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MEMORANDUM FOR Chair, California High-Speed Rail Authority (the Authority)

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SUBJECT: Recommendations for Improving California High-speed Rail Project

This memorandum recommends alternatives for three persistent challenges facing the California High-Speed Rail (CAHSR) project. First, to address delays in rights-of-way acquisition, particularly interfering with public utilities, the Authority is recommended to strengthen cooperation with relevant agencies and pursue legislative solutions to expedite processes. Second, to build public trust, the Authority should conduct a transparent route decision process, including public hearings and sharing international case studies. Lastly, to induce long-term ridership, the Authority is recommended to integrate seamlessly with local transit systems through coordinated fare structures, including partnerships with ride-share and micromobility companies to enhance first- and last-mile connectivity.

1. Background

CAHSR is a state-led initiative to construct the first true high-speed rail system in the United States, designed to connect major regions across California, including San Francisco and Los Angeles. The system is being developed in two phases: Phase 1 is now under construction, which plans to link San Francisco to Los Angeles and Anaheim via the Central Valley, covering approximately 494 miles, and Phase 2 proposes future extensions north to Sacramento and south to San Diego, expanding the network to a total of 800 miles with up to 24 stations (Exhibit 1). Despite progress, Tom Richards, Chair of the Authority, pointed out the astonishing cost of moving various public utilities as one of three persistent challenges in a press statement on April 1, 2025[1]. Additionally, the public is still skeptical about route alignment and the business plan and unsure if ridership projections are exaggerated.

2. Recommendations

a. Cooperation with other authorities for stable acquisition of rights-of-way

It is recommended that the Authority implement more proactive partnerships with local governments, utility owners, and other relevant authorities, potentially backed by legislative measures to expedite the necessary acquisition of rights-of-way, particularly with regard to public utilities. In 2010, "the acquisition of rights-of-way was expected to account for over 7% of the

[1] Nazaryan, A. (2025, April 1). After a slow start, high-speed rail might finally arrive in America. *The New York Times*.

estimated $33.6 billion project cost for the San Francisco-to-Los Angeles/Anaheim segment (Christian et al., 2010)." However, associated costs are expected to increase steadily over time involving rights-of-way negotiations with public utilities. Thus, the Authority should be given authorization to proceed with "necessary designs and utility relocations" if third parties are nonresponsive after a specific period. Cooperating with State Senator Scott Wiener to introduce a bill (SB 445) requiring third parties like utilities to quickly respond to communications from sustainable transportation projects, including high-speed rail[2] would also be helpful.

b. Establishing Public Consensus for Route Alignment

It is recommended that the Authority convene public hearings that transparently present both successful and unsuccessful route decisions, explaining that this is the result of the efforts to minimize right-of-way acquisition by sharing existing corridors, and how community impacts were managed or mitigated.

If the regional examples do not provide sufficient insight, sharing international cases would also be helpful. For example, South Korea's high-speed rail route offers a cautionary tale. Due to political considerations, the Korean government complex in Sejong City—despite being a location with high travel demand—is located 30 minutes by car from the nearest high-speed rail station[3]. Although some politicians proposed building a new station closer to the center of Sejong City, the residents of surrounding areas have opposed it. Meanwhile, the brand-new Muan Airport, which has a very low passenger volume, is directly connected to the high-speed rail network. The Korean case would be helpful for the public to understand that while route decisions for CAHSR may not be perfect, those driven by political motivations can lead to irreversible and wasteful consequences.

In contrast, the Authority may refer to recent research showing that "Central high-speed rail new towns demonstrate a more considerable driving effect on the urban sustainable development compared to peripheral ones in China (Zou et al, 2024)," or "The demand growth rates are promising for this transport technology when the population density is high enough (Campos & Rus, 2009)," stating that route decisions must be seen not as a burden, but as an opportunity to stimulate long-term sustainability. Since the Authority has a responsibility to prevent those through transparent information, this would be the starting point for rights-of-way acquisition, and consequently help justify budget procurement.

c. Increasing Ridership Through Seamless Transit Integration

It is recommended that the Authority make an effort to collaborate with the public and private transit sectors to enhance ridership of CAHSR. AB 3034 mandates that each segment provide "independent utility"—defined as the ability to operate without state subsidies (Christian, 2010). This underscores the need for every station to serve not just as a node, but as a fully connected multimodal hub that attracts sufficient passenger volume to sustain operations.

However, the current demand forecasts of CAHSR fails to account for multimodal transportation patterns and primarily focuses on which travel modes—such as cars or flights—will

[2] Nieves, A. (2025, Feb 21). California watchdog says high-speed rail on track to blow more deadlines. *Politico*.
[3] https://www.joongang.co.kr/article/23830276

be substituted. This approach does not accurately reflect the growing trend of travelers combining multimodal transport, potentially reducing the accuracy of future projections. Furthermore, from a sustainability standpoint, it is essential to encourage integrated multimodal systems that connect high-speed rail with local transit and other complementary mobility options. One of the most pressing barriers to ridership in existing regional rail systems like Caltrain (Exhibit 2) and Metrolink is the lack of station access[4] also known as first- and last-mile connectivity, which is the most critical point of comparison with high-speed rail systems in Europe and East Asia. Despite the introduction of micromobility—18% of riders used bikes or scooters in 2024[5] —many Caltrain riders still face challenges without their cars due to inconsistent multimodal planning. CAHSR risks repeating these patterns, potentially validating criticisms that the system is a "train to nowhere (Christian, 2010)." To avoid this, the Authority should review integrated fare systems and first- and last-mile partnerships with feeder services such as bus and taxi authorities, ride-share providers (Uber, Lyft), or micromobility companies, while also working with local agencies to deploy on-demand shuttles.

3. Conclusion

As many critics pointed out, the CAHSR project depends on three aspects: securing rights-of-way through cooperative frameworks and legislative support, building public consensus through transparent route decisions, and maximizing ridership via seamless integration with multimodal transit systems. These efforts will not only streamline construction and reduce project costs but also ensure that the system operates efficiently and sustainably in the long term.

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[4] Individuals use a number of modes of transport to complete their journey to and from Caltrain stations: they are pedestrians, ride a bicycle, use shared micromobility, drive, are dropped off, take a bus or train operated by another agency, or in many cases combine various modes of transport (CC&G, 2024).

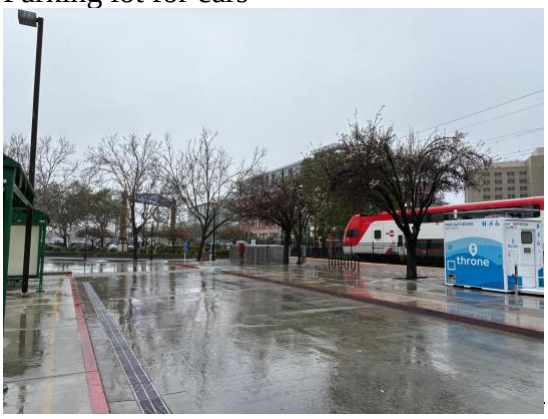
[5] While 18% of respondents have a bike or scooter, 16% bring them on board while 2% leave them at the station (Caltrain Citizen Advisory Committee, 2024).

Exhibit 1. Proposed high-speed rail connecting northern and southern California.

Source: https://hsr.ca.gov/high-speed-rail-in-california/overview/

Exhibit 2. Caltrain Station supported by Multimodal Transport (car, bus, and micromobility) (Redwood Station, March 2025)

Parking lot for cars



E-scooter

Bus stop