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April 13, 2020

California High Speed Rail Authority
Attention: Draft 2020 Business Plan
770 L Street, Suite 620 MS-1
Sacramento, CA 95814

Subject: Draft 2020 HSR Business Plan Comment Letter

Dear Sir/Madam,

Introduction

Since Mr. William Grindley and I did a Report in January 2019, which was based on the HSR's 2018 Business Plan, we completed another, smaller report, on the planning documents the new cast of HSR officials published in the early part of 2019. This all centered around the Authority confusing the issue by them saying that using ACE trains to get from the Bay Areas to Merced would save the day.

Then they put out the 2020 Business Plan

Before their Business Plan was released in January 2020, we had completed our June, 2019 document, "If you Connect To ACE...", and delivered it to the HSR Authority. Our conclusion was that, until they have HSR from the San Francisco Peninsula (San Jose) to Merced, they are totally non-competitive in total travel time and cost, compared to Autos.

Look At The 2029 to 2033 Period (Before Pacheco Period)

In effect, their forecast of riders before the SV – CV link is made, via the Pacheco Pass, is not based on a competitive product. In the 2029 (when they want to start operations) to 2033 time period (based on this being when the Pacheco Pass connection is to be completed) it is always faster to drive an auto than take ACE from San Jose northeast to Tracy and then south east to Merced and then HSR on to Bakersfield.

The 2020 Business Plan

Look At The 2031 to 2035 Period (Before LA Period)

And once they get over the Pacheco Pass, and have a SF to Bakersfield HSR route, they still are not going to be able to hold the prices that are in their Plan, and once they start to cut prices to get market share between SF and Bakersfield, they will require a subsidy until at least the 2035 time period (when they expect they will have completed the Bakersfield to LA connection). And if this connection to LA is not made, they will most probably need a subsidy forever. But at that

point, in the late 2030s, no one is going to go to jail for requiring a subsidy promised to the taxpayers back in 2008, after they have spent about another \$80B.

What Does the 2020 Business Plan Tell US?

My view of the 2020 Plan is that it is the same old classic house of cards. It is built on a ridership forecast that is based on the same 2016 MODEL as all of the recent plans. None of these plans have ever done a common sense, basic competitive analysis that looks at the costs the potential riders will incur - in terms of the total travel time to get from their starting point to their destination, and what will be their total out of pocket costs - of the 3 alternatives - HSR, autos, or air. And, nowhere is there any actual survey data, since 2016 or earlier, of potential riders and what their choices would be, faced with the current cost of air, the cost to drive a car (for 1 or more than 1 person), or the Authority's planned prices, for the various routes planned for the 2029 to 2033 time period and the 2031 to 2035 time periods.

They hide behind this complex model with no actual survey data to support their claims. Think of the movie, the Wizard of Oz, Dorothy and her 3 pals go through all sorts of adventures to get to see the great "Wizard of Oz", only to find out the Wizard is a classic smoke screen (and a drape), being powered by a little old man who pushes and pulls a lever back and forth.

The Authority then takes their ridership forecast and they do all sorts of analysis, such as their now popular Side by Side analysis. and how many buses they will need to get over the mountains. All very interesting, but they pale in importance to the key question: "If they build it, will the people come?" The Authority takes the model as a given, and everything else evolves around it, as opposed to the question, "What if the model is wrong?" Does this remind us of any sad and recent experience with models? Or when the hurricanes start in the Gulf of Mexico, every TV channel/station has a different projection (based on their model) of when Florida is going to be wiped out.

Our Work On The 2018 Business Plan Is Directly Applicable.

In January of 2019 we finished a detailed analysis of travel time and cost and concluded that HSR was not competitive with autos or air, in many cases. William Grindley and I submitted all of our findings to the Authority at their January 2019 Board Meeting. The then-Chairman said they would get back to us. We are still waiting. You can see our report on our Web site at:

[10/2018 - If You Build It, They Will Not Come - The Sequel - Calif HSR Fin Reports](#)

This link takes the reader to the specific Web page on our Web site which contains the report, and all of its supporting documentation. In Folder 1.0 are the Press Release, the Report, and the presentation we made to the Board in January 2019, all in PDF format. The other folders (2.0 to 3.6) contain the supporting documents. The reader can download any of these documents or just open them and read them on the Web site.

