



PUBLIC SECTOR – STATE & LOCAL / INFRASTRUCTURE ADVISORY

California High-Speed Rail Authority Organizational Assessment

Final Report October 2009

ADVISORY SERVICES



AUDIT ■ TAX ■ ADVISORY

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I. Executive Summary



I. Executive Summary

The Engagement

In June 2009, the California High-Speed Rail Authority (Authority) engaged KPMG LLP (KPMG) to perform an organizational assessment to facilitate the Authority's effective transition from a project planning organization to a project implementation organization. KPMG assisted the Authority in the identification of the key administrative and operational functions that it will need to perform over the next several years, and provided the Authority with an assessment of which of these functions it should consider performing internally, which it should consider contracting out to other State agencies or private entities, and how to structurally organize to perform the internal functions and oversee the external functions.

Project Activities and Methodology

KPMG undertook a three-pronged approach to this organizational assessment:

Document Reviews

- We reviewed numerous existing documents that were provided by Authority staff or were available via the Internet to obtain an overview of the Authority. These documents included the project timeline, the Program Summary Report, the 2005 Implementation Plan, the 2008 Revised Business Plan, risk management documentation, contracts with private entities and individuals, contracts with other state agencies, memoranda of understanding with other state and regional transportation agencies, as well as international organizations and countries, current organization charts and staff duty statements, legal opinions, relevant statutes and pending legislation, budget documents, and the project preliminary financial plan.



I. Executive Summary

Interviews

- We conducted personal interviews with key internal and external stakeholders to obtain their views on the current and future roles and responsibilities of the Authority, the informational interfaces with the Authority that they have and foresee in the future, the strengths and challenges of the current Authority organizational structure, and their thoughts regarding the future demands on the Authority and the resulting organizational needs. Those interviewed included:
 - Current Authority Board Members
 - Current Authority Executive Staff
 - Peer Review Group Members
 - Key Consultants
 - Other key external stakeholders representing the Legislature, the Governor’s Office, the Legislative Analyst’s Office, the California Department of Transportation, and the California Department of Personnel Administration

Benchmarking

- We conducted a benchmarking survey of other large infrastructure organizations from within the United States, as well as from around the world to gain insight into leading practices and effective organizational structures, as well as lessons learned from other mega-projects. The organizations examined came from Europe, Asia, South America, and North America, and included conventional and high-speed rail, transit, roads, water, and housing. Our benchmarking also included a review of leading practices in project implementation, including project controls and risk management, gleaned from KPMG publications and senior subject-matter professionals within KPMG’s global network of member firms. We also surveyed industry and academic literature.



I. Executive Summary

Current State Assessment - Key Observations

As a result of the project activities undertaken, as described above, KPMG identified a number of observations that impact the Authority's organizational structure. Some of the key observations discussed in the report, are:

- The Authority has multiple layers of governance and oversight
- The project has many milestones to meet over the life of its implementation
- Several categories of significant project risk have been identified
- The Authority is relying on an external project manager for its risk management plan
- The current roles and responsibilities of the Authority need to evolve
- The Authority's informational interfaces need to be strengthened
- The organizational structure requires enhanced internal capacity, as well as continued reliance on outside contractors
- Trends among infrastructure mega-projects reveal reasons for concern relative to risk management

Gap Analysis – Guiding Principles

KPMG's organizational assessment of the Authority identified a number of considerations that we believe will assist the Authority to establish a more efficient, effective, accountable, and responsive organization. In developing these considerations, we identified four guiding principles that drove this assessment. These guiding principles were:

- 1) Governance and Decision-making in the Public Interest;
- 2) Accountability and Transparency;
- 3) Expertise and Institutional Capacity to Drive Project Implementation; and
- 4) Project Controls, Quality Assurance, and Risk Management.



