CALIFORNIA High-Speed Rail Authority

PUBLIC SUMMARY: REQUEST FOR EXPRESSIONS OF INTEREST FOR THE DELIVERY OF OPERATING SEGMENTS

CALIFORNIA
High-Speed Rail Authority

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The Tule River Viaduct will take high-speed trains over State Route 43, the BNSF freight line, and the Tule River in Tulare County.

Table of Contents

Mission: The California High-Speed Rail Authority (Authority) is responsible for planning, designing, building, and operating the first high-speed rail system in the nation. California high-speed rail will connect the megaregions of the state, contribute to economic development and a cleaner environment, create jobs, and preserve agricultural and protected lands.

Introduction

The California High-Speed Rail Authority (CHSRA or "the Authority") is committed to delivering the nation's first true high-speed rail system, a transformative investment for the state. To inform its delivery strategy, the Authority is continuously engaged in consultation with industry.

On June 26, 2025, the Authority released a ***Request for Expressions of Interest (RFEI)*** to seek detailed feedback from industry participants on commercial, financial, and technical aspects of upcoming procurements and explore the potential benefits of alternative delivery models.

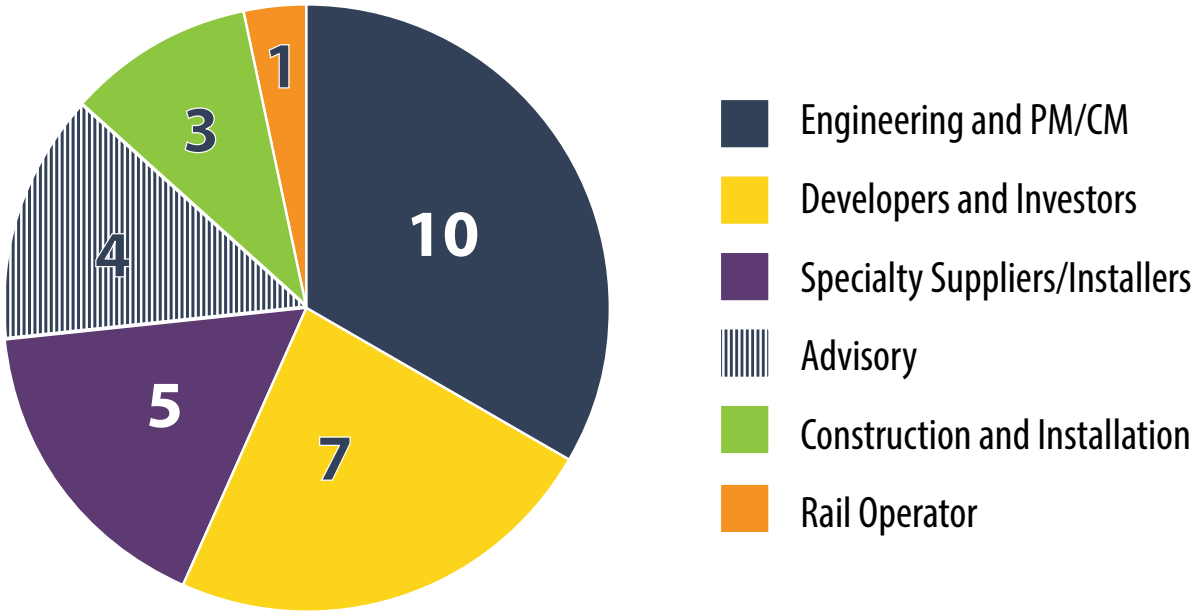
This public report provides information on the respondents, their industry sub-sectors, and key themes from the 30 Expressions of Interest (EOIs) submitted to the Authority. These themes highlight points consistently emphasized by the respondents in alignment with the Authority's objectives of efficient delivery, attracting investment, and streamlining processes.

Overview of Respondents

The 30 respondents represented several areas of expertise, as described below.

- **Engineering and PM/CM:** Firms specializing in engineering, program management, and construction management.
- **Developers and Investors:** Companies interested in financing and developing the project. Their responses focus on commercial, financial, and (in some cases) technical aspects.
- **Specialty Suppliers/Installers:** Suppliers of specific components like power systems or communications technology. They address technical aspects and provide perspectives related to the delivery of their specialty components.
- **Advisory:** Consultants offering financial, commercial, strategic, and management advisory services and providing perspectives on infrastructure delivery strategy, funding, financing, and program management.
- **Construction and Installation:** Contractors specializing in specific construction and installation activities. Their input focuses on practical delivery and technical feasibility.
- **Rail Operators:** Companies with experience operating high-speed rail systems. They offer insights into service delivery and lifecycle considerations.

