to be placed on the November 2004 ballot, however, the measure was postponed twice and is now scheduled for the November 2008 ballot."
http://www.lao.ca.gov/analysis_2008/transportation/trans_anl08006.aspx

¹³ See: Ballotpedia:
http://ballotpedia.org/wiki/index.php/California_Proposition_1A_%282008%29

¹⁴ On August 6, 2010 the Authority submitted four applications to the FRA for funding one or more of the four segments: Merced to Fresno; Fresno to Bakersfield; Los Angeles to Anaheim or San Francisco to San Jose. "The Authority submitted four separate applications for this current round of funding - one for each section - because it has not yet been determined where that Recovery Act funding will be put to use." See: California Seeks to Bring Additional Federal Funds to State's High-Speed and Intercity Rail System; a Press Release:
http://cahighspeedrail.ca.gov/hs_intercity_passrailapps.aspx

¹⁵ Part of AB3034 (Prop 1A) refers directly to California's Streets and Highways Code; Section 2704.04 (F) which Phase I of the CHSR to begin work in the segment whose capital costs are the least of all segments. This suggests the Authority must give

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priority to and should be assembling funds to begin Phase I somewhere outside of the state's two major metropolitan areas. This provision was also cited in the official ballot description. See: Op.Cit. The Official Voter Information Guide says "Proposition 1A will protect taxpayer interests."

- Public oversight and **detailed independent review** of financing plans.
- Matching private and federal funding to be identified BEFORE state bond funds are spent.
- 90% of the bond funds to be spent on system construction, not more studies, plans, and engineering activities.
- Bond financing to be available to every part of the state.
- **The most cost-efficient construction segments to have the highest priority.**" (emphasis added)

To date no independent peer review has been done, and the CHSRA has been accused of leaving out cost items (e.g. eminent domain, land acquisition) in certain segments to increase their likelihood of being built.

¹⁶ Op. cit. AB3034, Chapter 267, Chapter 20, (J)

¹⁷ Among transportation experts who have no financial or vested interest in the outcome of the proposed California high-speed rail system, and have questioned the wisdom or financial feasibility of the national or California high-speed rail systems are: Cox, Wendell; Glaeser, Edward; Julian, Liam; Levinson, David; Love, Jean; Moore, Stephen; Moore, Adrian; Orski, Ken; O'Toole, Randal; Pickrell, Don; Poole, Robert and Vranich, Joseph.

¹⁸ Bay Area Rapid Transit's (BART) experience with the San Francisco airport extension is telling. The BART 1996 EIR developed by Parsons-Brinckerhoff (the CHSRA's Project Management Team) projected initial daily ridership of 39,500 - and daily ridership of 68,600 by 2010. When the airport extension opened in 2003, daily ridership averaged 16,600 or 42% of projections. July 2007 data indicated ridership leveled off at 17,452, only 25% of the EIR projection for 2010. In January 2008 BART discontinued service between Millbrae and the airport due to low ridership. Not surprisingly BART's June 2008 data said SF-SFO ridership had decreased to 10,700, less than a fifth of what it was supposed to be. In more than seven years of its existence, the SF-SFO link has cost the agency \$73 million. That doesn't help offset BART's \$7.5 billion maintenance shortfall. Phase I of the CHSR plans include a Millbrae stop as an airport link, which will indubitably 'cannibalize' BART and Caltrain riders, although it may save less than two minutes travel time from the downtown to the airport. See: <http://www.sfxaminer.com/local/BARTs-price-of-expansion-98637079.html#ixzz0ytA2t9EL>

¹⁹ Status Report on California's Bond Debt: Assembly Budget Hearing; December 14, 2009. Bill Lockyer, State Treasurer: page 4. True interest cost of California's General Obligation Bonds in December 2009 was 5.93%. At that interest rate, California pays a premium credit spread to US Treasuries of 310 basis points - a higher spread than Mexico, Brazil, the Philippines or Indonesia.

²⁰ 2008 California High-Speed Train BUSINESS PLAN November; pg. 12

²¹ Op.cit. HSRA Report; December 2009; pg. 81.

²² Source: (<http://www.treasurer.ca.gov/bonds/debt/201008/authorized.pdf>) .

²³ One notable change was that the initial ridership model had more people boarding the train daily in Gilroy than board Amtrak's Acela every day in Boston.

²⁴ A recent analysis of the ratio of fares to operating costs for twenty-seven US transit agencies found that Austin's system provided only 9%, while Washington's WMATA recovered nearly 62% of its operating costs from the fare box. Los Angeles's LACMTA recovered only 30% while San Francisco's BART recovered 45% and Caltrain 41% of their operating costs from tickets, See: <http://www.ntdprogram.gov/ntdprogram/data.htm>
<http://www.ntdprogram.gov/ntdprogram/data.htm>
http://en.wikipedia.org/wiki/Farebox_recovery_ratio

²⁵ For reference, this potential HSR Operating Deficit of \$656 million is roughly equivalent to a third of the annual K-12 expenditure in the California State budget. We are not saying that K-12 education would be cut to pay for CHSR's deficit, but something would need to be cut and this is not a trivial sum.

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²⁶ Op.cit. The Official Voter Information Guide says "Routes linking downtown stations in SAN DIEGO, LOS ANGELES, FRESNO, SAN JOSE, SAN FRANCISCO, and SACRAMENTO, with stops in communities in between." Yet Phase I is only for funding the LA/Anaheim to the San Francisco Transbay Terminal.

²⁷ Op.cit. The Official Voter Information Guide says "Routes linking downtown stations in SAN DIEGO, LOS ANGELES, FRESNO, SAN JOSE, SAN FRANCISCO, and SACRAMENTO, with stops in communities in between." Yet Phase I is only for funding the LA/Anaheim to the San Francisco Transbay Terminal.

²⁸ California High-Speed Train, Business Plan, November, 2008; pgs. 7-9

²⁹ The Official Voter Information Guide of the Tuesday, November 4, 2008 California General Election says: "Proposition 1A will save time and money. Travel from Los Angeles to San Francisco in about 2 hours for about \$50 a person." See <http://www.voterguide.sos.ca.gov/past/2008/general/argu-rebut/argu-rebut1a.htm>

³⁰ California has what is popularly called a "bait and switch law" in the Business and Professions Code, Section 17500-1709. In 2009 Attorney General Edmund G. Brown sued Midas on misrepresentation of final prices for its services. See: http://www.consumeraffairs.com/news04/2009/06/ca_midas.html. In 2010 Attorney General Brown sued on the issue of false presentations in home re-financing. See: <http://livinglies.wordpress.com/2010/06/11/calif-atty-general-brown-goes-after-bait-and-switch-refs-fraudsters/>

³¹ See: Report of Responses to the Request for Expressions of Interest For Private Participation in the Development of A High-Speed Train System in California by the Infrastructure Management Group (IMG) to the California High-Speed Rail Authority Board Financing Workshop, dated October 2008; page 2 of 17 The presentation was given in June but the printed report issued in October. "A presentation summarizing the results of the RFEI was made before the Authority Board of Directors on June 11, 2008 "

³² HSRA Report To The Legislature; December 2009; pg. 104 "Their responses supported the Financial Plan's assumption of private sector interest in a P3 arrangement for the high-speed train project."

³³ Op.cit IMG October 2008 Workshop; figure on page 11 of 17

³⁴ In the 2008 CHSRA Business Plan, the funding sources for the ten-\$3.6 billion capital project included \$6.5-\$7.5 billion of Public Private Partnerships (P3). See Figure 26, page 25

³⁵ HSRA Report To The Legislature; December 2009; pg. 104

³⁶ In August 2008, the Legislature demanded a business plan by September 1st and said " This bill would require the authority to revise its business plan by the Legislature, 2008, as specified, and to submit the revised plan to the Legislature." See: AB3034 Chapter 267, as approved by the Governor on August 26, 2008 and filed with the Secretary of State. The Legislative Analyst's Office (LAO), page TR-46."In June 2008, an oversight report by the Senate Transportation and Housing Committee recommended that the business plan be similar to a financial prospectus prepared for investors in new stock or bond offerings and not an advocacy document."

³⁷ Cover page; California High-Speed Train, Business Plan, November 2008.

³⁸ Ibid pgs. 17-22. Three succeeding pages list out risks to the project but without a plan to manage those.

