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Policy Summary
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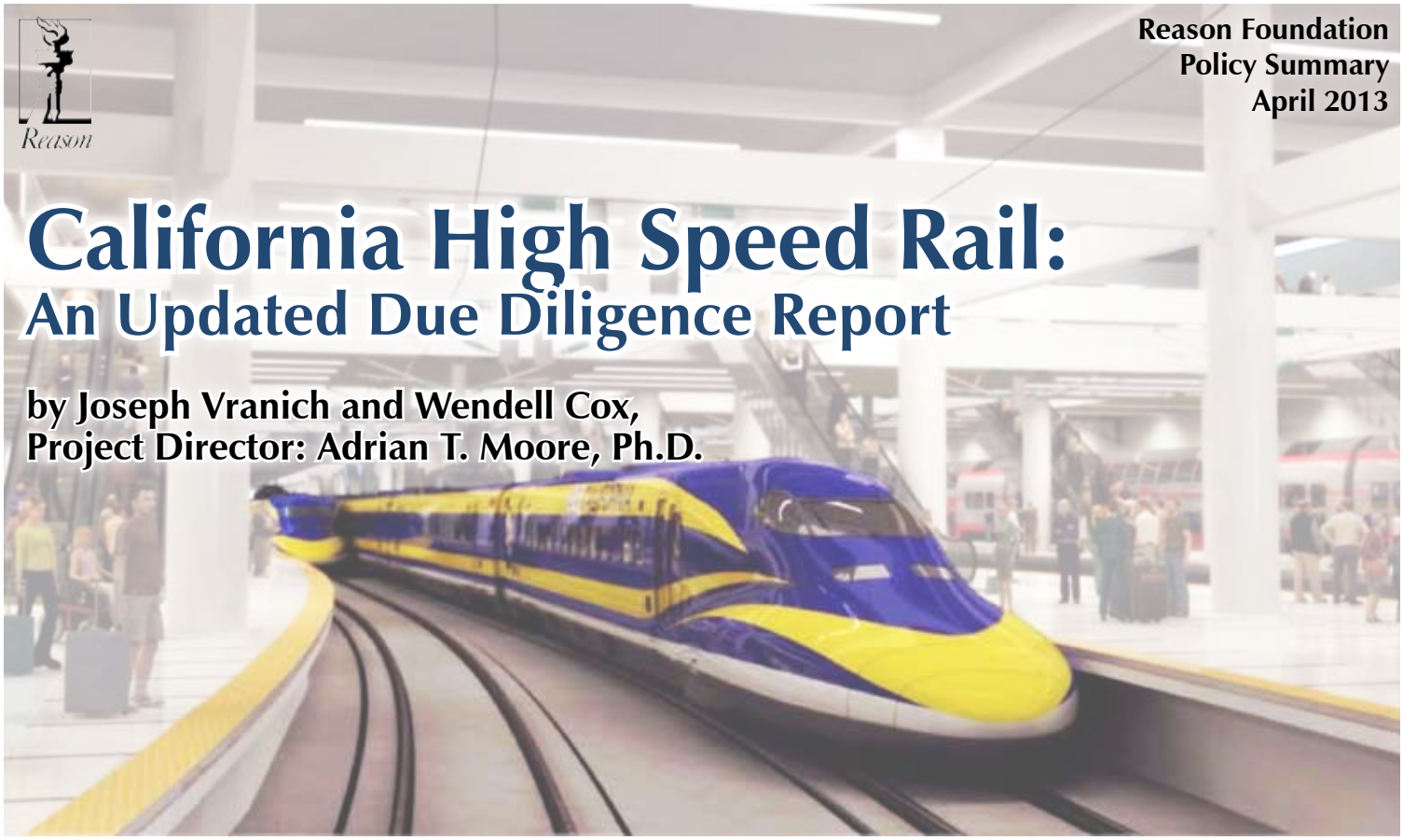


California High Speed Rail:
An Updated Due Diligence Report

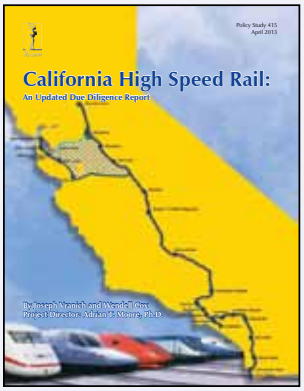
**by Joseph Vranich and Wendell Cox,
Project Director: Adrian T. Moore, Ph.D.**

Reason Foundation's 2008 report, *The California High Speed Rail Proposal: A Due Diligence Report*, warned that plans by the California High-Speed Rail Authority (CHSRA or Authority) issued prior to and during 2008 were inaccurate, misleading and not in compliance with California statutes. As well, it found that the Authority's financing plan overstated projected revenues and private financing, and understated capital requirements and operating subsidies needed from taxpayers. Subsequent independent studies and new Authority documentation have proven virtually every characterization in Reason's 2008 *Due Diligence Report* to be accurate or understated.

This report updates Reason's 2008 *Due Diligence Report* by addressing and evaluating numerous changes in California's plan to build a high speed rail (HSR) system between San Francisco and Los Angeles via the San Joaquin Valley. This *Due Diligence Update* addresses the Authority's revised documentation, business plans and public statements issued between 2008 and late-2012, which are found to be similarly inaccurate, misleading and in violation of the laws guiding the project. Additional analysis is warranted to respond to the Authority's newer yet illusory capital cost reductions, likely capital cost escalations, need for operating subsidies, slower train schedules, high ridership projections, and the inability to meet the statutory requirement to link Los Angeles and San Francisco in 2 hours and 40 minutes or less.

