Written Statement of
Mr. Roelof VanArk, Chief Executive Officer,
California High-Speed Rail Authority
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Chairman Mica, Ranking Member Rahall and members of the Committee: It is my pleasure to appear before you today on behalf of the California High-Speed Rail Authority to discuss one of the most important transportation initiatives in recent history.

Beginning 30 years ago, the people of California envisioned a high speed rail network that would tie our large and diverse state together. More than 10 years ago, our Legislature created a California High Speed Rail Authority to begin the process of planning and developing such a system. Three years ago, the voters of our State breathed life into this vision by enacting a $10 billion bond measure for High Speed Rail. Two years ago, President Obama declared that high speed rail was a matter of national importance and funds were appropriated by the Congress to support the development of such a system. One month ago, the California High Speed Rail Authority produced a draft business plan that lays out a clear, realistic path to how such an enormous program could be carried out, over the course of the next generation. And one year from now, we can be under construction on the first true high speed rail project in America, a project employing 100,000 people and spawning a whole new industry for our state and nation.

On November 1, 2011 I stood with other Board members to unveil the 2012 draft Business Plan that would take us from planning to implementation of the largest public-private partnership in the history of the United States. In doing so, we unveiled a plan that reflected the hard financial realities of funding a long-term transportation infrastructure project whose benefits would inure to future generations. Within the context of the economic and budgetary constraints operative at all levels of government this proposal is as bold as it is necessary.

The Authority has not flinched in meeting its fiduciary responsibilities to the taxpayers of California and the Nation nor has it wavered in its commitment to provide future generations with the tools it will need to meet the demands of an expanding population. By employing realistic economic assumptions and conservative ridership and revenue projections, built in contingencies, extended schedules, higher than anticipated inflationary increases, and recognition that composite prices would be driven upward by expanding demand, the transparency and honesty which forms the foundation of this Business Plan has been lauded in quarters that were unexpected. And although misinformation, disinformation, and coordinated attacks reflect opposition more to the boldness and bigness of the vision than to the actual

substance of the proposal, the Authority and its members remain dedicated and committed to the long-term benefits that far outweigh either the short- or long-term costs.

Why is High-Speed Rail needed?

High-speed rail (HSR) is an investment predicated upon two key factors:

The recognition that continued growth will require major investments in expanded transportation systems over the coming decades; and,

The economic and environmental case that high-speed rail will meet those demands more effectively and efficiently than the alternatives.

Today, congestion on California roads results in $18.7 billion annually in lost time and wasted fuel. Over the next 30-40 years California is projected to add the equivalent of the current population of the state of New York. Approximately one in four flights between Los Angeles and San Francisco--the busiest air corridor in the country—is late by an hour or more, representing the most delayed flights in the country. The question is not *if* investments to meet growing demand are to be made, but rather *how* investments will be made that will reap the greatest benefits, or return on that investment.

If we continue to follow the antiquated infrastructure of building more lanes of freeways and increasing airport capacity (even where it is feasible), expenditures could exceed $170 billion over the next 20 years, compared to the conservative estimate for building Phase 1 which will connect Los Angeles/Anaheim with San Francisco over the same time frame of $98 billion. The environmental benefits of building high-speed rail include saving 3 million tons of carbon dioxide annually, reducing 146 million hours lost in traffic congestion annually, and traveling 8 billion vehicle miles less annually. Put in another context, the enhanced quality of life derived from building HSR are considerable indeed.

And California does not only benefit in the long-term, there are significant short-term benefits as well. Over the next five years HSR will create 100,000 jobs in the Central Valley. Eventually over one million jobs will be created. Thus, HSR is a job generator in both the short-term and the long-term.

What exactly is being proposed?

While building the entire system will take longer and cost more than previously estimated, the initial operating section can be in place within 10 years, generating positive cash flows, carrying millions of riders, and serving as a launch pad for private sector participation. There are two keys to cost-effective and timely implementation of a statewide high-speed rail system:

Dividing the program into a series of smaller, discrete projects that build upon each other but also can stand alone to provide viable high-speed rail service; and

Making advance investments in regional and local rail systems to leverage existing infrastructure and benefit travelers by providing interconnecting "blended" services.

We have identified funding for the initial construction section and are moving forward with construction commencing in the fall of 2012. But let us be clear that the decision to move ahead with the initial step does not commit the state to proceeding with the full program. By building the project in phases, work can be matched to available funding. For instance, our Business Plan does not anticipate additional Federal funding for the next three years. But each segment can be delivered through business models that transfer design, construction, cost, and schedule risks to the private sector and maximize efficiency by capturing the advantages of private-sector innovation. It is truly the essence of a successful private-public partnership.

How will the system be built?