³⁹ Op. cit AB3034, Chapter 267: "Section 185033 is added to the Public Utilities Code, to read: 185033. The authority shall prepare, publish, and submit to the Legislature, not later than September 1, 2008, a revised business plan . . . "AB3034's description of reporting requirements for the Authority further states "(d) Prior to committing any proceeds of bonds described in paragraph (1) of subdivision (b) of Section 2704.04 for expenditure for construction . . . (E) an assessment of risk and the risk mitigation strategies proposed to be employed." (emphasis added)

⁴⁰ The Official Voter Information Guide of the Tuesday, November 4, 2008 California General Election says: "REBUTTAL TO ARGUMENT AGAINST PROPOSITION 1A California's high-speed rail network requires NO TAX INCREASE and is subject to strict fiscal controls and oversight. It's simple and fair once completed, THE USERS OF THE SYSTEM PAY FOR THE SYSTEM. That's why taxpayer watchdog groups support Proposition 1A." (emphasis in original): See <http://www.voterguide.sos.ca.gov/past/2008/general/argu-rebut/argu-rebut1a.htm>

⁴¹ CHSR 2008 Business Plan, Figure 26, page 21 shows that of the \$33 billion estimated capital costs, the Authority expected \$6.5-7.5 billion to come from Public Private Partnerships (P3)

⁴² Op. cit Presentation by IMG to CHSRA Financing Workshop; page 3 of 17. There were only three operators among the five claimed by IMG: SNCF, the French national railways operator; Stagecoach, a UK transport group operating busses and trains; and Veolia, a private German operator of busses and trains. ACD ID, listed as an operator is a collision avoidance supplier; and Angel Trains is a UK rolling stock leasing company. Neither operate rail systems according to their web descriptions.

⁴³ Joint Legislative Informational Hearing; California High-Speed Rail Authority's 2009 Business Plan; January 19, 2010; pg. 10

⁴⁴ Legislative Analyst's Office; The 2009 High-Speed Rail Business Plan; Presented to: Assembly Transportation Committee Hon. Mike Eng, Chair, January 11, 2010, pages 1-9. Among these deficiencies were: - "Information provided in the plan was very general and did not provide specifics that are included in typical business plans."; "The plan's discussion of risk management is significantly inadequate . . ." "Few deliverables or milestones are identified in the plan against which progress can be measured."; "The plan contains no discussion of the authority's plans or processes to (1) identify potential threats or (2) manage, respond, and mitigate those threats"; "The plan does not provide any numerical ranges nor confidence intervals for projections contained in the plan (such as cost, revenues, or ridership)."; "The plan contains no detailed discussions or consideration of even the most significant risks to the project, such as ridership and funding."; "The plan addresses the risk of incorrectly forecasted ridership with one sentence. . . ."; "To avoid the risk of failing to win credit approval from investors, the authority's strategy is to clearly communicate the project and obtain up-to-date feed-back."; "To mitigate the risk that financial markets shut down and stop lending, the authority has to continually monitor the market and develop strong back-up strategies such as project segmentation."; "The authority plans to avoid the risk that governments are not able to follow through on their commitments "by carefully assessing how each government funding source affects the build-out of each segment."; "The program management and project delivery timelines contained in the plan are very general and provide little opportunity for increased accountability. . . few deliverables or milestones included against which progress can be measured."; "Because the timelines in the plan are so general, it is unclear in what order various events will occur."; "The plan assumes some form of revenue guarantee from the public sector to attract private investment . . . The plan does not explain how the guarantee could be structured so as not to violate the law."; "If the public sector pays for insurance, that would constitute an operating subsidy in violation of Proposition 1A."; "The plan assumes between \$17 billion and \$19 billion from federal funds by 2016, or nearly \$3 billion per year for the next six years. In comparison, over the past five years California has received roughly \$3 billion per year of formula funding for the state's entire highway system . . ."

⁴⁵ ADDENDUM to the California High-Speed Rail Authority's "Report to the Legislature; December 2009; Approved by High-Speed Rail Authority Board April 8, 2010; Submitted April 13, 2010.

⁴⁶ Elaine M. Howle and Doug Cordiner, Chief Deputy State Auditor; California State Auditor Bureau of State Audits; Report 2009-106; April 29, 2010. Public Letter.

⁴⁷ See: California High-Speed Rail Authority Board Financing Workshop; A presentation by Infrastructure Management Group Inc. and Goldman Sachs; September 3, 2009; pages 9-13

⁴⁸ Ibid. pg. 42.

⁴⁹ Source: Assembly Bill 3034, California Legislature, 2007-08 Regular Session, pg. 4; SECTION 1 Section 185033 of the Public Utilities Code; lines 14-19.

⁵⁰ The auditors were quoted as saying the risk management plan was "generic, incomplete and likely out of date." (KPMG Final report, pg. 36-37.

⁵¹ Committee Report: Oversight Hearings of the California High-Speed Rail Authority; Prepared by the Senate Committee on Transportation & Housing: June 2008; pg.5

⁵² Legislative Analyst's Office: The 2009 High-Speed Rail Business Plan; January 11, 2010;pg. 4.

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⁵³ *ibid.* pg.4. *nota bene.* As yet the combined State GO bond authority and the allocated (not appropriated) Federal grants do not equal the monies needed to construct the four, independent rail segments the Authority proposes to start with. The mandate that the Authority must prove financing is secured for those four segments seems to contradict the Authority's statement of how "a funding source affects the build-out of each segment"

⁵⁴ Addendum to the California High-Speed Rail Authority's "Report to the Legislature; December 2009; Approved by High-Speed Rail Authority Board: April 8, 2010; Submitted April 13, 2010; pg. 33.

⁵⁵ *ibid.* pg. 34.

⁵⁶ *ibid.* pg. 34.

⁵⁷ *ibid.* pg. 33.

⁵⁸ *Op. cit.*; Addendum, pg. 37.

⁵⁹ See: AB3034 Chapter 267, as approved by the Governor on August 26, 2008 and filed with the Secretary of State. "The bill would also require the authority to establish an independent peer review group for the purpose of reviewing the planning, engineering, financing, and other elements of the authority's plans and issuing an analysis of appropriateness and accuracy of the authority's assumptions and an analysis of the viability of the authority's funding plan for each corridor."

⁶⁰ See: AB3034; noting the addition to the Public Utilities Code SEC. 2. Section 185035, paragraphs (b) (3)" One representative from a financial services or financial consulting firm who shall not have been a contractor or subcontractor of the authority for the previous three years, designated by the Director of Finance." (c) (d) and (e) "The peer review group shall report its findings and conclusions to the Legislature no later than 60 days after receiving the plans."

⁶¹ <http://www.cahighspeedrail.ca.gov/faqs/planning.htm>

⁶² See: Questions & Answers - Planning & Peer Review
<http://www.cahighspeedrail.ca.gov/faqs/planning.htm>

⁶³ *Op. cit.*

⁶⁴ 2008 California High-Speed Train BUSINESS PLAN November 2008; California High-Speed Rail Authority; California High-Speed Train Business Plan; November 2008; pg 7. The source document for this citation probably is: Bay Area/California High-Speed Rail Ridership and Revenue Forecasting Study; Final Report; prepared by Cambridge Systematics, Inc. August 2007; pg. 2-10, Table 2.3, the Pacheco Pass Alternative. On page 6 CS reports that total annual riders is [sic] 57 million compared to previous 37 million. On page 12 CS reports that the 2000 Business Plan ridership for 2030 was 37 million, but then shows a base of 65-69 million and a range of 65-94 million, depending on the costs of air or auto travel. By page 21, the base had somehow increased to 86-90 million riders, but depending on higher auto or airfares could range as high as 117 million riders in 2030. Why the Prop 1A claim of 93.9 million riders was chosen is not clear. Also see: Bay Area/California High-Speed Rail Ridership and Revenue Forecasting Study; Cambridge Systematics, March 2, 2007.

⁶⁵ Source: Center for Urban Studies: Wayne State University.
http://www.michigan.gov/documents/hal_lm_census_Projections_Kurt_122858_7.pdf

⁶⁶ Source: Table in "Amtrak Fiscal Year 2009" Oct. 2008-Sept. 2009.

⁶⁷ Source: Demographic: World Urban Areas & Population Projections: 5th Edition, April 2009.

⁶⁸ *Op.cit.* HSRA Report; December 2009; pg. 68.

⁶⁹ *Op.cit.*: Bushell: notes; pg.4.

⁷⁰ US Density is 86 people per square mile. Source: World Atlas.com
<http://www.worldatlas.com/aatlas/populations/usadensity.htm>

⁷¹ State Senator Alan Lowenthal (D- Long Beach) personally criticized Governor Schwarzenegger for the Governor's decision to solely promote high-speed rail over increased rail safety. "He told us there would be one state application for the \$8 billion in President Obama's rail stimulus program and it would include both high-speed rail and conventional rail improvements." See: 'Governor Schwarzenegger Put California On The Wrong Track'; *California Rail News*; December 2009 - February 2010' page 3. The Governor's comments came some 16 months after 25 people died in the September Chatsworth train collision. See:
http://en.wikipedia.org/wiki/2008_Chatsworth_train_collision

⁷² Source: Flyvbjerg, Bent; Bruzelius, Nils and Rothengatter, Werner: *Megaprojects And Risk, An Anatomy of Ambition*; Cambridge University Press, 2003; pg. 26.

⁷³ *Op.cit.* Flyvbjerg *et al.* pg. 25.

⁷⁴ *Op.cit.* Flyvbjerg *et al.* pg. 22.

⁷⁵ Private communication with Jean-Claude Guez: Non-Executive Board Director/ Administrateur de Sociétés Internationales; Senior Management Advisor/ Conseiller Expert de Directions Générale: former director of the board of SNCF.; jean-claude@quez.ws

⁷⁶ *Op.cit.* Flyvbjerg *et al.* pg. 31.