The primary focus of this *Due Diligence Update* is the CHSRA's *Draft Revised Business Plan* issued in April 2012 that outlines how high speed trains will operate on the same tracks as local commuter trains ("blended systems")

This is a policy summary of a more detailed policy study that is available at reason.org/ california-high-speed-rail-2013-due



For more information about Reason's policy work, please contact Adrian Moore at adrian.moore@reason.org. For media inquiries, contact Chris Mitchell at (310) 367-6109 or chris.mitchell@reason.org

into San Francisco and Los Angeles, which now are called the "bookends" of the system. The blended system replaced the cost-prohibitive Full Phase 1 system that had new rail lines dedicated exclusively to high speed trains into San Francisco and Los Angeles. Despite the characteristics of the blended system that slow train-speed and shorten lines, which makes the system less high-speed and less competitive, CHSRA continues to use the ridership and train-speed data from the Full Phase I system in its original plan in its analysis of the blended plan's viability. (See Figure ES1 on next page.)

Current plans are now identified as "Phase 1 Blended," which the CHSRA estimates will cost as much as $63.2 billion in 2011 inflation-adjusted dollars ($78.0 billion in year-of-expenditure dollars) with the only sources of funding being $9 billion in California Proposition 1A general obligation bonds and $3.5 billion in federal grants. Further funding is highly speculative if not outright non-existent for the remaining capital needed, which may exceed $50 billion.

As will be shown in this *Due Diligence Update*, the CHSRA April 2012 *Business Plan* is so deficient that it is inconceivable that policymakers would continue to rely on its assertions to evaluate the program. This report is not alone in identifying shortcomings in CHSRA's plans and documentation, and will include findings from other state agencies and independent reviewers.

NOT-SO-FAST TRAIN SCHEDULES

The Authority has continually made questionable claims about speeds and travel times. Based upon a review of the international experience and CHSRA plans, it appears likely that California's high speed trains will operate at slower speeds than promised and travel times will be longer than promised.

The CHSRA *Draft 2011 Business Plan* stated that an "express/non-stop" can operate from Los Angeles to San Francisco in 2 hours and 40 minutes. CHSRA's April 2012 Business Plan truncates the HSR infrastructure in the Los Angeles Basin and between San Jose and San Francisco, and the result can only increase non-stop travel times. Documentation for the 2012 *Business Plan* indicates a 3-hour minimum one-stop travel time for San Francisco to Los Angeles. The plan fails to cite a non-stop travel time for the Phase 1 Blended System, a noticeable omission. With no apparent justification, the CHSRA continues to represent a 2:40 non-stop travel time to the public.

This *Due Diligence Update* finds that the 2:40 travel time is not achievable under the Phase 1 Blended system. That is because the CHSRA trains are slated to operate at peak speeds of 220 mph (354 kph)–speeds that are not attained today anywhere in the world.

Under the blended system high speed trains will need to operate more slowly on the "bookends" as they share tracks with commuter trains and, in some locations, freight trains. An example is the Peninsula line where the CHSRA claims its trains will connect San Francisco and San Jose in 30 minutes. This matches the Authority's previous estimate, which was based on running trains on low-obstruction, no at-grade rail/highway crossings, elevated, four-track structures at speeds of between 100 and 150 mph. Such speeds are unattainable over the "blended" system, on which high speed trains would compete along a two-track alignment with multiple at-grade street crossings with three levels of Caltrain commuter trains (from Baby Bullet expresses to locals) and slower freight trains. Similar conditions will apply where high speed trains would coexist with commuter trains in the Los Angeles Basin.

Other conditions will contribute to slower speeds including the inability to operate at 200 mph in urban areas; safety concerns of non-stop trains passing at high speeds in two-track stations where commuters are gathered on platforms; additional safety concerns of traversing railroad/street crossings used by vehicles and pedestrians; and potential demands to reduce excessive noise by operating at slower (quieter) speeds.

The non-stop *average* speed between Gilroy and Bakersfield as indicated by CHSRA under the Phase 1 Blended system is 198 mph, nearly equal to the present *peak* speed of the fastest high speed trains in the world (France), at 199 mph. Such an aggressive average speed seems impossible to achieve, especially because the trains would be routed through urban areas, the largest of which is Fresno.

The Transportation Research Board speed estimates of 60-to-100 mph are assumed as low scenario and high scenario speeds for urban areas. Therefore,

Figure ES1: California High Speed Train Map, Statewide Overview

Source: http://www.cahighspeedrail.ca.gov/assets/0/152/ 198/81ea4dd6-afe8-4dee-bc13-a49899fc7df6.pdf

Table ES 1: Summary of CHSRA 2012 *Business Plan* Failings
A summary of the problems with the *Business Plan*: where its projections and predictions may go wrong and how that might lead to consequences for Californians.