Phased implementation of the system means there will be several critical decision points. Once again, no discrete segment will be started until the necessary funding has been identified. The first critical decision point will be the construction of a 130-mile "backbone" connecting just north of Fresno to just north of Bakersfield in the Central Valley. Construction will commence in 2012 and finish by 2017 and the cost of this initial construction section will be $6 billion.

Many criticisms have been leveled at beginning in the Central Valley; however there are sound technical and economic reasons for starting there. First, needed right-of-way in the state's fastest growing region could be secured before land values increase further. Second, building through the Central Valley is required for high speed rail in the State and this section is further along and there are significant employment needs in the Valley. Third, we can build more track miles with each available dollar in the Central Valley. Lastly, building there and expanding north and south is consistent with building of international systems. It makes good sense to build off of proven successes.

The second critical decision point will be construction with the first of two operating segments, either north of Fresno or south of Bakersfield. If the southern option is chosen first, it will cover 300 miles at a cost of $27.2 billion, and construction will commence in 2015 and finish by 2021. It will connect Merced with the San Fernando Valley and it is at this point that private sector involvement in the system changes from design build contracts to long term concessions with financial participation.

Much has been said about the $98 billion, 20 year program. However, this is a program of many phased, operationally self-sufficient projects—exactly the way that high-speed rail has been built throughout Europe and Asia. In less than a decade, this Initial Operating Section will allow the State of California and the U.S. to have a completed, operationally self-sufficient high speed rail link that connects the growing Central Valley of California, home to more than 4 million people, to Los Angeles or the San Francisco Bay Area. Given the current funding for the ICS and the additional funding available through Proposition 1A, we need approximately $20 to $21 billion from the federal government over the next 6-7 years to make this happen. With continued partnership between the State and Federal government, we believe this is a vision and schedule that can make high-speed rail real in the U.S. in the very near future.

The third critical decision point will be construction of the other operating segment, in this case the northern section which will connect the San Fernando Valley with San Jose, essentially connecting the San Francisco Bay with the Los Angeles Basin. This operating segment will be 290 miles long, will cost $21.1 billion, construction will start in 2021 and finish in 2026.

The fourth decision point will involve the implementation of additional rail-transit improvements in the Los Angeles basin and the San Francisco Bay area, including electrification of existing rail systems, to create "blended operations" with high-speed rail, creating a "one-seat" ride from San Francisco to Los Angeles/Anaheim. The cost of the "Blended" stage will be $23.9 billion; construction will begin in 2026 and be completed by 2030. I should point out that in fact we will begin making early investments in these systems immediately, using the nearly $1 billion of our state bond funds that were slated for interconnectivity.

At this point, the total cost of the system will be $78.2 billion, and additional decisions will be made related to further build out of infrastructure for fully completing Phase 1. With the completion of Phase 1 the anticipated private-sector infusion will be between $11 - 20 billion. Once again, these are fairly conservative estimates and costs are expected to be lower. But when subtracting out the private

dollars, the total taxpayer funded costs of the Phase 1 Blended system would be slightly over $67 billion. In 18 years you will have the ability to ride from Los Angeles to San Francisco in three hours at a cost of approximately $81 in 2010 dollars. The ticket prices are expected to be about 83 percent of an average airline ticket, which will vary according to when you purchase the ticket and when you travel.

The fifth critical decision point involves either fully completing Phase 1 with dedicated track, at a cost of an additional $19.9 billion with a completion date of 2033, or commencing with construction of Phase 2, connecting San Diego at the southern end and Sacramento at the Northeastern terminus, hence completing the 800 mile project. Specific cost estimates and construction schedules for the Phase 2 extensions have not yet been developed.

What Are "Blended Operations"?

The blended system utilizes existing rail systems within the context of the statewide system. By sharing services considerable costs can be avoided, particularly since these services are utilized in the high-cost sections of the system, i.e. densely populated urban areas in San Francisco and Los Angeles. The commitment to a blended system is the result of extensive cooperative planning among state, regional, and local partners and is the product of extensive comments and suggestions from local communities and their leaders.

Initially, passengers arriving in San Jose or the southern terminus in the San Fernando Valley would seamlessly connect with Caltrain or Metrolink services. Sacramento passengers would experience similar benefits by connecting to Amtrak's San Joaquin service at Merced. Eventually, as further improvements to existing systems are made, transfers would not be necessary, thereby effectuating a "one-seat ride" concept. By employing blended services we could have in place a blended "one-seat ride' system by 2030, fully three years ahead of the fully built out Phase I construction schedule and at a cost savings of $20 billion.