⁷⁷ Paul Amos, Dick Bullock and Jitendra Sondhi; World Bank Report No 55856; July 2010; pg.14

⁷⁸ CARRD Ridership Comments; April 26, 2010; pg. 3.

⁷⁹ *ibid.* pg. 6

⁸⁰ See: Tomlach, Richard F; "How HSRA gamed ridership data to favor Pacheco Pass route"; September 1, 2010; California Rail News.

⁸¹ Marshall to Schonbrunn Memorandum; April 26, 2010; pg. 12

⁸² Memorandum To David Schonbrunn, TRANSDEF; From: Norm Marshall (Smart Mobility); April 26,2010: Subject: California High-speed Rail Model Coefficients Review; pg. 13.

⁸³ Statement by Samer Madanat; Director of ITS Berkeley; found at http://www.berkeley.edu/news/media/releases/2010/07/01_high_speed_rail.shtml

⁸⁴ *ibid.* pg. 1.

⁸⁵ *The Economist*, by NB; July 10th 2010: see:
http://www.economist.com/blogs/gulliver/2010/07/high-speed_rail_california

⁸⁶ Rich Connell, *Los Angeles Times*; July 09, 2010:
<http://articles.latimes.com/2010/jul/09/local/la-me-high-speed-rail-20100708>

⁸⁷ Whitestone Research: Facility Cost Indices: April 2010:
<http://www.whitestoneresearch.com/indexes/newcon.htm>

⁸⁸ *Op.cit.* HSRA Report; December 2009; pg. 110.

⁸⁹ *Op.cit.* Flyvbjerg, Bent; Bruzelius, Nils and Rothengatter, Werner: *Megaprojects And Risk, An Anatomy of Ambition*; Cambridge University Press, 2003; pg. 12

⁹⁰ *ibid.* pages. 40-41

⁹¹ *Op. cit.* Pickrell, Don; *Urban Rail Transit Projects*:

⁹² The project manager for CHSRA is Parsons Brinckerhoff, the same firm that managed Boston's Big Dig.

⁹³ On September 7, 2010, the Bay Area toll bridge commissioners added another \$293 million to the costs of repairing the Oakland-SF Bay Bridge and added another \$100 million to the contingency fund in case further costs are as yet unaccounted for. See: Budget for new Bay Bridge span nears \$2 billion: Denis Cuff, Contra Costa Times, 09/08/2010: Parsons Brinckerhoff (PB), the CHSRA's lead management team together with Bechtel Corporation managed Boston's Big Dig. In 2008, when a driver was killed by a falling piece of the tunnel, Bechtel/Parsons Brinckerhoff, which oversaw the Big Dig design and construction, agreed to pay the bulk of the settlement, \$407 million. See: Boston Globe; Big Dig Settlement will take quick hit; Andrea Estes; Globe Staff / January 24, 2008.

⁹⁴ *Op.cit.* Flyvbjerg, Bent, *et al.*; pg. 15

⁹⁵ *Op.cit.* Flyvbjerg, Bent, *et al.*; pg. 16

⁹⁶ 2008 California High-Speed Train BUSINESS PLAN November 2008; pg. 12

⁹⁷ *Op.cit.* HSRA Report; December 2009; pg. 83

⁹⁸ Parsons Brinckerhoff, Cambridge Systematics (CS) and SYSTRA: Ridership And Revenue Forecasts; California High-Speed Rail Project; pg.11. Also, a pdf document called More Ridership Information from the CA HSR: pg. 6. Notably this document also says: "the CS model forecasts are twice those done in 2000: The current forecast for 2030 of 93 million trips (67 million inter-regional and 26 million within region trips) made by Cambridge Systematics (CS) replaces the forecast for 2020 made by Charles River Associates (CRA) in 2000 for inter-regional trips (32 million) and the Authority's estimate of long-distance commuting (10 million)"

⁹⁹ William H. Warren; Analysis of the HSR Planned Pricing V4 100702; July 2, 2010 and William H. Warren; Average Fares V4 100702.xls

¹⁰⁰ *ibid.*

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¹⁰¹ OECD and International Transport Forum: JOINT TRANSPORT RESEARCH CENTRE Round Table, 2-3 October 2008, Paris; Discussion Paper No. 2009-7; *Competitive Interaction between Airports, Airlines and High-Speed Rail*: May 2009, pg. 14

¹⁰² Addendum to the California High-Speed Rail Authority's "Report to the Legislature; December 2009; Approved by High-Speed Rail Authority Board: April 8, 2010; Submitted April 13, 2010; pg. 40.

¹⁰³ In its 2008 Business Plan, the Authority states that the 550 million auto trips between the regions in 2000 was 96% of the total trips. See: Figure 7, page 6. In its 2009 Business Plan, year 2000 auto trips represent 95% of the total. See: page 68.

¹⁰⁴ Op.cit HSRRA [Report To The Legislature](#); December 2009; pg. 65

¹⁰⁵ A recent analysis of the ratio of fares to operating costs for twenty-seven US transit agencies found that Austin's system provided only 9%, while Washington's WMATA recovered nearly 62% of its operating costs from the fare box. Los Angeles's LACMTA recovered only 30% while San Francisco's BART recovered 45% and Caltrain 41% of their operating costs from tickets. See: <http://www.ntdprogram.gov/ntdprogram/data.htm>

¹⁰⁶ http://en.wikipedia.org/wiki/Farebox_recovery_ratio

¹⁰⁷ Op.cit Statement by Iñaki Barrón de Angoití; *NY Times*, May 29, 2009

¹⁰⁸ EU Approves British state aid or high-speed Eurostar line: <http://www.eubusiness.com/news-eu/1242212522.48>

¹⁰⁹ Op.cit Amos et al; World Bank Report No 55856; July 2010; pg.20

¹¹⁰ Japan privatized its rail lines in 1987, selling the high-speed lines for \$0.05 for every dollar spent building them. Since then it has built new lines and leased them to the private operators at well below cost. The private companies operate at a profit apparently without operating subsidies. So while Japanese HSR train operators apparently receive no operating subsidies, they received enormous capital subsidies.

¹¹¹ Op.cit Amos et al; World Bank Report No 55856; July 2010; pg.1

¹¹² Sources: ICE ticket fares are from: http://www.raileurope.com/us/rail/point_to_point/results.htm?rows=&itemId=-1&fn=fsRequest&cobrand=public&c=USD&roundtrip=0&from0=Frankfurt&to0=Berlin&deptDate0=08%2F30%2F2010&time0=anytime&nA=1&nY=0&nC=0&nS=0 Distance by land is from: <http://www.answers.com/how+many+miles+frankfurt+to+berlin>

¹¹³ Sources: For AVE fares: http://www.raileurope.com/us/rail/point_to_point/results.htm?rows=&itemId=-1&fn=fsRequest&cobrand=public&c=USD&roundtrip=0&from0=MADRID&to0=BARCELONA&deptDate0=08%2F30%2F2010&time0=anytime&nA=1&nY=0&nC=0&nS=0 For land distances: <http://www.freedom-tour.com/mall/kmeurope.htm>

¹¹⁴ For Italian ticket fares on Trenitalia: http://www.raileurope.com/us/rail/point_to_point/results.htm?rows=&itemId=-1&fn=fsRequest&cobrand=public&c=USD&roundtrip=0&from0=MILAN&to0=ROME&deptDate0=08%2F30%2F2010&time0=anytime&nA=1&nY=0&nC=0&nS=0 For land distance: http://www.mapcrow.info/Distance_between_Rome_IT_and_Milan_IT.html

¹¹⁵ Op.cit Statement by Iñaki Barrón de Angoití; *NY Times*, May 29, 2009

¹¹⁶ TGV ticket prices are from: http://www.eurorailways.com/products/trains_tickets/parlyo.htm?qlid=CKShIzIqKMC

¹¹⁷ FQ8mbAodtVO2nA. Land distances are from: <http://gofrance.about.com/library/calculator/bltimedistancecalculator.htm>

¹¹⁸ Edward Glaeser: Running the Numbers on High-Speed Trains: *New York Times*; August 4, 2009: "It'll average between 10 and 50 and plug in 30 cents a passenger mile in operating costs, which comes to \$72 for a 240-mile trip."

¹¹⁹ <http://economix.blogs.nytimes.com/2009/08/04/running-the-numbers-on-high-speed-trains/>

¹²⁰ Pickrell, Don; *Urban Rail Transit Projects: Forecast Versus Actual Ridership and Costs* (Washington, DC: US Department of Transportation, Urban Mass Transportation Administration, 199089).

¹²¹ Federal Transit Administration, Office of Planning and Environment, US Department of Transportation; Contractor Performance Assessment Report: August 2007: Table 6, pg. 24.

¹¹⁹ Amtrak Reform Council; "An Action Plan for the Restructuring and Rationalization of the National Intercity Rail Passenger System"; Government Printing Office, Washington, DC; February 7, 2002; pg. 68.