Unachievable Train Speed Assumption	Current *Business Plan* does not include the promised, and legislatively mandated, 2:40 non-stop travel time Los Angeles to San Francisco.
	CHSRA plan says the train will on average be faster than any train in existence, and faster than the Transportation Research Board says is safe.
	The "blended system" approach in the *Business Plan* requires shared tracks and slower speeds in the Los Angeles and San Francisco metro areas.
	Reason's *Due Diligence Update* projects likely fastest travel times of between 3:50 and 4:40.
Implausible Ridership Projections	Independent reviews of CHSRA ridership projections by the Legislative Analyst's Office, California State Auditor, UC Berkeley Institute of Transportation Studies, legislative Peer Review Group, and Reason Foundation have repeatedly pointed out that CHSRA's ridership projections are "unreliable" and "inflated."
	Experience from European high speed trains suggests that the shift of riders from cars to the high speed train will likely be 90% less than CHSRA predicts.
	When realistic and generally accepted costs of driving are compared to high speed train fares, ridership from automobiles will likely fall 50%.
	When realistic travel times are used rather than the 2:40 trip originally promised, ridership likely falls by 25–50%.
	CHSRA predicts a medium case of 21.1 million riders/year by 2035. Reason's *Due Diligence Update* predicts 4.8 to 6.9 million.
Spiralling Costs Misrepresented to Voters	Costs in the current plan for Phase 1 are $58 billion, 60% higher than the cost told to taxpayers when voting to fund the project.
	Those *higher* costs pay for a *smaller* system than was promised to voters.
No Funding Plan	To pay for Phase 1, the CHSRA only has $3.5 billion in federal grants and the ability to borrow $9 billion in state bonds.
	The remaining $45 billion has not yet been found. The plan calls for it to come from the federal government and private sector.
	Federal spending on high speed rail has been cut.
	Since this train will not make money and will require significant subsidy, the private sector will not invest its money.
Incorrect Assumptions About Alternatives to High Speed Rail	The CHSRA plan argues that the cost of expanding the roads and airports to accommodate predicted growth in intercity travel are $171 billion.
	Several independent analyses have refuted that number. The Legislative Analyst pointed out that the CHSRA methodology is flawed and the figure they use is "not what the state would otherwise spend to address the growth in inter-city transportation demand."
	The CHSRA's alternatives cost estimates greatly exaggerate train capacities and frequencies, and the costs of highway construction and need for more airport space. For example, they assume you can only increase flight capacity by more planes, and ignore the more common approach of using bigger planes.
Fares Keep Going Up	In 2008 voters were promised fares of "about $50 a person". That has gone up to $81 already.
	CHSRA's comparison of car vs. train cost to the rider assumes only individual travelers, omitting that if more than 1 is travelling by car, with costs shared between travelers, it will be vastly cheaper.

the fastest non-stop San Francisco-Los Angeles trains over the Phase 1 Blended system are estimated to operate at from 3:50 to 4:40 (higher-speed scenario v. lower-speed scenario).

The more frequent trains stopping at intermediate stations would have longer travel times, estimated at from 4:35 to 5:25 (higher-speed scenario v. lower-speed scenario), with four intermediate stops between San Francisco and Los Angeles, and from 5:10 to 6:00 (higher-speed scenario v. lower-speed scenario) with seven intermediate stops.

The CHSRA's travel times may be lengthened further because safety is a concern when high speed trains share tracks with commuter trains and freight trains. Track-sharing complicates designing a train to meet Federal Railroad Administration crash-safety standards, which are considered the toughest in the world. These aspects are addressed more completely in Reason's 2008 *Due Diligence Report*.

Sharing busy tracks with other trains raises the issue of frequency–perhaps only two high speed trains in each direction will operate per hour for a total of four trains. But high speed rail revenue projections were based on operating trains every five or six minutes.

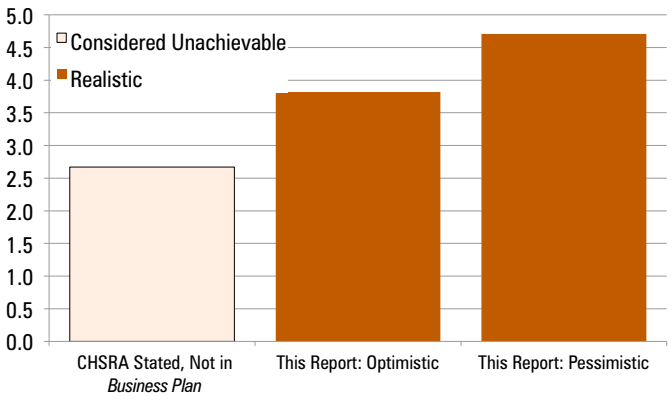
The CHSRA continues to claim the fastest San Francisco-Los Angeles nonstop schedule at 2:40 even though current plans will fail to bring about such service. Even the suggestion of a 3 hour schedule with one stop seems well beyond any reasonable hope of achievement.

RIDERSHIP PROJECTIONS AND REALITIES

Excessively optimistic and erroneous ridership forecasts have plagued high speed rail mega-projects similar to California's, resulting in overly optimistic revenue projections. CHSRA's ridership and revenue projections have been criticized by other agencies, university researchers, a peer review group and Reason's 2008 *Due Diligence Report*. Reviewers have outlined how ridership projections are unrealistically high because they are based on faulty models and flawed assumptions, mainly about automobile travel costs. This report finds that the CHSRA has made consumer cost assumptions that unrealistically skew the cost of automobile travel to be high. In reality the out-of-pocket automobile costs would be approximately one-third to one-half less than high speed rail fares depending upon distance traveled and how many people are riding in a car. Hence, auto diversion to high speed rail will be lower than projected by the Authority. The Institute of Transportation Studies at the University of California Berkeley found that the CHSRA's ridership forecasts were "not reliable enough to support the expenditure of billions of dollars."