Exhibit 1: 30 RFEI Respondents by Area of Expertise



2025 RFEI Respondents

- Accenture
- ACS Infrastructure Development & FlatironDragados Constructors
- Alvarez & Marsal Infrastructure & Capital Projects LLC
- AtkinsRéalis USA Inc.
- CohnReznick Advisory, LLC
- Colas Rail Inc. & RailWorks Track Services LLC
- Copasa Group
- Cordoba Corporation
- Fengate Capital Management Ltd.
- FS Italian Railways USA
- Hatch
- Hill International, Inc.
- Hitachi Energy USA Inc.
- Hitachi Rail Limited and LK Comstock
- Ineco
- Jacobs
- John Laing Limited
- Kiewit, Stacy Witbeck, Herzog JV
- Luster National, Inc.
- Meridiam Infrastructure North America
- Parsons Transportation Group Inc.
- Plenary Americas & CDPQ Infra
- Powertrunk, Inc.
- PCM RAILONE AG
- Reed M. Benet*
- Sacyr Infrastructure USA LLC
- SENER Engineering and Systems, Inc.
- Syneox Rail
- Turner & Townsend
- United Engineering and Construction Management
- Vinci Railways

*** Deemed not responsive**

Key Themes

In analyzing the responses against the Authority's core objectives of efficient delivery, attracting investment, and streamlined processes and procurement, several key themes and common recommendations emerged across the population of respondents.

Efficient Delivery

- **Systems Integration and Interface Risks:** Respondents recommend transferring complex integration and interface risks inherent to HSR projects to the private sector, ideally under a single private entity responsible for integrating civil work, rolling stock, track, and systems to mitigate the risks stemming from the fragmentation of the current delivery strategy.
- **Collaboration and Early Contractor/ Supplier Involvement:** Considering the project's complex integration needs, early private sector involvement and collaborative delivery models, particularly Pre-Development Agreements (PDAs), are broadly supported by respondents as a mechanism to jointly optimize the project by allowing for early contractor, supplier, and developer inputs to align the Authority's objectives with the industry's capabilities and mitigate risks. However, this approach includes challenges such as cost uncertainty, competitive tension, and increased complexity.
- **Phased Implementation:** Phased implementation, defined by the Authority as incrementally delivering portions of the system to strategically enable faster deployment and integration, is of strategic importance and offers significant advantages in accelerating delivery, managing risks, fostering flexibility, and enhancing market competition; yet respondents also expressed concerns regarding the potential for increased integration and interface risks in defining the phasing and potential hindrances to whole-life optimization if not planned and managed cohesively.
- **Advanced Purchasing Strategy:** Advanced purchasing of long-lead time items, including rolling stock, can offer significant benefits by accelerating project schedules and securing competitive pricing upfront. However, this approach can limit contractor/supplier flexibility, innovation, and whole-life cost optimization, and it can increase interface risks when executed outside an integrated design process.
- **Standardization and Modularization:** Using standardized designs and specifications, open and well-established standards for systems, pre-engineered components, and modular construction techniques offers significant benefits in accelerating delivery, reducing costs, and improving project quality across the entire program, as long as these strategies do not limit flexibility and innovation.

Attracting Investment

- **Long-Term Funding and Revenue Streams:** Almost all respondents — and all Developers — expressed concerns over quantum and the volatility of Cap-and-Trade revenues, emphasizing the need for long-term, stable, and predictable revenue streams to attract private investment and support program financing.
- **Public-Private Partnerships (P3s):** P3s, particularly Design-Build-Finance-Maintain (DBFM) or Design-Build-Finance-Operate-Maintain (DBFOM) models with Availability Payments (APs), are supported by the majority of respondents due to their ability to accelerate delivery, optimize lifecycle costs, transfer risks, and attract private capital, with core rail infrastructure and complex extensions considered the most appropriate scopes for this integrated approach.

Streamlined Processes and Procurement

- **Standardized Contracts and Procurement Procedures:** By combining standardized procedures and contract structures with open and timely market communication and adequate lead time, the Authority can create a more efficient, transparent, and predictable procurement environment, attracting a broader pool of qualified bidders.
- **Clear Roles and Responsibilities:** Respondents consistently emphasized that clearly defined roles, responsibilities, and decision-making authority for all project stakeholders are essential for managing the complexity of high-speed rail projects, mitigating risks, avoiding delays, and achieving efficient delivery.