¹²⁰ Transportation Research Board, National Research Council, *In Pursuit of Speed: New Options for Intercity Passenger Transport*, Special Report 233, 1991, Table A-14 (operating cost items only).

¹²¹ Cox, Wendell; Vranich, Joseph and; Moore, Adrian: The California High-Speed Rail Proposal: A Due Diligence Report: Reason Foundation; Policy Study 370; September 2008; pg. 49.

¹²² Op.cit HSRRA Report; December 2009; pg. 80

¹²³ Bushell, Alan; "Operating Expense In The 2009 California High-Speed Rail Authority Business Plan, Perspectives Of A Private Investor"; July 22, 2010; pg 5.

¹²⁴ *Ibid.* pg. 5.

¹²⁵ Op.cit HSRRA Report; December 2009; pg. 82

¹²⁶ Op. cit Bushell: notes; pg.5

¹²⁷ Eurostar boosts passenger security at Ashford international: http://www.eurostar.com/UK/uk/leisure/about_eurostar/press_release/press_archive_2007/Eurostar_boosts_passenger_security.jsp

¹²⁸ Amtrak recently negotiated a 14.87% increase over the next ten years with the increase coming each semester. See: IBEW Local 1573 ET Foremen Explanation of Amtrak Agreement .pdf

¹²⁹ GAO, *Intercity Passenger Rail*, November 2006, GAO-07-15, Appendix VI, pp. 150-156.

¹³⁰ The three member unions to the Amtrak Service Workers Council (ASWC), voted 450- 116 to accept the five-year contract that provides a total of 15 percent in general wage increases, beginning with a 1.5 percent raise July 1. The pact also caps future health-care contributions, and freezes co-pays and deductibles. See Progressive Railroading Daily News June 22, 2010.

¹³¹ <http://www.progressiverailroading.com/prdailynews/news.asp?id=23647>

¹³² Warren, William: HSR Financial Presentation 100607 Version 6.doc; HSR Cash Flows with Financing Alternatives 100607 v6.xls; and Analysis Ticket Prices on Financing V1 100718.doc.

¹³³ The Warren Model uses \$9 billion as the amount the State must service from Prop 1A because \$950 million of bond financing authorized by that Proposition is dedicated solely to "independent utility" and therefore does not produce revenues for the CHSR project.

¹³⁴ The CARRD analysis is referred to in a CARRD Background paper on "Revenue Guarantee Packet" dated March 1, 2010. It says: "CARRD did a basic cash flow analysis last May and came to the conclusion that it was very unlikely that the private sector would lend significant amounts of money just on the basis of projected revenues." page 1.

¹³⁵ CHSRA 2009 Business Plan; pg. 108 "Finally, in order to calculate the total private funding capacity, an after-tax equity internal rate of return (IRR) or investment hurdle rate of 16 percent has been assumed."

¹³⁶ Op.cit HSRRA Report; December 2009; pg. 108.

¹³⁷ Op.cit AB3034, Chapter 267.

¹³⁸ While the Warren model assumes, for calculating purposes, a guaranteed rate of return of 10%; the Authority has assumed " . . . an after-tax equity internal rate of return (IRR) or investment hurdle rate of 16% . . ." See: 2009 Business Plan, page 108. If anything, the Warren model underestimates the exposure the State has to the Authority's assumptions about guaranteeing private equity a return on their capital.

¹³⁹ *Ibid* page. 5.

¹⁴⁰ US Department of Transportation; Bureau of Transportation Statistics; Federal Subsidies To Passenger Transportation; December 2004; Table 4. http://www.bts.gov/publications/federal_subsidies_to_passenger_transportation/

¹⁴¹ Spain's High-Speed Rail Offers Guideposts For U.S." *NY Times*, May 29, 2009

¹⁴² See: Amtrak, Office of the Inspector General: EVALUATION REPORT E-08-02 Public Funding Levels of European Passenger Railroads April 22, 2008

¹⁴³ *Ibid.* page 4.

¹⁴⁴ Op.cit. Peterman,; Frittelli, and Mallett, W.; CRS; pg.1.

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¹⁴⁴ Cox, Wendell; Vranich, Joseph; Moore, Adrian: The California High-Speed Rail Proposal: A Due Diligence Report: Reason Foundation; Policy Study 370; September 2008; pg. 89-90.

¹⁴⁵ Paul Amos, Dick Bullock, and Jitendra Sondhi "High-Speed Rail: The Fast Track to Economic Development?": World Bank Report No 55856; July 2010: Summary; pg.6 - See <http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/07/26/000334955_20100726032714/Rendered/PDF/558560WP0Box341SR1v08121jul101final.pdf>

¹⁴⁶ Op.cit HSRA Report; December 2009; pg. 108.

¹⁴⁷ Op.cit HSRA Report; December 2009; pgs. 101-106.

¹⁴⁸ Addendum to the California High-Speed Rail Authority's Report to the Legislature; December 2009; Approved by High-Speed Rail Authority Board: April 8, 2010; Submitted April 13, 2010; pgs. 27-28.

¹⁴⁹ Op.cit HSRA Report; December 2009; pg. 82, Table J.

¹⁵⁰ Op.cit AB3034, As Amended in Senate, August 6, 2008: Section 2704.08 C2 (J)

¹⁵¹ Op.cit For citations of the need for a revenue guarantee see: HSRA Report; December 2009; pgs 101-106.

¹⁵² Another \$950 million was allocated for transport projects with independent utility. While not directly part of the CHSR, the State must also service debt from bonds sold for that purpose.

¹⁵³ In April 2008, while considering AB3034, the Legislature requested a business plan by September 1st and said ". . . that the business plan be similar to a financial prospectus prepared for investors in new stock or bond offerings and not an advocacy document . . ." The Legislative Analyst's Office (LAO), page TR-46."In June 2008, an oversight report by the Senate Transportation and Housing Committee recommended that the business plan be similar to a financial prospectus prepared for investors in new stock or bond offerings and not an advocacy document." Also see: Assembly Bill 3034, Amended in the Assembly April 9, 2008. Page 12, Section 2704.08 c (1) and (2)

¹⁵⁴ AB3034, As Amended in Senate, August 6, 2008: Section 2704.08 C2 (J) "The planned passenger service by the authority in the corridor or usable segment thereof will not require a local, state, or federal operating subsidy." pg. 12. Also see: "This "50 percent" fare level generates relatively large passenger flows without requiring operating subsidy, and creates large public benefits" in California High-Speed Rail Authority: Report to the Legislature; December 2009; pg.65.

¹⁵⁵ Op.cit HSRA Report; December 2009; ; pg. 82, Table J and pg. 108.

¹⁵⁶ Op.cit HSRA Report To The Legislature; December 2009; pg. 93.

¹⁵⁷ Op.cit HSRA Report To The Legislature; December 2009; pg. 81.

¹⁵⁸ See pg.5 <http://www.thsrc.com/THSRC%20Newsletter%20-%20May%202010.pdf>

¹⁵⁹ When the State Auditor, or the HSRA refer to having secured a quarter of the funds needed, they consider the entire \$9.95 of State bonds available. However, the State Treasurer can only sell GO bonds equal to the amount of other, non-State of California funds. At this time the project only has a commitment of \$2.34B from an ARRA Grant administered by the US Department of Transportation.

¹⁶⁰ Op.cit Peterman ad Mallett; Congressional Research Service; pg. 25.

¹⁶¹ Peterman, D; Frittelli, J and Mallett, W.; Congressional Research Service: High-Speed Rail (HSR) in the United States- 7-5700; www.crs.gov; R40973; December 8, 2009; Summary pg. 25.

¹⁶² Op.cit Howle and Cordiner; Report 2009-106; April 29, 2010; pg. 1.

¹⁶³ Op.cit Table 4, pg. 13.

¹⁶⁴ Op.cit pg. 26.

¹⁶⁵ Congressional Budget Office; The Budget And Economic Outlook: Fiscal Years 2010 to 2020; January 2010, pg. 13

¹⁶⁶ <http://www.apta.com/gap/legupdatealert/2010/Pages/2010July02.aspx>

¹⁶⁷ John Hughes, Bloomberg News Service; <http://www.bloomberg.com/news/print/2010-07-30/u-s-house-passes-79-billion-funding-plan-for-railways-highway-transit.html>

¹⁶⁸ http://www.whitehouse.gov/omb/factsheet_department_transportation/ and <http://wsdot.federal.funding.blogspot.com/2010/07/overview-of-senate-fy-2011-transpo-bill.html>

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¹⁶⁹ Op.cit. Peterman, Frittelli, and Mallett; CRS: High-Speed Rail (HSR) in the United States- 7-5700; www.crs.gov; R40973; December 8, 2009; pg. 12.