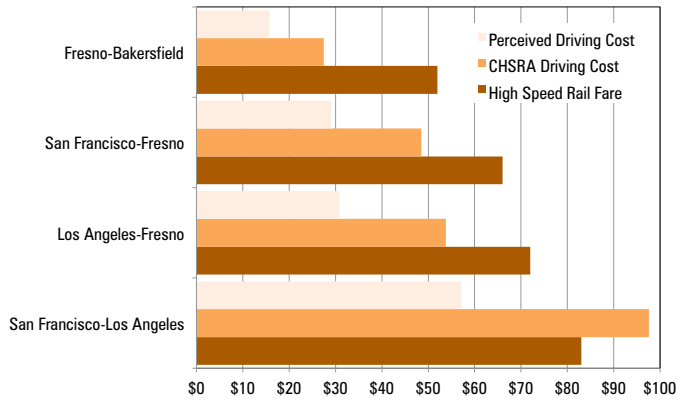
Reason's 2008 *Due Diligence Report* concluded that the CHSRA ridership projections could be as much as 200% high. Analysis of the data in the CHSRA 2012 *Business Plan* in this report finds the new ridership projections similarly optimistic. This report estimates that with appropriate modeling the ridership attraction from automobiles would fall by nearly 50%, while interregional ridership would lower by more than

Figure ES2: Travel Time: San Francisco to Los Angeles
(Blended System: Travel Times in Hours)



Source: CHSRA handout (Figure 11) and author analysis (text)

Figure ES3: High Speed Rail and Car Costs 2035
(Excludes Parking and Access to and from Stations)



Sources: 2012 *Business Plan*, Author calculations based on Cambridge Systematics data

35%–estimates that reflect international experience and which demonstrate that the California high speed rail auto attraction forecasts are implausibly high.

Likely travel times along the Phase 1 corridor will be considerably longer than projected. For example, non-stop San Francisco to Los Angeles "one-seat" travel times will most likely be in the range of 3:50 to 4:40, compared to the often-repeated claim of 2:40. Any increase in travel time can be expected to make HSR less competitive with airlines, reducing its ridership and revenue. At the optimistic 3:50 travel time, inter-regional ridership should be forecast at approximately 25% lower than at the CHSRA projected 3:00. The pessimistic 4:40 travel time would likely cause a nearly 50% reduction in the ridership forecast.

CHSRA forecasts indicate a material percentage of the inter-regional ridership, at nearly 25% of the total, will originate outside the metropolitan areas that will have stations in Phase 1. This is far higher—by a factor of 3.5 times—share than was projected in a previous "investment-grade" ridership projection and may not materialize (the current ridership projection is not labeled as investment-grade by CHSRA).

This *Due Diligence Update* estimates that the cumulative effect of ridership projection irregularities and other factors could be substantial. For example, assuming the optimistic travel time projection of 3:50, the 2035 interregional ridership would be approximately two-thirds (67%) below CHSRA projected levels at 6.9 million annually. Assuming realistic automobile costs and more-plausible outside-the-corridor ridership, the 2035 interregional ridership would be 77% below the CHRSA forecast, at 4.8 million annually. Even if the number of automobile drivers switching to rail equals the European experience, ridership would still fall nearly 65% short of the CHSRA projection.

Additional factors could lead to a larger gap between the forecasts and actual ridership, such as slower population growth and excessive air travel delay bias in forecasts. When all factors are combined, they skew high speed rail ridership much higher than is likely to occur.

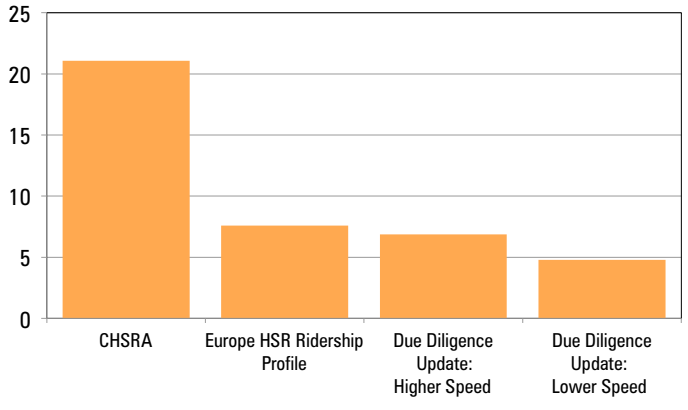
REVENUES AND OPERATING SUBSIDIES

Based upon the more realistic ridership projections above, it appears likely that the California high speed rail system will require operating subsidies to cover its day-to-day financial losses. Reason's *Due Diligence Report Update* projects these losses to be between $124,000,000 and $373,000,000 annually at the operating cost midpoint projected by CHSRA for 2035.

COSTS TO BUILD

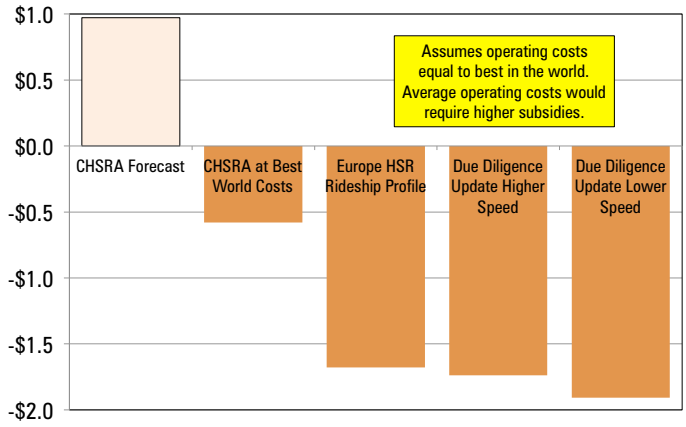
Associated with the new blended system are higher costs. The midpoint between the low and high cost estimate is $58 billion ($53 billion to $62 billion), approximately two-thirds more costly than the projections that were publicized during the 2008 campaign

Figure ES4: Interregional Ridership Forecasts: 2035
CHSRA and Due Diligence Update (Annual Ridership in Millions)



Sources: April 2012 *Business Plan* (CHSRA) and author's projections.