Summary of Responses

The following summaries represent the output of a question-by-question analysis of RFEI responses. These summaries detail respondents' feedback to each commercial, financial, and technical RFEI question and illustrate common themes by question. The questions can be found on Pages 19 and 20 of the ***Request for Expressions of Interest (RFEI)***

- **P3 Benefits/Preparedness (Q1):** Respondents strongly agree on the benefits of P3s for risk transfer, lifecycle cost optimization, and access to private capital. Recommendations include securing long-term, stable funding, adopting AP structures, and clearly defining scope and risk allocation. A robust procurement process and early communication and engagement with the industry are also emphasized.
- **Co-Development/PDA (Q2):** Recommendations include clear roles, milestone-based compensation, open-book transparency, and phased approaches with defined exit strategies. PDAs are considered best suited for complex, large-scale projects like track and systems, large-scale civil work, and extensions beyond the Central Valley.
- **Current Delivery Strategy (Q3) and Integration/Interface Risks (Q4):** Respondents acknowledged the substantial interface and integration risks inherent to high-speed rail projects. They raised concerns about the current fragmented approach, which may

increase these risks for the Authority and limit opportunities for innovation and whole-life cost optimization. Respondents recommend a greater level of integration and transferring technology integration, interface coordination, testing, and commissioning to a single private party (under a bundled procurement, a P3 contract, or to a systems integrator).

- **Scope Bundles (Q5):** Respondents generally agree that large-scale, complex components requiring significant planning, design, and integration, such as track and systems (signaling, communications, traction power), are best bundled and well suited for a P3 framework. While there is a consensus that a separate trainset procurement offers strong benefits, some respondents stressed that trainset integration should be allocated to a single private party within a broader scope. Several respondents identified extensions beyond the 119-mile Central Valley segment as well as long tunnels such as Pacheco Pass and Tehachapi Tunnels as suitable for P3 delivery. These large-scale civil works can benefit from the integrated design, construction, and long-term maintenance focus of a P3 model, which can help manage inherent complexities and risks. Renewable power generation, full station development, ancillary revenue opportunities, and transit-oriented development are generally seen as separate from the core P3, with varying suggestions for their delivery, including standalone P3 delivery.
- **Contract Term (Q6):** Longer-term contracts (30 to 60 years) are generally preferred for lifecycle cost optimization, effective risk transfer, and financing feasibility, aligning asset life, maintenance cycles, and financing terms.
- **Contract Size (Q7):** Contract values in the $2 billion to $4 billion range were deemed feasible, balancing project complexity and market capacity considerations. Larger contracts offer economies of scale but could limit competition due to contractor bonding capacity and the need for large joint ventures. Strategies like multi-prime delivery and phased approaches are suggested to mitigate such limitations.
- **Teaming and Competition (Q8):** Larger contract packages can either expand or limit teaming capabilities and competition, depending on how they are structured. Larger, more integrated scopes can expand teaming capabilities by requiring a broader range of complementary expertise within a consortium. While larger contracts might reduce the number of primary bidders, clear scope definition and risk allocation can attract strong competition, including international firms. Conversely, an expanded scope may limit teaming flexibility if the scope definition forces partnerships among very different (i.e., not complementary) firms. Clear and early market communications, project phasing, co-development, and tiered participation are suggested strategies to maintain competitive tension and encourage participation from smaller firms in larger procurements. Some advocate early teaming while others caution against locking in key suppliers too early.
- **Financing Considerations (Q9):** Financing is feasible with sufficient funding certainty and appropriate risk allocation, particularly under an AP structure. Federal credit support programs and state guarantees should be explored as part of any financing solution.

- **Existing Funding (Q10):** Changes to Cap-and-Trade were unanimously recommended, with suggestions for a statutory floor, dedicated fund, state backstop, or state-backed bonds. The expected term of the funding stream should align with the contract term to support private financing. Ancillary revenue streams, while beneficial for the program, are not considered creditworthy sources of funds to raise financing at this stage. (Note: In September the Legislature reauthorized the Cap-and-Invest program and committed $1 billion for the project annually through 2045, the largest guaranteed infusion of funding for California's high-speed rail program to date.)
- **Availability Payment (AP) vs. Revenue Concession (Q11):** APs are strongly favored for initial phases due to ridership and revenue uncertainties. Hybrid models or revenue concessions might be considered in later phases when travel patterns are established.
- **Cost/Schedule Reduction (Q12):** Collaborative delivery models with phased implementation and early contractor involvement, DBFOM/P3 models, and performance-based contracts are identified as key strategies for cost and schedule savings. Various examples from analogous projects are cited.
- **Pros and Cons of Separate Procurements (Q13):** Separate procurement packages are generally viewed as disadvantageous due to increased interface and integration risks, higher lifecycle costs, and increased risks of schedule delays. While separate contracts might offer upfront lower cost and flexibility during design and construction, these benefits are contingent upon strong oversight and integration control and management.
- **Technical Changes (Q14):** Standardized designs and specifications, open and well-established standards for systems, pre-engineered components, early works, and integrated design/construction/O&M are recommended for cost savings and schedule acceleration. Specific suggestions include standardized station equipment, ballast-less slab track, and early introduction of a systems integrator.

Next Steps

The Authority appreciates the time and effort expended by all the entities who submitted responses and will take the information provided into consideration as it moves forward with its strategic plans. The Authority intends to continue its outreach efforts with the industry and continue to engage in one-on-one meetings to seek detailed feedback as necessary.