¹⁷⁰ CHSRA Press Release, September 30, 2010: "\$194 Million Grant to California High-Speed Rail" See: <http://d15.activatedirect.com/fs/distribution/wl/z5jo41w96wtolijz64qknq3g11m1w/dai/d/z654b1qxdunnvx?&c=d/z5jo41w96wtolijz654b1qxdunnvx&ce=1285897303.69ae0166fad924129c324a64f3fb850d>

¹⁷¹ Two arguments have emerged against a national high-speed rail system. The first is that the proposed plans assume a great deal of track sharing with freight haulers who own 90% of the US tracks. Trains traveling up to 125 mph can technically use such tracks. Above that speed, as the CHSRA proposes, requires new track technology. But even for slower trains, the freight haulers have insisted that coordinating passenger and freight schedules to avoid accidents is difficult at best. The Union Pacific Railroad (UPRR) has right-of-way rights along portions of the proposed CHSRA route south of San Francisco. In letters of both April 23rd and September 2nd 2010, UPRR once again insisted that the high-speed rail corridor could not include any part of their right of way. [See: Letter to Mr. Dan Leavitt from Jerry S. Wilmoth, GM, Network Infrastructure, UPRR dated April 23rd 2010, and "High-Speed Rail Stalls; Freight Carriers Balk at Sharing Tracks With the Faster Passenger Service"; Wall Street Journal; September 21st, 2010; Jennifer Levitz.] The second argument set is based around the 'pork barrel' politics and cost per passenger mile inefficiencies of the national program. These arguments were articulated in a 'Fact and Comment' article by Editor and Chief, Steve Forbes. See: Forbes.com August 11, 2010.

¹⁷² Op.cit HSRA Report To The Legislature; December 2009; pg. 93.

¹⁷³ Op.cit HSRA Report To The Legislature; December 2009; pg. 93.

¹⁷⁴ Op.cit HSRA Report To The Legislature; December 2009; pg. 108.

¹⁷⁵ Op.cit. San Diego Union-Tribune; Sign-on; July 14, 2010 <http://www.signonsandiego.com/news/2010/jul/14/u-t-editorial-lockyers-straight-talk/>

¹⁷⁶ On the closing of the Shanghai-Nanjing high-speed rail line see: Barbara Hollingsworth; Washington Examiner, July 13, 2010: <http://www.washingtonexaminer.com/opinion/columns/Taking-us-on-a-high-speed-ride-to-the-poorhouse-98264104.html> On the financial problems of Taiwan's high-speed system see: Benjamin Yeh, "Taiwan High-Speed Rail: From Pride to Embarrassment," The China Post (Taipei), September 28, 2009, <http://www.chinapost.com.tw/taiwan/t-business/2009/09/28/226411/Taiwan-High-Speed.htm> (March 11, 2010). On the bankruptcy of the Las Vegas monorail, important because it had an investment grade business plan and was a mixture of government and private financing, see: Kyle Hansen, Las Vegas Sun, January 13, 2010; <http://www.lasvegassun.com/news/2010/jan/13/las-vegas-monorail-files-bankruptcy-protection/>.

¹⁷⁷ See: "Goldman Says Peak in Treasuries Is Past," Wall Street Journal, page C10, Tuesday, October 5, 2010

¹⁷⁸ See "Goldman Says Peak in Treasuries Is Past," The Wall Street Journal, page C10, Tuesday, October 5, 2010

¹⁷⁹ For GO Bonds, Standard and Poor's rating as well as Fitch's is A- while Moody's Investor Services rates California at A1; See: State Treasurer Bill Lockyer, <http://www.treasurer.ca.gov/ratings/current.asp>

¹⁸⁰ The Meredith Whitney Advisory Group; "Tragedy of the Commons: Launching Ratings on the Top 15 States," See: Mike Milard and Wes Goodman; Bloomberg News; "Meredith Whitney Rates California as Worst, Fortune Reports"; September 29, 2010

¹⁸¹ The 'wild card' in the State's debt obligation is California's unfunded pension liability. While is not precisely known, it is thought to range from \$50 billion to \$500 billion. This 'unfunded pension liability' is frequently termed an 'off-balance-sheet' liability. The effects of this could be similar to what happened at General Motors. If combined with 'on-balance-sheet' liabilities, such as GO bonds, can result in a cash solvency crisis. See: "Going for Broke: Reforming California's Public Employee Pension Systems," April 2010 Policy Brief, Stanford Institute for Economic Policy Research.

¹⁸² See: statement by Ellen Greenberg; Mary Williams Walsh, Wall Street Journal; August 18, 2010

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¹⁸³ The assumption by the U.S. Federal Government of \$128 billion of debt from AIG's issuance of CDS on toxic assets is a prime case in point. The worldwide depth of untenable CDO-backed-by-CDS deals is still unknown. See: ISDA®-International Swaps and Derivatives Association; November 2009, "AIG and Credit Default Swaps"

¹⁸⁴ See: <http://dealbook.blogs.nytimes.com/2010/05/17/a-scorecard-on-wall-streets-legal-troubles/>

¹⁸⁵ There are offices of operators and equipment makers of high-speed rail components from at least eight nations in Sacramento – Belgium, Canada, China, France, Germany, Italy, Japan and the UK.

¹⁸⁶ Assembly Budget Subcommittee No.5 On Transportation and Information Technology; Assembly Member Joan Buchanan, Chair; April 28, 2010.

¹⁸⁷ Chris Cooper and Kiyotaka Matsuda; Japan Offers California Loan to Help Pay for \$40 Billion High-Speed Train: [Bloomberg News Service](http://www.bloomberg.com/news/2010-09-13/japan-offers-california-loan-to-help-pay-for-40-billion-high-speed-train.html); - Sep 13, 2010

<http://www.bloomberg.com/news/2010-09-13/japan-offers-california-loan-to-help-pay-for-40-billion-high-speed-train.html> On September 16th, Bloomberg News quoted He Huawu, the Railway Ministry's chief engineer as saying "What other nations don't have, we have". See: "China Touts Complete Package" for California Railway by Chris Anstey and Neil Denslow; September 15, 2010. <http://www.businessweek.com/news/2010-09-15/china-touts-complete-package-for-california-railway.html>

¹⁸⁸ Elaine Kurtenbach (AP) "Schwarzenegger checks out China's high-speed rail," Shanghai (AP) September 12, 2010. See: <http://www.google.com/hostednews/ap/article/ALeqM5jvcVDCepZyt5Bk75vNc98An2CdGwD9166VNO1>

¹⁸⁹ Op.cit HSRA Report; December 2009; pgs. 70, 82 Table J, 83, 83 Table K, 92, 101, 103, 106, and 108.

¹⁹⁰ Op.cit The Official Voter Information Guide says: "Vote Yes on Proposition 1A to IMPROVE MOBILITY and inject new vitality into California's economy by creating nearly 160,000 construction-related jobs and 450,000 permanent jobs in related industries like tourism. **These are American jobs that cannot be outsourced.**" (emphasis added)

¹⁹¹ Op.cit HSRA Report; December 2009; pg. 110. *nota bene*, this differs from the 2008 Business Plan which says "Experts calculate about 160,000 jobs will be needed to construct the high-speed train, and more than 320,000 permanent jobs will result by 2030." pg.8.

¹⁹² California High-Speed Rail Authority CHSRA; California High-Speed Train Business Plan; November 2008; pg. 12.

¹⁹³ Source: <http://www.foxandhoundsdaily.com/blog/michael-bernick/6796-who-will-get-disappearing-california-construction-jobs>

¹⁹⁴ Source: "Factcheck on Jobs" – a pdf file, December 2009; by Elizabeth Alexis, Californians Advocating Responsible Rail Design (CARRD). <http://www.calhsr.com/>

¹⁹⁵ CHSRA 2009 Business Plan; page 110.

¹⁹⁶ Source: US Department of Labor; Bureau of Labor Statistics; Economy at a Glance-California: <http://www.bls.gov/eag/eag.ca.htm>

¹⁹⁷ Source: Bureau of Labor Statistics:

<http://www.deptofnumbers.com/unemployment/california>

¹⁹⁸ Report by John Chiang, California State Controllers Office, http://www.sco.ca.gov/ppsd_empinfo_demo.html

¹⁹⁹ As of March 31, 2010, Google employed 20,261 full-time employees, and an unspecified number of contractors and part-time employees. Google required less than \$50 million to get it to its August 2004 IPO and has been profitable since. The cost per Google employee per \$1 million of investment is insignificant compared to the cost per job created by the CHSR. See: <http://investor.google.com/corporate/faq.html#employees>

²⁰⁰ Op.cit. HSRA Report; December 2009; on page 80 it says the average employee in 2035, in 2009 \$'s, will earn, including benefits, \$93,600. But page 81, Table I shows that the total operation and maintenance costs in 2035, in 2009\$'s, will be \$1,071 million. Of that, the total labor cost, including benefits, will be \$634.6 million. By dividing this total labor cost of \$634 million by the average earnings per employee of \$93,600, there will be about 6,800 employees in 2035. If there are 6,800 Phase I

employees, and if there are ultimately to be 450,000 annual jobs created, it will take about 65 years to provide these 450,000 jobs.

Submission 346 (Millie Meders, September 15, 2011)

Millie Meders
P O Box 442
Chowchilla, CA 93610

Gentlemen:

My husband and I farm and ranch in Madera County. Madera County is ground zero in this project as it is hit with both the North/South and East/West corridors. The alternate routes have great adverse effects on our farming properties both on the Ave. 24 bypass as well as A-1 route. We will be formally presenting our specific written comments regarding the EIR/EIS later in the comment period.