Figure ES5: Operating Subsidy Forecasts: 2035
CHSRA and Due Dilligence Update
(Operating Subsidies/Surplus in $Billions)



Sources: Author's projections from CHSRA reports.

for approval of the bonds through Proposition 1A.

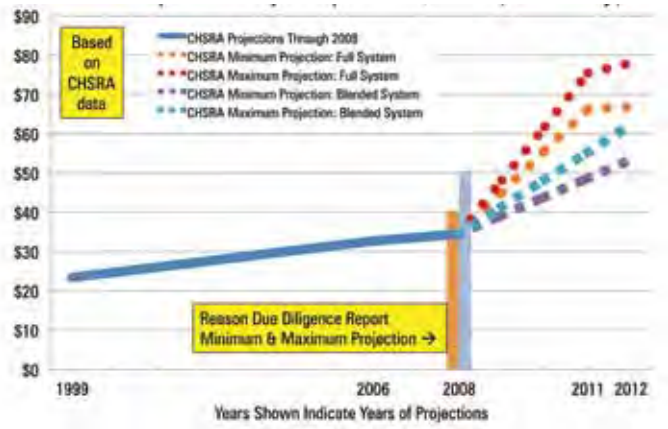
The blended system's cost exceeds the highest cost escalation projection in Reason's 2008 *Due Diligence Report*, which forecast a capital cost of between $40 billion and $50 billion for the Full Build Phase 1 of the system. The CHSRA's 2012 projected midpoint cost for the Full Phase 1 system was 60% above Reason's 2008 *Due Diligence Report* projection and the cost of the blended system was nearly 30% higher.

MORE COST INCREASES AND A SKELETAL SYSTEM

Affidavits filed by CHSRA indicate that it will be challenging for CHSRA to complete the first segment in the San Joaquin Valley in time to obtain full reimbursement of the federal funding share. Absent from the CHSRA 2012 *Revised Business Plan* is any even speculative identification of capital funding to cover the cost for Phase 2, which would include lines to the major metropolitan areas of San Diego, Riverside-San Bernardino (the Inland Empire) and Sacramento. It is possible those lines will never be constructed, even though voters in November 2008 approved Proposition 1A based on a promise of service to those metropolitan areas.

Reason's 2008 *Due Diligence Report* warned, in a Chapter entitled "If the CHSRA Runs Out of Money," that funding may only be possible for what was termed the "skeletal" system. CHSRA's "blended system" of a dedicated high speed line from Palmdale to Gilroy, with entry to Los Angeles and San Francisco over existing tracks (although upgraded), is quite similar to the "skeletal system."

Figure ES6: California High Speed Rail Capital Costs
Phase 1: History in 2011 Project Capital Cost $Billions (Inflation Adj.)



Sources: Author's projections from CHSRA reports.

For example, the blended system, with full high-speed service from San Jose to the Los Angeles Basin, could be further truncated by requiring operation over commuter rail tracks over longer distances, as far as from Gilroy to San Francisco and from Palmdale (or even Lancaster) to Los Angeles and Anaheim. Similarly, the potential remains for additional cost escalation system-wide, particularly on the San Jose to San Francisco and Los Angeles Basin segments (which involve upgrades to commuter rail systems). California would thus have the "form" of high speed rail (in a partial system), but not the substance (in high speed rail travel times).

FUNDING THE PLAN

The ever-changing cost projections to build the California high speed rail system have one common element: The funding plans have virtually no basis in fact. Warnings and criticisms have been issued on many occasions by a variety of state agencies and independent reviewers.

"Astounding" is the only word to describe the manner in which the Authority has ignored reviews ranging from constructive analysis to censure. Rail officials have done so despite the credibility of the studies, investigations and recommendations.

The CHSRA claims it will need $53 billion to $62 billion (in 2011$, or $68 billion to $80 billion cost in "year-of-expenditure" dollars) to complete the Phase 1 blended system. While the Authority may have access to $9 billion in funds from General Obligation bonds (should the legislature approve) from Proposition 1A and $3.5 billion in federal grants, additional funding sources are elusive or non-existent.

This report provides a chronological listing of assessments issued by the independent and nonpartisan Legislative Analyst's Office (LAO), Committees in the U.S. Congress, the State Auditor, the independent California High-Speed Rail Review Group, the State Treasurer, the California Senate Transportation and Housing Committee, reviewers with extensive financial

experience and Reason's 2008 *Due Diligence Report*. These reviews have universally found the funding plan to be speculative and virtually unachievable. CHSRA expects to obtain 62% of its funding from the federal government and state "cap-and-trade" revenues. These scenarios are unlikely to happen.