Early investment in these improvements, such as grade-crossing eliminations and additional tracks, have independent utility that will benefit not only the high-speed rail system but also riders using these systems prior to connection with the high-speed system. The blended operations proposal is a significant improvement over previous planning scenarios and truly reflects the Authority's commitment to extensive cooperation and coordination with local communities and further underscores the importance of its continuing public outreach activities.

Why do we need this now?

The real question facing California and Californians is not *if* we spend public resources on infrastructure needs, but rather *how*. We can either continue to expend precious State dollars on the continuation of an antiquated infrastructure paradigm designed for the mid-twentieth century or we can accept the challenge to plan for and participate in the twenty-first century economy, a reality that is not off in the future but is here today. An increasingly globalized economy places a premium upon anticipating and planning for trends. There is good reason why twenty-four countries around the globe either already have or are in the process of planning high-speed rail systems. And Californians accepted this challenge to participate in the twenty-first century economy in 2008 with the passage of Proposition 1A.

This, by the way, should come as no surprise. Today, there are 50,000 miles of California freeways and highways that began with an initial $18 million bond issuance in 1909. From its designation as a key highway in 1947, Interstate 5 was not completed until 1979 and serves as the "backbone" of the state's highway system. So California and its citizens have a long history of a willingness to spearhead far-reaching and long-term projects.

Despite the current economic recession California population continues to grow and will continue to grow into the future. Over the next 30-40 years it is expected to add the equivalent of the current population of New York. The infrastructure demands this growth will visit upon our policy makers and governmental institutions and residents will be extensive and profound. We can either meet these needs by constructing additional lanes of highways and by increasing airport capacity, further degrading the environment and at an exorbitant cost or we can invest in a statewide transportation network that will connect the Northern and Southern regions of the state at lesser cost, with far greater economic benefits, and in an environmentally sensitive fashion.

But let us put numbers to these propositions. In order to accommodate even a conservative estimate of economic growth over the next two decades it is projected that building equivalent capacity for conducting "business as usual" would require constructing the 2,300 miles of additional highways, 115 new airport gates, and 4 new airport runways that would be needed would require an expenditure of $171 billion. Building high-speed rail under the "blended operations" scenario already described is projected to cost $78.2 billion over the same time period.

Construction of high-speed rail in California will also result in as yet uncalculated economic benefits from "transit-oriented development", that is the multiplier effects of development around the stations

and transportation hubs that will accompany construction of the system. This has happened all around the world and will happen here as well. Based on international experience, it is possible to conclude that high-speed rail will lead to greater and more rapid capture of regional development projections around stations, as well as premiums for land value, employment and local taxes. The following changes can be expected:

- HSR stations can accelerate planned development, attract additional development, increase commercial and employment densities, and enhance property value around stations.
- The majority of development will occur at selected major downtown stations and in cities close to these hubs.
- Central Valley cities will attract less total development than major metropolitan stations, but can capitalize on advantages from lower land and labor costs so new manufacturing, recreational, tourism, residential development, and back office uses will be especially suitable.

In the short-term, construction of HSR will create 100,000 jobs over the next five years, with most of these jobs created in the economically strapped Central Valley where unemployment is considerably higher than in other areas of the state. Over the next twenty years construction of Phase 1 of HSR will create in excess of one million jobs, with 4,500 permanent operations jobs and between 100,000-450,000 new non-HSR permanent jobs created by 2040. Quite simply, HSR is a jobs generator in both the short- and long-term.

From an environmental perspective the benefits of HSR versus continuing reliance upon automobiles and aviation is compelling. Over the next 40 years Californians will see a significant reduction in traffic congestion with a reduction of 320 billion vehicle miles traveled. Each year Californians will experience 146 million hours saved from sitting in traffic, time which can be spent either more productive from the standpoint of worker productivity or quality of life enhancements. The reduction in greenhouse gas emissions from tailpipes is expected to be 3 million tons annually or 120 million tons over the next forty years.

Further complicating the business as usual alternative is the fact that in many instances expanding airport facilities, especially accommodating additional runways is not a feasible option. The Los Angeles-San Francisco corridor is the most heavily traveled airway segment in the nation, with constant delays. Aviation officials have expressed a desire to shed short-haul flights and concentrate on long-haul routes that are more profitable, hence making HSR a complimentary addition to the intermodal mosaic that comprises California's transportation system.

Does it make money?

One of the most serious criticisms leveled at HSR is whether or not the system will indeed attract private sector investment. Unless it operates at a profit, it will not attract private sector investment. In examining international models and through careful construction of the Business Plan utilizing a bona fide business model we have presented a draft plan that *will not* require an operating subsidy and *will* produce net operating profits. There has been substantial expression of interest from the private sector in HSR and the project is truly a private-public partnership in every sense of the term.

The business model employed in this Business Plan proceeds from five fundamental assumptions:

First, this is not a public works project, nor is it fully privatized, it is truly a partnership.