346-1 | However, at this time we want to convey our strong endorsement of the request by the J. G. Boswell Co. for the extension of the comment period to a full 180 days (6 mo.). It is ludicrous to imagine that we can responsibly critique a 23,000^{page} document in 45 days.

346-2 | In a cursory overview we have spotted numerous inaccuracies, omissions and undocumented generalizations that must be addressed before finalizing the EIR/EIS. Many of these issues when fully realized will increase the cost of the project immensely. Of primary importance to us is the disruption not only to our home and business, but to the very fabric of our community, its schools, and its citizenry. Madera County is one of California's top producing agricultural counties. Farmland, once removed, will never be replaced and the ability of this nation to feed itself will be further jeopardized.

346-3 | We also have grave doubts about the ridership study published to date and the ability of this project to carry itself financially without serious impact to California's already overburdened taxpayers.

We implore you to extend the comment period for both the Merced to Fresno and Fresno to Bakersfield Sections to assure adequate input for more reasoned approach to the fulfillment of this project.

Thank you.



Response to Submission 346 (Millie Meders, September 15, 2011)

346-1

See MF-Response-GENERAL-7.

346-2

See MF-Response-GENERAL-14 and MF-Response-GENERAL-5.

346-3

See MF-Response-GENERAL-6.

Submission 97 (Larry Miller, August 23, 2011)

Merced - Fresno - RECORD #97 DETAIL

Status : Action Pending
Record Date : 9/12/2011
Response Requested :
Stakeholder Type : CA Resident
Submission Date : 9/12/2011
Submission Method : Project Email
First Name : Tiffany
Last Name : Batac
Professional Title :
Business/Organization :
Address :
Apt./Suite No. :
City :
State :
Zip Code : 95814
Telephone :
Email : Batac@pbworld.com
Cell Phone :
Email Subscription :
Add to Mailing List :

Stakeholder
Comments/Issues :

From: Jeff Abercrombie
Sent: Wednesday, August 31, 2011 11:04 AM
To: 'Larry Miller'; jhardoing@HSR.ca.gov
Cc: Dan Leavitt
Subject: RE: Recommenind HSRA extend comment perios for EIR/EIS

Mr. Miller,

Thank you for your email regarding the Draft Environmental Impact Reports / Environmental Impact Statements (EIR/EISs) for the Merced to Fresno and Fresno to Bakersfield sections of the High-Speed Train project. You raised three concerns: 1) needing more time to review these documents 2) some DVDs issued for the Merced to Fresno document contained corrupted files and 3) some citizens may be unable to access DVDs in lieu of CDs.

First, as you may be aware, at the High-Speed Rail Authority Board meeting last week the Authority CEO announced that the comment period for the Draft EIR/EIS documents has been extended until October 13, 2011. Your second concern has been addressed by providing corrected materials to those that received the diskettes with corrupted files. On the third issue, the Authority is asking all who request an electronic copy of the EIR/EIS documents which electronic format they desire (CD or DVD), and the Authority is providing the electronic format requested. I would like to point out, however, that the Draft EIR/EIS documents are available in both hard copy and electronic format locally in numerous locations, including public libraries. They Draft EIR/EISs have also been available electronically to review on the Authority's and FRA's websites as of August 9, 2011.

I appreciate you interest in the High-Speed Train project.

Jeff Abercrombie
Area Program Manager, Merced - Bakersfield
California High Speed Rail Authority
559-801-1164

From: Larry Miller [mailto:litekeys@comcast.net]
Sent: Tuesday, August 23, 2011 2:36 PM
To: jhardoing@HSR.ca.gov
Subject: Recommenind HSRA extend comment perios for EIR/EIS

Mr. Hardoin:

Submission 97 (Larry Miller, August 23, 2011) - Continued

97-1

Thank you for your assistance with my phone call this afternoon, regarding my concerns about HSRA's delays in making its two EIR/EIS documents available to the public in a timely and error-free fashion.

As we discussed on the phone, by means of this email I am asking the Authority Board and its Chair to extend the period for comments in response to its Draft EIR/EIS.

I do not make this recommendation as a gadfly wishing to harass the project, as I know some do. Rather I make this recommendation based on obvious mistakes and confusion I personally have experienced regarding the process on the part of HSRA. I see these as errors in administration that inherently reduce and obstruct informed comment on the plan and thus expose the plan to what ought to be unnecessary criticism. To wit: the mandated period for comments is 45 days from the release of the document. As I explained by phone and emailed to your staffers Bev Mason and Susie Medina who represent HSRA--and as I commented on in print in the Fresno Bee--HSR's consultants were a good 7 days late to ship (and 10 days late in delivering) electronic copies of the plan to the public. This means that by the time the public received its (now late) copies of the plan, their comment period had dwindled to approximately 30 days at best, which is hardly enough time to read, digest and formulate informed responses to the thousands of pages of text and data in the plan.

Moreover, I understand several copies of the Merced to Fresno leg that HSR shipped were corrupted and could not be read. This is on top of the fact that HSR promised CD-ROM versions of the plan in its mass emailing of August 9, but then delivered another format, DVD, copies instead. I trust you will appreciate that the two formats are NOT wholly compatible. In one sense, they are as different as Mag Lev and steel wheels--so sending the wrong version disenfranchises thousands of prospective reviewers. HSRA promised the one and then shipped the other. This is tantamount being a matter of Environmental Justice: The less prosperous who may not have more modern DVD drives can not access and read the material, although they were promised more universal CD-ROM versions.

Again, my interest in making this recommendation and request to extend the period for comment and response is in preserving the integrity of the process, which should protect HSR from charges of chicanery, delay, and obfuscation of the public review process. As it is, HSRA's fumbling lays the process, the plan and it authors open to charges of malfeasance, deceit and deliberate abuse of process.

For further reference I am attaching a link to a publication (www.fresnobee.com/2011/08/21/2505256/rails-draft-eir.html)
<<http://www.fresnobee.com/2011/08/21/2505256/rails-draft-eir.html>>)
that I authored in the Fresno Bee anticipating this problem. Also I am

attaching a copy of HSRA's email of August 9, promising the CD-ROM discs, which they did not deliver.

Larry Miller

1584 East Utah Ave.

Fresno, CA 93720

559-323-8806

Litekeys@comcast.net <mailto:Litekeys@comcast.net>

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EIR/EIS Comment :

Yes

Response to Submission 97 (Larry Miller, August 23, 2011)

97-1

See MF-Response-GENERAL-7.

Submission 952 (Larry Miller, October 13, 2011)

Larry Miller
1584 East Utah Ave.
Fresno, CA 93720
litekeys@comcast.net

RECEIVED
10-18-11 11:13 RCVD

October 13, 2011

California High Speed Rail Authority
770 L Street
Sacramento, CA 95814-3359

CC: Jeff Abercrombie, Regional HSR program manager

I make the following three comments on CHRA's Draft Environmental Impact Statement for the proposed Merced to Fresno leg of its High Speed Train project.

Please appreciate that I make these remarks as member of the public, as well as having been:

- Member of the Fresno County High Speed Rail Technical Advisory Group
- Member of the San Joaquin Rail Committee (advising Amtrak and Cal Trans Division of Rail on the San Joaquins), representing Fresno County
- Member of the Fresno County COG Rail Committee
- Member of the Fresno County Blue Print Committee on smart growth

I look forward to making more comments on the Fresno to Bakersfield section of the DEIR, when that revised DEIR is re-released for public comment.

Sincerely

Lawrence E. (Larry) Miller

952-1

Comments on Merced to Fresno leg of High Speed Rail Draft EIR

These comments are to the Draft EIR for the Fresno to Merced segment of the proposed plan.

This correspondence has three parts. One questions the need for a station in Merced. The other questions the wisdom of installing the Fresno to Merced segment at this first phase of the project. The third objects to the lack of outreach to the Hispanic populations of Merced, Madera and Fresno Counties, as an Environmental Justice issue.

First comment:

I see no justification whatsoever for locating a high speed rail station in the city of Merced. Merced has a population of approximately 80,000, according to the most recent census. This does not represent nearly enough riders to justify the station.

Merced is well served by Amtrak, and experiences ridership of approximate 50,000 boardings and alightings per year as is. It is hard to conceive that this ridership would be much greater on HSR. It might even be less, if both services handle these riders!

Even if one were to expect that Merced would grow at a rate astronomically faster than every other city in the San Joaquin Valley and the state (which is NOT the history of growth in Merced), its population will not reach even 125,00 in the next twenty to thirty years. Furthermore, the 25 mile catchment area for riders around Merced is not largely populated and is not growing at a rapid pace.

There are several other Valley cities and metropolitan regions with much larger populations that would better justify a station. The confluence of the cities of Visalia, Tulare Hanford and Lemoore, for example, come to mind. Within a 25 mile radius of midpoint between these cities are currently located more than 250,000 people, and this population is growing more rapidly than Merced's. It is hard to see why Merced's 80,000 residents are more worthy of service than these quarter of a million residents—unless one wants to argue that Merced's population, by virtue of race, political connections or other unsavory metrics, are intrinsically more worthy than other residents.