I. Executive Summary

Gap Analysis – Considerations for a Stronger Organizational Structure

- Responsibility for decisions needs to be clearly vested in public officials
- Oversight of consultants needs to be performed by public officials
- Executive leadership needs expertise and experience aligned with the technical requirements and scale of the project
- Accountability to the public and protection of the public interest must be central to the organization
- A strong internal program and risk management culture is needed to support project success
- Independent project controls and quality assurance mechanisms are needed in-house
- Leading practices in management structure and work environment will be needed to attract the “best and brightest” to the project
- Staffing and oversight mechanisms are inadequate to ensure the public interest is fully protected
- The Board appears to need more in-depth and timely information to make well-informed decisions
- The Authority needs several in-house specialists on its Executive Management team to successfully drive project management and funding strategies
- Flexibility in personnel and procurement practices will be needed
- The Authority needs robust, transparent, and credible in-house policies and procedures for all key functions and activities
- Expanded outreach is needed to provide accountability and transparency



I. Executive Summary

Organizational Structure – Key Positions

In addition, KPMG believes that several key functions could be brought in-house and/or strengthened to ensure sufficient expertise and capacity to oversee the project and protect the public interest. These functions, which we believe must be addressed immediately, are discussed further in our report, and consist of:

- Chief Executive Officer
- Chief Program Manager
- Chief Financial Officer
- General Counsel
- Chief, External Affairs
- Chief of Staff
- Regional Directors
- Internal Auditor
- Chief, Project Controls and Risk Management

Additional senior positions also are needed to perform mission critical functions, including both existing and new positions:

- Director, Planning and Environmental
- Director, Engineering and Programming
- Director, Legislation
- Director, Public Affairs
- Director, Finance
- Director, Business and Procurement Services



I. Executive Summary

Next Steps

In order to begin implementing any or all of the considerations offered in this report, the Authority needs to initiate a number of important and time-sensitive actions, including:

- Secure support from the Administration, legislature, and key stakeholders for the Authority's desired staffing, organizational structure, and timing. This should include the necessary legislative and executive actions to provide the Authority with additional exempt entitlements to facilitate the hiring of quality individuals from either inside or outside of state service at competitive salaries.
- Carefully manage the recruitment effort to attract world-class talent. This may include engaging a qualified search firm(s) or human resources consultant(s) to refine position parameters, identify appropriate classifications, and assess the competitive landscape, before establishing positions or commencing recruitment.
- Make additional assessments, secure needed advice, and develop and implement plans to reach successful implementation. This may include undertaking an independent enterprise risk management assessment; securing other independent technical, legal and financial advisors, as needed; and/or developing and implementing strategic and tactical plans to secure the necessary private and public partnerships at the federal, state and local levels to implement the project.



II. Background and Introduction



II. Background and Introduction

Following years in the making, the California High-Speed Rail Authority now has the voters' mandate to deliver California's landmark high-speed passenger rail train system

Established in 1996, the California High-Speed Rail Authority (Authority) is the current state entity with the exclusive authorization and responsibility for planning, constructing and operating the high-speed train system serving California's major metropolitan areas.

- The Authority has a nine-member policy board consisting of five appointed by the governor, two appointed by the Senate Rules Committee, and two appointed by the Speaker of the Assembly.

Voter approval of Proposition 1A on the November 4, 2008 ballot provided \$9 billion in bond funding for the massive statewide network and \$950 million to finance capital improvements to commuter and intercity rail as well as local transit lines that will connect existing infrastructure to the high-speed train system.

- Under Proposition 1A, most of the \$9 billion in state bonds to develop the system cannot be spent until matching federal, local and private funding is also secured. Operation and maintenance is to be funded through fares paid by users.
- The Authority must obtain statutory appropriation for funding its activities, including the appropriation of bond funding for both operational and capital expenditures.
- Likewise, state staffing levels are subject to statutory approval, either through the annual budget process or other legislative action.

State bond funding will provide a critical “down payment” on development and implementation of the high-speed train.

- The Authority recently submitted an application for \$4.7 billion in funds under the American Recovery and Reinvestment Act (ARRA).
- The Authority's preliminary funding strategy calls for \$5 to 7.5 billion in private sector financial investment through P3 and other means
- The funding strategy also includes \$2 to \$4 billion in local funding, along with \$1 to \$3 billion in cost sharing or other innovative funding sources



II. Background and Introduction

With responsibility for a recognized “mega-project,” the Authority now must transition from a Project Planning organization to a Project Implementation organization.

California’s new high-speed train system is an infrastructure project on the scale of the State Water Project, falling in the category of large-scale infrastructure projects around the globe that have become known as “mega-projects” due to their size, complexity, and magnitude of expected social and economic impact.