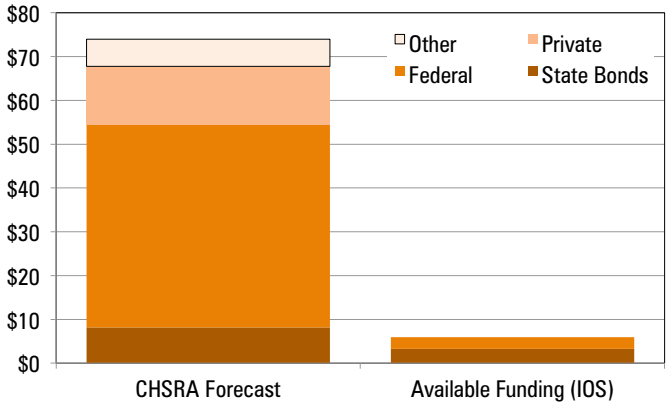
The CHSRA suggests that profits earned will induce 18% of its funding to come from private investment. However, ridership is likely to fall far short of the forecasts and there is likely to be little in profit potential to attract private investment.

The Authority's financing assertions are virtual fantasy and represent additional evidence that its April 2012 submission to the legislature and to the public fails the test of what constitutes a credible business plan. The Authority's failure to heed findings and recommendations by respected independent researchers could lead to California taxpayers' paying many billions in unanticipated costs despite specific promises to the contrary.

THE COSTS OF ALTERNATIVES TO HIGH SPEED RAIL

For some time the CHSRA and high speed rail promoters have claimed that it will cost the state more to expand highways and airports if the rail system isn't built. The assertion is that such alternatives would cost $171 billion (year-of-expenditure dollars, $98 billion to $118 billion in 2010$) to expand highways and airports to equal high speed rail's claimed capacity.

Figure ES7: CHSRA Funding Plan: Theory and Reality
Forecast and Actual Funding Available: 2012 $Billions of $YOE)



Sources: April 2012 *Business Plan* (CHSRA) and author's projections.

Such an analysis is irrelevant to public policy. The rail project's impact on infrastructure costs is limited to the amount of new highway and airport capacity that is not required as a result of travel that is diverted from each mode to the train. The purported capacity of the high speed rail system itself is of no consequence and fails to support the need to expand highways or airports should the rail system not be built. Moreover, if ridership on the high speed rail fails to live up to the CHSRA's very rosy predictions, as this study predicts, then it will not reduce the need for these alternatives to the extent CHSRA predicts.

Highway Expansion

For example, the CHSRA highway alternative cost analysis assumes that:

(1) Trains will have twice as many seats as planned.

(2) Many times more trains will operate than planned.

(3) At least 65% more highway miles would need expanding than the length of the high speed rail route between San Francisco and Los Angeles.

(4) Highway construction costs would be well above Federal Highway Administration cost factors for California.

If these exaggerations are corrected, the highway capacity analysis would yield a cost that is a mere fraction of CHSRA's claim.

Airport Expansion

The airport expansion analysis is at least as flawed. CHSRA assumes that the average number of seats on a plane capacity is 70 (though in another document CHSRA shows the average plane capacity at 135). However, much larger short-haul jets are now being introduced that would triple capacity relative to the CHSRA claim.

Further, while the cost of *required* alternate highway and airport capacity is small or virtually non-existent compared to CHSRA claims, users (drivers and airline passengers) pay virtually all of the cost of these expansions through fuel taxes and airport fees and

taxes. In contrast, all of the costs of building the high speed rail system and providing operating subsidies will be paid by taxpayers in general.

Several independent analyses of the costs of alternatives used by the CHSRA have been very critical. The Legislative Analyst pointed out that the CHSRA methodology is flawed and the figure they use is "not what the state would otherwise spend to address the growth in inter-city transportation demand." CHSRA is still using old population growth estimates that indicate more need for future infrastructure than current population trends would indicate. The CHSRA's alternatives cost estimates exaggerate train capacities and frequencies, and the costs of highway construction and need for more airport space. They are so deficient as to be irrelevant to any policy discussion about California's future transportation needs.

GREENHOUSE GAS REDUCTIONS AND USE OF CAP-AND-TRADE REVENUE

The Authority has claimed that HSR would substantially reduce greenhouse gas (GHG) emissions. Hence, Governor Brown and the CHSRA have proposed using "cap-and-trade" revenues under Assembly Bill 32 (the Global Warming Solutions Act) to help finance system construction.

Yet, HSR would likely be an inefficient use of cap-and-trade revenues. The United Nations has estimated that sufficient GHG emission reductions can be achieved at a cost of $20 to $50 per ton. Using CHSRA data, Reason's 2008 *Due Diligence Report* estimated that the cost for GHG emissions removed by HSR would be approximately $1,800 per ton. This estimate was considered conservative since it did not include the GHG emissions that would have been produced in system construction. Meanwhile, the system cost has more than doubled and ridership projections have been scaled back. It is thus likely that an updated estimate of the cost per ton of GHG removed would be considerably higher.

Moreover, research at the University of California, Berkeley concluded that it would take 71 years for high speed rail to save enough GHG emissions to negate the emissions from construction. This is a clear indication that high speed rail is an ineffective means for reducing GHG emissions. As well, claims that the HSR system will further reduce GHG emissions by using electricity generated by greener alternatives (renewable power) are fallacious. Such energy used by HSR would simply displace green energy use by others, resulting in no net reduction in GHG emissions.