Larry Miller
Comments on DEIR Merced to Fresno leg

October 13, 2011
page 1

Larry Miller
Comments on DEIR Merced to Fresno leg

October 13, 2011
page 2

Submission 952 (Larry Miller, October 13, 2011) - Continued

952-2

Second comment:

The need for the leg to Merced itself in this first phase on construction seems beyond wasteful. What if ridership and service in this trial installation does NOT justify the leg or the Merced station?

The cost for this short, demi-leg, depending on the route/ alignment alternatives selected and the final costs of construction will be well in excess of \$1 billion and perhaps as high as \$6 to \$10 billion.

Why should HSR be spending money to extend the tracks from Fresno to Merced, at this time? This commits the state to billions and billions of dollars to service a station in Merced, even if the initial Bakersfield to Fresno section does not pan out. This strategy defies all logic—unless by spending this money at this time, HSRA expects to obligate the state for finish building this station and this leg at a future date, despite the fact that it may not generate enough ridership to justify the later installation.

According to Amtrak's ridership numbers, total boardings and alighting in Merced for the city pair of Bakersfield and Merced are approximately 30,000 riders per year. I see no justification to claim that Merced residents are several times as worthy as other Valley resident to justify this special attention.

Attached, below, is a copy of a recent Amtrak/Caltrans summary of ridership on the San Joaquins, corroborating my reports above about ridership to and from Merced. I received this as a member of the San Joaquin Valley Rail Committee, representing Fresno County. It can be easily verified

952-3

Third Comment:

Approximately one half of the population of Fresno, Madera and Merced Counties is Hispanic, but HSRA held only one outreach meeting that was specifically designed to inform the Hispanic population about HSR and this leg of the project.

This one meeting was hastily arranged at the last minute and held in the remote, largely unpopulated town of Planada well outside of Merced.

This one belatedly arranged outreach meeting to the Hispanic community was not well publicized and drew less than 40 attendees.

How, in the name of Environmental Justice, can HSRA claim it vetted its DEIR to the whole public?

Amtrak Routes Ridership and Ticket Revenue by Station Origin/Destination, FY08 vs. FY07
Route 39 - San Joaquins

	Station Origin/Destination	Ridership		Ticket Revenue		% chg
		FY08	FY07	FY08	FY07	
Total		65,414	57,102	\$1,854,482	\$1,939,558	+19%
1	Bakersfield, CA - Stockton, CA	94,181	81,469	\$1,652,833	\$1,357,682	+24%
2	Bakersfield, CA - Fresno, CA	30,228	28,091	\$1,128,382	\$955,655	+17%
3	Bakersfield, CA - Sacramento, CA	27,070	26,459	\$1,055,387	\$922,700	+14%
4	Bakersfield, CA - Martinez, CA	23,472	20,904	\$941,486	\$753,851	+25%
5	Bakersfield, CA - Redondo, CA	22,815	20,738	\$910,109	\$905,883	+0%
6	Bakersfield, CA - Emeryville, CA	24,901	21,114	\$798,749	\$689,163	+16%
7	Fresno, CA - Sacramento, CA	32,654	26,152	\$778,116	\$628,145	+24%
8	Fresno, CA - Stockton, CA	37,897	31,894	\$747,410	\$627,420	+17%
9	Bakersfield, CA - Merced, CA	26,455	22,010	\$616,060	\$502,918	+22%
10	Bakersfield, CA - Hanford, CA	42,688	36,004	\$572,451	\$473,908	+21%
11	Fresno, CA - Martinez, CA	18,149	16,140	\$516,822	\$441,041	+17%
12	Bakersfield, CA - Oakland, CA	12,129	10,744	\$501,733	\$434,986	+16%
13	Bakersfield, CA - Sacramento, CA	14,203	12,163	\$394,710	\$334,260	+18%
14	Hanford, CA - Stockton, CA	17,250	14,934	\$377,443	\$332,637	+13%
15	Fresno, CA - Oakland, CA	10,876	9,859	\$371,695	\$327,777	+13%
16	Fresno, CA - Richmond, CA	8,982	8,031	\$340,048	\$300,881	+13%
17	Bakersfield, CA - Redondo (ACE) CA	10,299	7,924	\$329,654	\$248,228	+33%
18	Antioch-Nilesburg, CA - Bakersfield, CA	6,605	7,782	\$327,003	\$281,723	+16%
19	Emeryville, CA - Hanford, CA	7,282	6,697	\$259,376	\$206,785	+24%
20	All other markets	481,180	330,621	\$15,264,657	\$16,172,785	-6%
	Total	949,611	804,785	\$29,847,498	\$24,644,160	+21%

Larry Miller
Comments on DEIR Merced to Fresno leg

October 13, 2011
page 3

Larry Miller
Comments on DEIR Merced to Fresno leg

October 13, 2011
page 4

Submission 952 (Larry Miller, October 13, 2011) - Continued



Response to Submission 952 (Larry Miller, October 13, 2011)

952-1

Section 2.4.2.4 in the EIR/EIS provides a description of the Downtown Merced Station.
See also MF-Response-GENERAL-2 and MF-Response-GENERAL-6.

952-2

See MF-Response-GENERAL-13.

952-3

See MF-Response-SOCIAL-7 and MF-Response-GENERAL-17.

Submission 175 (Charles Moffitt, September 13, 2011)

09-13-11P01:12 RCVD

RECEIVED
SEP 13 2011

California High Speed Rail Authority
770 L Street, Suite 800
Sacramento, Ca 95814

175-3

Gentlemen:

175-1

I have the following comments concerning the Merced to Fresno HST Draft EIR/EIS:

People will not ride the HST unless it is safe from terrorists. The Madrid train bombings in 2004 and the ones in London in 2005 were done with explosives carried on board the trains. A total of 247 people were killed.

175-2

DEIR Section 2.2.1, System Design Performance, Safety, and Security does not state whether or not riders will be required to undergo the same types of security check procedures as currently required for commercial airlines; those procedures generally being arrival at the station 1 hour ahead of schedule departure time, having luggage checked, going through Xray machines, and junk checks.

175-3

If so, a short trip from San Diego, or say Bakersfield, to L.A. at 200 miles per hour on the HST would take ½ hour of travel time plus 1 hour at the station for a security check, resulting in a total travel time of 1 ½ hours. By car the same trip would take 2 ½ hours. Yes, 1 hour more than by HST, but then the car driver doesn't need to find additional transportation after arriving in LA.

The LA area is so spread out that finding other fast and economical transportation upon arrival is going to be by far the major concern when using the High Speed. Long distance cab and city bus rides just "aint gonna cut it".

If security procedures similar to those of airlines are required for the HST, then it should be anticipated that the additional 1 hour for security check most likely will cause short distance travelers to not find any advantage in using the HST and thus they will continue to drive their cars instead.

Accordingly, the ridership and economic feasibility of the HST becomes more in doubt.

BART will help alleviate this problem in the bay Area.



Tight security screening is presently not required for AMTRAC passengers. AMTRAC does not travel at 200 miles per hour, and will not have as much terrorist perceived symbolism.

It is recommended that a determination be made as to exactly what security procedures will be required prior to the start of any construction work on the HST.

Thanks for your time.

Charles Moffitt
9/9/11

USA
Mr. Charles Moffitt
4405 Coronado Ave.
Bakersfield, CA 93306

Response to Submission 175 (Charles Moffitt, September 13, 2011)

175-1

See MF-Response-S&S-8. The Authority recognizes that locations that attract large numbers of people are potential targets for terrorists. The Authority's objective is to implement prudent measures to reduce the risk to passengers and infrastructure to acceptably low levels.

175-2

See MF-Response-S&S-10.

175-3

The Authority does not currently anticipate that riders will be subject to the same type of security check as required of commercial airplane passengers. The future HST stations will be multi-modal hubs, providing passengers with a variety of transportation options once they arrive at their destination. This is expected to include local bus, rail (where such systems exist), and taxi service. Although the station details remain to be worked out, it is not inconceivable that car rental or car sharing facilities will be available nearby to take advantage of the business generated by the station. So, even if security screening is required in the future, the HST system will likely maintain a time advantage over driving.

Submission 375 (Charles Moffitt, September 26, 2011)

California High Speed Rail Authority
Merced to Fresno Draft EIR/EIS Comments
770 L Street, Suite 800
Sacramento, Ca 95814

09-26-11PC4:23 RCVD

Gentlemen:

Please accept the following comments concerning the Merced to Fresno High-Speed Train Draft EIR/EIS:

POPULATION

The section entitled "The Economic Impact of the California High-Speed Rail in the Sacramento/Central Valley Area", prepared by Shawn Kantor, Ph.D., as part of the Statewide Program Environmental Report EIR/EIS states that the Central Valley and Southern San Joaquin Valley will experience explosive growth in the service sector, which will be significantly amplified as a result of the HSR (page19); Central Valley cities may come to be seen as 'bedroom communities' to major metropolitan labor markets (page 13); based upon other studies, if similar trends were to occur in the valley, one could easily envision Bay Area firms relocating to the Central Valley to benefit from lower property/rental costs and a cheaper labor force (page 22); the HSR will trigger internal job creation with in the Central Valley especially in the services, transportation communities, utilities, and finance, insurance and real estate sectors (page3).