Two Examples

First - Page 49 of our report, in Figure 21, shows we analyzed 140 Origin -Destination (O-D)s for the period 2029 - 2032, before the route to LA will be available. Of these, HSR won in only

10 cases (7%), Auto won 100, and Air won 30. Then we analyzed 180 cases for the 2033 to 2040 period when the link to LA will be available. HSR won 37 (21%), etc., etc. Note that HSR won mostly when the O-D were in adjacent Regions, so the distance was short, such as San Jose to Fresno.

Second - Page 43 drills a bit deeper and Figure 19 shows these 10 HSR wins in the 2029 - 2032 period were all in the Bay Area - San Joaquin O - Ds. But once the LA link was in existence, HSR was winning more often in the south, than in the north.

During 2019 ACE Was Brought Into The Picture

During last year the Authority decided that connecting HSR to the ACE trains was the answer to all of their problems. However, when we put the HSR+ACE in competition with autos, autos were faster and cheaper. We submitted all of these results to the Authority at their July 2019 Board Meeting. The now new-Chairman, said "Thank you", but he did not promise to get back to us. You can see our report at:

[6/2019 - If You Connect To ACE, They Still Will Not Come - Calif HSR Fin Reports](#)

Go to this link, to our "6/2019 - If You Connect To ACE..." Web page. Go to the 1.0 Folder and look at the One Page Summary. This page, "Connecting The San Joaquin Valley With Silicon Valley – Three Scenarios", is also attached to this document. These three scenarios show round trip total travel time and total travel cost before there is a Pacheco Pass connection. It shows that the ACE + HSR total travel times and prices are not competitive compared to driving. So, they have to spend the Billion \$s to get over the Pacheco Pass, even before they try to get to LA, otherwise they will not have any traffic between the Bay Area and the Central Valley.

Why Are They Not Competitive?

So, we have told them twice in 2019 they are not competitive, and the core of the problem is both the fares they are planning and the lack of tunnels they cannot afford to build. For example, in the 2018 Plan the fare from Merced to Bakersfield was \$70, in the 2020 Plan it is \$75. The 2020 Plan says the cost to drive is 26 cents per mile. It is 164 miles to drive from Merced to Bakersfield, or \$43. HSR is faster, about 1 and 1/2 hours, compared to 2 and 1/2 hours by auto. But the HSR time is station to station, while auto is door to door.

So, HSR costs \$32 more, but it is an hour faster, IF the traveler lives in an apartment above the Merced train station and is going to his office that is in an office building over the Bakersfield train station. The one hour time advantage, to justify paying an extra \$32, will quickly disappear for most potential travelers who do not live and work "on top" of the train stations. If there are two people going to Bakersfield, the extra cost is \$107, not \$32 to gain an hour, or probably less.

To look at the same issue another way, consider a person who rides the current Amtrak San Joaquin rail service between Merced and Bakersfield. It takes him 3 hours and 15 minutes, much longer than the 1 and 1/2 hours on HSR, and longer than driving a car which is 2 and 1/2 hours. However, the cost of a one-way Amtrak ticket is \$23 to \$28.50, much cheaper than the HSR ticket of \$75 or the cost to drive a car at \$43 (or \$21.50 if it is a group of 2 people). Since the HSR Plan is to discontinue the Amtrak San Joaquin service between Merced and Bakersfield,

this rail customer is going to face a one-way price increase of about \$50, and for this he will save, one way, 1 hour and 45 minutes. This is a substantial price increase and for many residents of the Central Valley it may be unaffordable.

Why Is There No Future/Potential Customer Feedback?

This raises the basic question, again, where is the “boots on the ground” market research and customer surveys that show the Amtrak customers will switch over to HSR and gladly pay the increased price. Amtrak reports ridership on the San Joaquin route in 2019 was 1.1 million passengers, and I would expect up to 2/3s will switch over to cars or ride a Greyhound Bus which offers Merced to Bakersfield service from \$41 to \$46 (much cheaper than the \$75 HSR ticket).

When one looks at the most recent Business Plan, one sees a great deal of intentionally misleading information. The reality is that it is really not a Business Plan, it is a Construction Spending Plan. If it were a Business Plan it would start by defining what is the need in the marketplace, and how can the need be fulfilled better than the competition (autos, air, buses, etc.) can fulfill it. Then it would show why the citizens should pay \$75Billion to \$90Billion to fulfill this need.