Policy makers should consider the Legislative Analyst's Office (LAO) recommendation that "rather than allocate billions of dollars in cap-and-trade auctions revenues for the construction of a new transportation system that would not reduce GHG emissions for many decades, the state could make targeted investments in programs that are actually designed to reduce GHG emissions and would do so at a much faster rate and at a significantly lower cost."

Under these circumstances, the proposal to use cap-and-trade revenues raises considerable doubt about the state's (and Brown Administration's) commitment under the Global Warming Solutions Act (AB 32) to reduce GHGs.

PROPOSITION 1A – WHAT CALIFORNIA VOTERS WERE LED TO BELIEVE

From the beginning, the voters were denied impartial information on the ballot measure, as the legislature dictated the wording in the ballot summary in AB3034 that read like a proponent's argument in favor of the project. In January 2011, a state appeals court ruled that the legislature acted improperly in circumventing the legal requirement for impartial language. Despite the false pretences found by the court, the approval of Proposition 1A was allowed to stand.

Voters were led to believe that Sacramento and San Diego would be included in the system (they are not part of the new "blended plan"); that private investors would participate (legitimate offers of private equity remain elusive); that tickets between Los Angeles and San Francisco would be "about $50 a person" (now it is $81); that ridership would be between 65.5 and 117 million annually (now it is a range of 19.6 to 31.8 million; that Phase 1 San Francisco-Los Angeles/Anaheim

was projected to cost $35 billion (2011$) (it escalated to between $66 and $76 billion by late 2011 and has since dropped to a range of $53 to $62 billion–but the "savings" are illusory because they result from removing major sections at both ends of the line and not using inflation-adjusted dollars); that operating subsidies will not be required (this report finds a likelihood of $124 to $373 million in annual subsidies); and that the fastest Los Angeles-San Francisco non-stop travel time would be 2:38 (this report estimates a time no faster than 3:50).

The proposed system fails to meet Proposition 1A requirements in numerous ways. Nevertheless, the CHSRA continues with plans that fail to meet statutory requirements and will cost taxpayers billions of dollars more than they were told in their voter pamphlet. The Authority is breaching its obligations to those who voted for Proposition 1A.

What the public voted for in Proposition 1A is not what will be delivered. The LAO found that CHSRA's Draft 2011 *Business Plan* "does not meet the requirements of Proposition 1A." The 2012 *Business Plan* contains the same or similar shortcomings. Hence, the California high speed rail program appears to be vulnerable to a wave of litigation.

A corporation could not unilaterally change what it promised to customers without facing possible prosecution. The view that public agencies should be held to at least as high a standard as applies to businesses is partially behind the campaign to allow voters to reassess the 2008 high speed rail bond issue.

Reconsideration may occur through a new ballot proposition entitled "Stop the $100 Billion High Speed Train Act" that may appear on the November 2014 ballot. If voters approve, the provision would stop all federal, state and local funding for the program, terminate all contracts, and require that unspent proceeds from bond sales be redirected to retire debt incurred from the issuance and sale of the high speed rail bonds.

CONCLUSION

This *Due Diligence Update* concludes that the Authority's 2012 *Business Plan* appears to be no more credible than CHSRA's prior reports. A danger exists that the project will impose many billions of dollars of additional taxation on California taxpayers. This would be a concern in the best of times, but these are more like the worst of times considering California's dismal fiscal condition, budget shortfalls and enormous debt obligations.

Numerous realistic reviews of the Authority's plan and documentation find they come up short. Particularly noteworthy is the review of the plan issued in late 2011 by the senior academic and business professionals associated with the Community Coalition on High Speed Rail, which clarified the general deficiencies of the CHSRA's business plans:

Business Plans in the private sector are produced by men and women who have invested, and will invest, their time, intellectual capital, and normally a tremendous amount of their personal financial capital into making the future venture a success. For private enterprises that have outside shareholders, there is also a group of committed investors who press to maximize efficiency and opportunity for the business. Unfortunately, for an enterprise like High Speed Rail that aspires to be treated like a business but run by the public sector, what is missing is the lack of a strong personal financial stake in turning a profit. Because of this difference, financial commitments become promises; forecasts become guesses, and statement of facts become estimates. This is due to the consultants and managers having "no skin in the game." Given this tremendous difference, elected officials need to take what is told to them, or provided to them in a Business Plan, with a large grain of salt—and to think through . . . the consequences to the State if the [CHSRA] goes ahead but does not meet its proponents' financial assertions and expectations.

Richard Tolmach of the California Rail Foundation was more succinct in his conclusion about the 2012 *Business Plan*, saying, "This time, more than last time, is a sales job. It doesn't have actual facts, but it must have 20 pictures of [rail] boosters and parades."

That is less of a harsh statement than it might at first appear because legislators, particularly in the State Assembly, appear to have bought into what Tolmach called the "sales job." Veteran journalist Dan Walters noted during April 18, 2012 hearings:

This is the largest state public works project in U.S. history, one that would cost tens of billions of dollars and divert money from a deficit-ridden state

budget. Independent reviewers, including the Legislature's own budget analyst, have expressed serious doubts as to its financial viability. The Assembly subcommittee's members, however, treated it just like another routine budget request. Several were downright gushy over the bullet train, unwilling to delve into the very serious questions about its efficacy.

Such an approach by the Assembly appears to fall short of the attention required for such an expensive project, one with significant long-term consequences.

A state Senate Committee has taken a less charitable view and has become frustrated with the Authority's unrelenting advocacy. Again, journalist Dan Walters noted that during an April 18, 2012 Senate budget subcommittee hearing, that Chair Joe Simitian said, "Our job is oversight, not cheerleading."