Second, this partnership will evolve as the system is developed moving from service and construction contracts to complex concession agreements with underlying private capital investment.

Third, competition in procurement is one of the strongest drivers of value and cost management available to the state, and the project will promote national and international competition.

Fourth, the system and its key components will be built in the United States. Employment and manufacturing will be focused in California and the U.S.

Lastly, successful establishment of required intergovernmental agreements will promote private-sector confidence that translates into additional value and reduced costs when the public sector negotiates private-sector agreements.

The project will not experience private capital infusion until the first operating segment is completed, in 2021. However, based on proven experience in other parts of the world, we believe that a conservative assumption that $11 billion in private capital will be available to offset costs of the HSR system at that time is just that, conservative, and could be greater.

The key to generating operating profits are founded on confidence and reliance upon projections on ridership. Previous criticisms leveled at ridership projections have been heeded and the Authority convened a panel of international experts in travel forecasting to examine and guide an extensive evaluation of potential ridership scenarios. The Ridership Peer Review Panel's work validated the integrity of present forecasting and establishes the current model system as a reliable and valuable tool for the state in its assessment of the HSR program.

The assumptions underlying this model are realistic, credible, transparent, and in many cases, and conservative. The process rendered three ridership and revenue scenarios based on varying assumptions of population growth, trip-making patterns, driving costs/gas prices and airfares. To illustrate the conservative nature of the assumptions an average gasoline price of $3.80 per gallon was used, despite much higher estimates from other forecasts. Obviously, higher gasoline prices would encourage greater ridership, so using lower cost assumptions lowers ridership projections. Similarly, the Panel assumed population growth rates lower than state Department of Finance estimates. Lower population rates also work to lower ridership estimates.

In short, strategically targeted conservative driving cost, airfare, and other assumptions create safeguards and the goal was to use approaches, methodologies, scenarios, and assumptions that improve the level of confidence and reduce financial risks.

HSR will produce net operating profits from the initial year of construction regardless of the initial operating segment first constructed (North or South). However, due to greater ridership in the southern segment net operating profits are expected to be higher for the system in the early years. For instance, using the medium ridership assumptions net operating profit in 2025 if the southern segment is constructed first would be $464 million, and if the northern segment is constructed first the net operating profit would be $285 million. Over the lifetime of the project, however, these projections even out.

**What is important to this discussion is that no operating subsidy will be required for the initial operating segment north or south under high, medium, or low ridership assumptions and this is consistent with the results of other high-speed projects across the world. Equally important is that under a breakeven analysis projected ridership could fall 59 percent lower than the high forecast in year one and still maintain a positive cash flow. In 2026 the difference is more dramatic, with projections showing that ridership could fall 83 percent below the high ridership projection and still produce a positive cash flow.**

In summary, the HSR network is forecast to produce a net operating profit immediately following commencement of operations, even under a low revenue scenario. Breakeven revenues for the IOS-North and IOS-South are estimated at $267 million and $218 million in 2022, respectively which is 35 percent and 41 percent below the first year high estimate and 5 percent and 29 percent below the low estimate, respectively. Private-sector development and operation of the system is expected from the outset of construction and operations. Private-sector investment in anticipated once revenues are proven through completion of the Initial Operating Segment, and is a potential option to fund the final several years of construction under the Bay to Basin section if a private-public partnership structure is introduced at that time.

On the basis of such a private-sector transaction, the federal government funding requirements will be reduced significantly to represent approximately **61** percent of the total funding to achieve Bay to Basin connectivity. This represents a considerable deviation from traditional major transportation infrastructure projects that require anywhere from **80-90** percent federal funding.

Do the benefits outweigh the costs?

Under standard benefit-cost analysis methodology the answer is a resounding yes. The investment in the Phase 1 HSR system yields a return on investment—in terms of benefits—that exceed the costs by 57 to 78 percent. This represents a substantial positive financial investment for California and Californians. These are times that test our resolve, yet our collective responsibilities to our State and

our Nation make it imperative that we make sound, prudent and wise economic decisions that give us the best bang for the buck. High-speed rail is such an investment.

Let me close by saying that California High Speed Rail makes sense, economically and from a transportation policy standpoint. It represents a new paradigm of partnership with the private sector, it is based on a favorable split of federal and state funding, it will provide the first test of truly high technology, high speed rail in the U.S. and we know how to build it. We look forward to working with the Congress and our partners at DOT and FRA.

And California is the right place for High Speed Rail for another reason. As Governor Jerry Brown said recently:

> **"This is a place where people found gold, where people created the movie industry, where Facebook and Apple were founded. People come to California to do not what's already been done, but to create what hasn't happened yet"**

**Thank you.**