The Ridership and Revenue Forecasting document’s Figure 5.3 raises a fundamental question. In the Phase 1 period, the projected HSR market share for the SF to LA route is 25%. Really? This is the premiere market HSR is intended to serve. Why just 25%? This means 75% are going to fly or drive. Why is all this money being spent to build something 75% of the population is projected not to use. And for the SV to CV period the projection is just 10%. This means that if the link between Bakersfield and LA is never built, 90% of the population will continue to fly or drive. If there is no known way to fund the two tunnels, why is this a so-called “Business Plan” even being considered?

Look no further than the forecast of 4.5M riders in the 2029 to 2033 Period (the Before Pacheco Period), which they plan to capture from existing users of autos and rail in the Central Valley. Look again at the attached chart. Compare the travel times and cost to the 1.1M of Amtrak San Joaquin riders going from Oakland or San Jose to Bakersfield, and the travel times and costs of autos – to the HSR plus ACE prices and travel times in their Business Plan, which are much higher. Where is the validation that (bluntly put) the dogs will eat the dog food?

Could It Be?

The Authority does not want to face the fact that their planned price fares will not survive, leading to operating losses and ongoing operating subsidies forever. Just like the vast majority of HSR routes around the world.

And it is highly probable that the HSR Authority does not want to conduct “boots on the ground” market research and customer surveys, because the results will destroy their model’s ridership projections.

Thank You,
William H. Warren

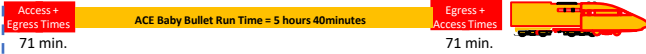
Connecting The San Joaquin Valley With Silicon Valley – Three Scenarios

Scenario 1 –Merced-San Jose-Merced

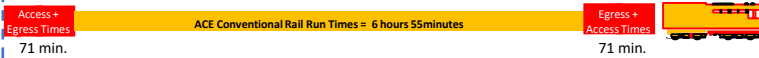
Auto - Total Round Trip Travel Time = 4 hrs. 48 minutes - Total Travel Cost is \$55.20



ACE Baby Bullet - Total Round Trip Travel Time = 8 hrs. 2 minutes - Total Travel Cost is \$48.94



Conventional ACE Rail - Total Round Trip Travel Time = 9 hrs. 17 minutes - Total Travel Cost is \$48.94

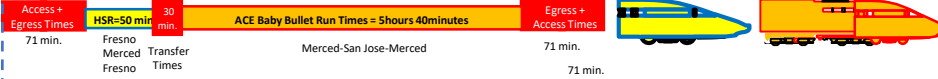


Scenario 2 - Fresno-Merced-San Jose-Merced-Fresno

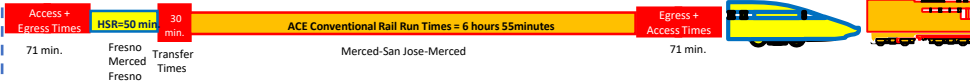
Auto - Total Round Trip Travel Time = 5 hrs. 43 minutes - Total Travel Cost is \$69.46



HSR + ACE Baby Bullet - Total Round Trip Travel Time = 9 hrs. 22 minutes - Total Travel Cost is \$75.44 subsidized or \$142.94 unsubsidized



HSR + Conventional ACE Rail - Total Round Trip Travel Time = 10 hrs. 37 minutes - Total Travel Cost is \$75.44 subsidized or \$142.94 unsubsidized

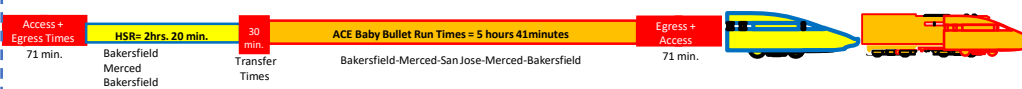


Scenario 3 - Bakersfield-Merced-San Jose-Merced-Bakersfield

Auto - Total Round Trip Travel Time = 8 hrs. 61 minutes - Total Travel Cost is \$111.32



HSR + ACE Baby Bullet - Total Round Trip Travel Time = 10 hrs. 52 minutes - Total Travel Cost is \$104.44 subsidized or \$188.94 unsubsidized



HSR + Conventional ACE Rail - Total Round Trip Travel Time = 12 hrs. 10 minutes - Total Travel Cost is \$104.44 subsidized or \$188.94 unsubsidized