Glossary

Ancillary Revenue: Consist of non-fare income generated from commercial activities, real estate, and partnerships, which helps supplement ticket sales and improve financial stability.

Availability Payments (APs): In public-private partnerships, availability payments are regular payments, generally monthly, made by a public sector owner to a private concessionaire based on a project's performance and availability to users. The sources of funds used to pay for the APs are not generated by the project but from other state or local sources.

Bundled Procurement: In infrastructure projects, a bundled procurement combines various scope elements (e.g., track, OCS, systems) and/or services (e.g., preliminary design, final design, construction management, maintenance services), into a single contract.

Cap-and-Trade Revenue: California's cap-and-trade system is a market-based program that sets a limit, or "cap," on statewide greenhouse gas emissions. Regulated companies must hold permits, or "allowances," for their emissions, which are sold by the State at regular auctions, generating revenue for the Greenhouse Gas Reduction Fund (GGRF). This revenue is then invested in various projects and programs aimed at reducing further greenhouse gas emissions, such as public transit, affordable housing, and clean energy infrastructure, including the California High Speed Rail Program.

Contract Size: Refers to the monetary value of a contract.

Contract Term: Refers to the length of time that an agreement is in effect, outlining the period during which the parties involved have enforceable rights and obligations.

Design-Build-Finance-Operate-Maintain (DBFOM): A comprehensive project delivery method where a single private entity is responsible for the design, construction, financing, operation, and maintenance of an infrastructure project.

Exit Strategy: In a contract, an exit strategy (also known as an exit clause) is a predefined plan that outlines the conditions and procedures for terminating an agreement early, ensuring a smooth and orderly transition for all parties involved without the need for litigation.

Federal Credit Support Programs: Federal credit support programs like the Transportation Infrastructure Finance and Innovation Act (TIFIA) and Railroad Rehabilitation and Improvement Financing (RRIF) provide financial assistance for major transportation infrastructure projects. These programs are designed to fill market gaps and attract private investment by offering low rates and favorable financing terms generally not available through private capital markets. Such programs offer direct loans and loan guarantees.

Interface Risks: Risks that arise at the points of connection or interaction between different systems, components, contractual parties, stakeholders, and stages of an infrastructure project. Poor management of these interfaces can lead to cost overruns, delays, safety hazards, and non-performance.

Integration Risks: Integration risks are a type of interface risk arising from the possible incompatibility or failure between different railway systems, such as rolling stock, signaling, and communication systems. For example, the new signaling technology might not communicate correctly with existing train control software.

Lifecycle Cost Optimization: Strategies aimed at minimizing the total cost of ownership of an infrastructure asset over its entire lifespan. This goes beyond considering only initial capital cost to evaluate all expenses incurred during design, construction, operations, maintenance, renewal/replacement, and eventual disposal of the various components of an infrastructure system.

Open-Book Process: Unlike a traditional fixed-price contract where the contractor assumes all cost risks, an open book agreement works by sharing information and costs in a transparent manner between the developer or contractor and the owner. Such a process is typically used with collaborative delivery models.

Pre-Development Agreements (PDAs): A pre-development agreement in a Public-Private Partnership (P3) is a preliminary legal contract that allows a private developer to collaborate with a public entity to define, plan, and assess a project before a final P3 contract is negotiated. This "progressive P3" approach encourages innovation and shared risk in the early stages, enabling the private sector to propose detailed technical and financial plans, for which they may receive a first right of refusal on a negotiated basis, along with reimbursement for some of the costs incurred during the PDA phase.

Procurement: The process that organizations use to acquire the goods, services, and works necessary for delivering infrastructure projects.

Public-Private Partnerships (P3s): A long-term contract (typically 15 to 35 years, potentially longer) between a government entity and a private company to design, build, finance, operate, and/or maintain (DBFOM) a public asset or service. Private capital is generally used to finance the project, with revenue generated from the project assets or from other public funds over the contract's term.

Request for Expressions of Interest (RFEI): A formal process used by organizations to generate market interest and gather ideas from industry participants on specific topics (oftentimes before starting a procurement).

Risk Transfer: The process of shifting certain risks from the public sector to the private sector in a contractual arrangement to leverage the private sector's ability to manage these risks.

Systems Integrator: A provider responsible for ensuring that various technical and operational parts of a project are integrated correctly and work together effectively.

Tiered Participation: A strategy allowing different levels of involvement in a project, accommodating various sizes and capabilities of firms by offering diverse roles.

Transit-Oriented Development (TOD): Urban development strategies focused on building residential and commercial spaces near transit hubs to encourage public transport use and reduce reliance on cars while fostering local economic growth.

Once complete, the Dutch John Cut Bridge in Kings County will span 669 feet.

2025 PUBLIC SUMMARY: RFEI REPORT

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