The Merced to Fresno DEIR population estimates do not seem to account for the migration of people from LA and the Bay Area to the San Joaquin Valley as it is developed to serve as a 'bedroom community' and to provide cheaper land for industries. It appears that the DEIR simply takes the No-Project population estimates by the California Dept of Finance (see DEIR section 2.4.1) and adds only the HST employees and other necessary to serve only them.

NEPA requires the analysis of cumulative impacts from "...reasonably foreseeable actions, regardless of what agency, ..., entity, or person undertakes such other actions (see DEIR section 3.19.1.1).

Accordingly, it is recommended that the DEIR be revised to account for impacts caused by the addition of population migration from the coastal metropolitan areas to the San Joaquin Valley.

AIR QUALITY

The Merced to Fresno DEIR section 2.4.1 states that the California Department of Finance for Merced, Madera, and Fresno County projects a population growth of 68% (average for all three) from 2010 to 2035. This is without the HST and related migration from the coastal metropolitan areas to the valley, per the above.

375-2

Air quality in the San Joaquin Valley is already, at times, unhealthy. The DEIR claims that the HST will improve the valley air quality by removing vehicles from the road. But again, it does not appear that the DEIR accounts for the HST related coastal population migration to the valley

Do the California Dept of Finance population growth estimates in any way consider air quality impacts, and mitigation measures; please describe. How bad does the air quality in the valley have to get before the state and local jurisdictions put a stop to all further development? What are the limits and related health issues? And how near in population growth are we to causing those limits to be reached, assuming current technology?

It is recommended that the DEIR be amended to include answers to these and other appropriate question in order to provide the public more knowledge with which they might use to consider the HST project along with population migration impacts.

375-3

AGRICULTURAL LAND:

Agriculture is believed to be one of the biggest (if not the biggest) economic driving forces in the state's economy. It helps to make California the great state that it is. Other industries depend on agriculture for their existence; and not just those in the valley, but also some of those in the coastal metropolitan areas.

Food grown within the state, seemingly, should be cheaper for LA and the Bay Area since it is much closer than say that grown in the Midwest.

It has been said that the San Joaquin Valley with its extensive flat fertile bottom land fed by slow melting snow capped high Sierra Mountains is a unique, and very valuable agricultural asset, not easily replaced.

It is recommended that the DEIR be revised to evaluate impacts of the HST caused population migration from the coastal metropolitan areas to the valley as they relate to the

Submission 375 (Charles Moffitt, September 26, 2011) - Continued

conversion of agricultural lands to urban use, and the corresponding effects on both the local and statewide economies.

The DEIR Table 3.14 lists the various local government agencies and describes their policies for preserving agricultural land. Are their policies of an advisory nature with urban development often taking priority over preservation of agricultural land? Should the state become more active in providing stricter control legislation and backup for the local agencies to preserve agricultural land?

Charles Moffitt
9/26/11

 Mr. Charles Moffitt
4405 Coronado Ave.
Bakersfield, CA 93306

Response to Submission 375 (Charles Moffitt, September 26, 2011)

375-1

See MF-Response-GENERAL-3.

375-2

See MF-Response-AQ-3 and MF-Response-GENERAL-3.

375-3

See MF-Response-GENERAL-4 and MF-Response-GENERAL-3.

Submission 645 (Jose Moran, October 11, 2011)

Comment Period Extended to October 13, 2011

El periodo a hacer comentarios está prolongado hasta del 13 de octubre de 2011

RECEIVED
10-11-11 10:38 RCVD

CALIFORNIA High-Speed Rail Authority

Comment Card Tarjeta de Comentarios

Merced to Fresno High-Speed Train Section
Draft Environmental Impact Report/
Environmental Impact Statement (EIR/EIS) -
Public Hearings
September 2011

Tren de Alta Velocidad Sección Merced a Fresno
Anteproyecto del Informe de Impacto
Medioambiental/Declaración de Impacto
Medioambiental (EIR/EIS) - Audiencias Públicas
Septiembre 2011

Please submit your completed comment card at the end of the meeting, or mail to: Por favor entregue su tarjeta al final de la reunión, o envíela a una de las siguientes direcciones:

Merced to Fresno HST Environmental Review, 770 L Street, Suite 800, Sacramento, CA 95814

The comment period on the Draft EIR/EIS begins August 15, 2011 and ends September 28, 2011. Comments received after 5:00 p.m. on September 28, 2011 will not be addressed in the Final EIR/EIS.

El periodo a hacer comentarios empieza a 15 de agosto y termina a 28 de septiembre. Comentarios recibidos después de 5:00 p.m. a 28 de septiembre no se responderá en el EIR/EIS final.

Name/
Nombre: Jose Moran Organization/
Organización:

(Optional/Opcional)
Address/Domicilio: 23684 Road 19 1/2 Chowchilla, CA 93610 Phone Number/
Número de teléfono: 559 706-0413

City, State, Zip code/
Ciudad, estado, código postal: Chowchilla, CA 93610 Email address/
Correo electrónico:

645-1

I am opposed to the Rail for two main Reasons. Number one the rail will be over my house so I will be forced to relocate. I have lived in my house for 20 years. I am of retirement age and having to lose money on my house and relocate would affect my quality of life. Number two I work for a farmer whose property will be cut into pieces. Affecting my elderly hood. Please reconsider the

645-1

Rail. And Consider the Chowchilla Community as People Living Lives not just Land.

Jose M Moran

Response to Submission 645 (Jose Moran, October 11, 2011)

645-1

See MF-Response-SOCIAL-1 and MF-Response-GENERAL-14.

Submission 44 (Georgia Murach, August 18, 2011)

Merced - Fresno - RECORD #44 DETAIL

Status : No Action Required

Record Date : 8/18/2011

Response Requested :

Stakeholder Type : CA Resident

Submission Date : 8/18/2011

Submission Method : Website

First Name : Georgia

Last Name : Murach

Professional Title :

Business/Organization :

Address :

Apt./Suite No. :

City : Fresno

State : CA

Zip Code : 93711

Telephone :

Email : georgiamurach@comcast.net

Cell Phone :

Email Subscription : All Sections, Merced - Fresno

Add to Mailing List : Yes

Stakeholder
Comments/Issues : From my reading of your report, the Hybred system seems to be the least damaging environmentally and the least expensive to build, but can you mitigate the severance of farmland? Whatever is done, please keep the construction of California's high speed train going. It's immensely valuable. Keep the big picture in mind. Thanks for your hard work to date.

EIR/EIS Comment : Yes

44-1

Response to Submission 44 (Georgia Murach, August 18, 2011)

44-1

See MF-Response-GENERAL-4 and See MF-Response-GENERAL-9.

Submission 985 (Virginia Muradia, October 12, 2011)

14



CALIFORNIA High-Speed Rail Authority

10-12-11 10:02:07 AM RECD RECEIVED

Comment Card
Tarjeta de Comentarios

Fresno to Bakersfield High-Speed Train Section
Draft Environmental Impact Report/
Environmental Impact Statement (EIR/EIS)
Public Hearings
September 2011

La Sección de Fresno a Bakersfield del Tren de Alta Velocidad
Proyecto de Informe de Impacto Ambiental/
Declaración de Impacto Ambiental (EIR/EIS)
Audiencias Públicas
Septiembre del 2011

Please submit your completed comment card at the end of the meeting, or mail to:

Por favor entregue su tarjeta completada al final de la reunión, o envíela por correo a la siguiente dirección:

Fresno to Bakersfield DEIR/EIS Comment, 770 L Street, Suite 800, Sacramento, CA 95814

The comment period is from August 15 to September 28, 2011. Comments must be received electronically, or postmarked, on or before September 28, 2011.

El periodo de comentario es del 15 de Agosto al 28 de Septiembre del 2011. Los comentarios tienen que ser recibidos electrónicamente, o matasellados, el o antes del 28 de Septiembre del 2011.

Name/Nombre: Virginia Muradia
Organization/Organización: Teacher
Address/Domicilio: 6502 Buston Ave, Kingsburg, CA
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(Use additional pages if needed/Usar paginas adicionales si es necesario)

985-1

By most reports, the cost of the high speed rail is severely underestimated. If the finances run out after the Merced - Bakersfield is built, we will have a rail to nowhere. If you begin the high speed rail in a more populated urban area, at least that section would be utilized. Who would be using HSR to get from Merced to Bakersfield - very few. Have you considered making the first section of high speed rail in either the Bay Area or the L.A. area? The ridership would be much higher than in the fertile, less populated, Central Valley. In case the HSR does not get finished, consider allowing our ~~farm~~ prime ag land to remain in agriculture.

Response to Submission 985 (Virginia Muradia, October 12, 2011)

985-1

See MF-Response-GENERAL-13.