A project as flawed as the California high speed rail program would be unwise at any time, but is even more so in the present difficult times. The California high speed rail project cannot be delivered at the cost promised to taxpayers, is based upon a business plan incapable of delivering on its legal requirements, and is justified by proponents based upon unachievable benefits. The taxpayers and the state of California would be best served by its immediate cancellation.

ABOUT THE AUTHORS

Wendell Cox is principal of Demographia, a St. Louis region-based public policy firm. He was appointed to three terms on the Los Angeles County Transportation Commission by Mayor Tom Bradley, where he introduced the amendment to Proposition A (1980) that established the local funding set-aside for the Los Angeles light rail and metro lines. He was also appointed to the Amtrak Reform Council by Speaker of the House Newt Gingrich to complete the unexpired term of New Jersey Governor Christine Todd Whitman. There, he was instrumental in forging the final financial self-sufficiency plan that was required by the U.S. Congress.

He has worked on numerous projects in the United States and internationally. Mr. Cox's professional endeavors on urban and intercity transport have the objective of ensuring that riders and taxpayers receive fair value in return for their funding and that scarce public resources are directed to the most beneficial projects and programs.

Mr. Cox is co-author of *The California High Speed Rail Proposal: A Due Diligence Report* published by Reason Foundation in September 2008, which anticipated many of the project's shortcomings that have recently been outlined in other studies.

He is author of the 1997 James Madison Institute evaluation report on the proposed Florida Overland Express high speed rail system, and authored reports on subsequent Florida high speed rail proposals. He is also author of Reason Foundation's *The Tampa to Orlando High Speed Rail Proposal: Taxpayer Risk Assessment*.

His analysis of the proposed Las Vegas Monorail contained accurate ridership projections, in contrast to the project-sponsored "investment grade" projections that were more than double the eventual ridership. His prediction that the Las Vegas system would ultimately be unable to service its bonded indebtedness has now been repeated by Wall Street analysts. His 2000 commentary in the *Apple Daily*, Hong Kong's largest newspaper, argued for vigorous expansion of that urban area's rail system.

He lectures widely and is a frequent op-ed commentary contributor. His regular "newgeography.com" column includes "The Evolving Urban Form" series, consisting of profiles of world urban areas.

He served for nine years as a visiting professor at the Conservatoire National des Arts et Metiers in Paris, where he lectured on transport and demogaphics.

Demographia's "Public Purpose" website (www.publicpurpose.com) was designated twice by the *National Journal* as a "Top Transport Internet Site." Demographia's principal website (Demographia.com) is home of the *Annual Demographia International Housing Affordability Survey*, with metropolitan area data in six nations and Hong Kong and Demographia World Urban Areas, the only annual compendium of population, land area and density data for identified urban areas with more than 500,000 population.

Joseph Vranich has been involved in rail passenger issues for more than 40 years. He has advocated building high speed train systems through public-private partnerships and served as President/CEO of the

High Speed Rail Association in the early 1990s, where he won the Distinguished Service Award. He has testified numerous times before the U.S. Congress on high speed rail and Amtrak—including Amtrak's high-speed Acela program. Early in his career he served as an Amtrak public affairs spokesman.

Mr. Vranich is co-author of *The California High Speed Rail Proposal: A Due Diligence Report* published by Reason Foundation in September 2008, which anticipated many of the project's shortcomings that have recently come into public view.

He has spoken internationally at the invitation of Japan's Ministry of Transport, Japan's Railway Technical Research Institute, European railway suppliers, and addressed a visiting Chinese government delegation in comments that were published in *Vital Speeches*. Also, he has met with the U.S. Department of Transportation, the Office of Management and Budget, and the U.S. General Accountability Office on rail passenger issues and was a U.S. Senate appointee to the Amtrak Reform Council.

He is the author of *Supertrains* (St. Martin's Press, 1991), a book advocating construction of HSR systems in the U.S. His second work, *Derailed: What Went Wrong and What to do About America's Passenger Trains* (St. Martin's, 1997), recommended creation of public-private partnerships and competitive franchising. His most recent book, *End of the Line: The Failure of Amtrak Reform* and the *Future of America's Passenger Trains* (AEI Press, 2004), outlined how Amtrak failed to comply with reform laws; it also detailed development of Amtrak's high speed Acela trains and examined railway reforms in 55 nations.

He has addressed rail issues on many TV and radio programs, including the CBS Evening News, CNN News, CSPAN and National Public Radio. His work has been featured in *The New York Times, Newsweek and Railway Gazette International* and his commentaries have appeared in *The Wall Street Journal, Washington Post, Chicago Tribune, Orange County Register* and many other publications.

RELATED REASON PUBLICATIONS

The XpressWest High speed rail Line from Victorville to Las Vegas: A Taxpayer Risk Analysis, Wendell Cox and Adrian Moore, August 16, 2012

The Tampa to Orlando High Speed Rail Project:A Florida taxpayer risk assessment, Wendell Cox and Robert Poole, January 6, 2011.

California High Speed Rail Findings at a Glance, Analyzing the impacts of the state's proposed train system, September 18, 2008.

The California High Speed Rail Proposal: A Due Diligence Report, Policy Study 370, Joseph Vranich, Wendell Cox and Adrian Moore, September 1, 2008.

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For media inquiries, contact Chris Mitchell, Director of Communications at (310) 367-6109 or chris.mitchell@reason.org