- The Authority has projected a cost of upwards of \$40 billion for the 800-mile network of trains, which will link California’s major cities between San Diego in the south and San Francisco and Sacramento in the north, touching at least two dozen cities under current plans for stations.
- Multiple layers of regulatory approval and multiple sources of funding add complexity and uncertainty, also compounded by an implementation time-frame that spans well over a decade.
- The Authority’s 2008 Business Plan estimates the system will be generating more than \$1 billion in surplus revenues by 2030, reducing congestion, pollution and reliance on fossil fuels, and returning an estimated nearly three times as much in value as the system will cost over the next 40 years.

In order to carry out the significant responsibilities that rest with the Authority, it must determine and implement an appropriate and effective organizational structure. Objectives include:

- Providing accountability to the public interest.
- Establishing the necessary balance of state staff and contracted staff (both private sector contractors and personnel from other state and local agencies).
- Defining and enabling the necessary leadership roles of the Authority in all administrative and operational aspects of the project.



II. Background and Introduction

Past state staffing levels were minimized, with heavy reliance on contracting

The Authority has relied on a network of contracts with other state agencies and the private sector to augment a full-time staff of less than 11 positions. The Authority's most recent requests for additional state staffing through the 2009-10 state budget process were not fully approved.

- With limited success in its past efforts to increase state staffing levels, the Authority's executive staff determined that an independent organizational assessment would be useful to the Authority and other decision-makers.
- There have also been recent proposals by various legislators to alter the governance structure of the Authority and/or other state agencies to affect the responsibilities for development, delivery and operation of the high-speed train.
- These events, along with the approval of the bond measure, among others, have had the effect of increasing the urgency of a systematic review of the Authority's organizational structure in light of its planned growth and development.

The Authority has contracted with KPMG LLP (KPMG) to perform an organizational assessment to facilitate the Authority's effective transition from a project planning organization to a project implementation organization. The timeframe of this evaluation covers the next five years, to encompass the start of construction.

- KPMG is to assist in the identification of the key administrative and operational functions that the Authority will need to perform over the next several years.
- KPMG also was asked to provide the Authority with an assessment of which of these functions it should consider performing internally, which it should consider contracting out to other State agencies or private entities, and how to structurally organize to perform the internal functions and oversee the external functions.



III. Scope of Services

III. Scope of Services

Objective: Assess Staffing Needed to Develop & Implement the High-Speed Train

KPMG is assisting the Authority in its determination of which functions it should perform internally and which it should consider contracting out to other state agencies or private entities. Issues examined include:

- Identification of the legal authority and responsibilities of the Authority
- Identification of other expectations (policy, environmental, etc.) of the Authority
- Review of the Authority's strategic goals and direction
- Review of the Authority's tactical or business plans
- Identification of the Authority's short- and long-term vision of permanent staffing versus contract staffing
- Review of the current organizational and management structure of the Authority
- Identification of the key functions that the Authority will need to perform, whether through internal staffing or contracted staffing, or a combination of both
- Identification of organizational leading practices for similar mega-projects, particularly in the high-speed rail industry and other transportation infrastructure sectors

III. Scope of Services

KPMG Services Include Several Phases of Work

The tasks and deliverables include:

- Prepare a Project Charter, including a definition of project scope and approach; Work Plan describing the work that will be done and when it will be done; description of deliverables; responsibilities of the parties, and a Communications Plan, describing what communications will occur, when they will occur and who will receive them.
- Review existing law, pending legislation, and other pertinent documents to gain an understanding of the legal and political environment within which the Authority must operate
- Conduct interviews with the Authority's executive management, Board members, and key external stakeholders to obtain their unique perspectives on the roles and responsibilities of the Authority; the nature of their information interfaces now and anticipated in the future; and the current and future organizational needs of the Authority
- Conduct benchmarking of other similar transportation and large infrastructure entities for comparison of their project management and organizational practices and structures
- Conduct an assessment/analysis of information gathered through research, interviews, and benchmarking to identify gaps between the Authority's current state and the leading practices and expectations of key stakeholders
- Develop a draft organizational plan and chart for the Authority's review and comment
- Develop draft position descriptions and qualifications for proposed Authority Executive Staff positions that may be used for obtaining approval from State control agencies and for recruitment purposes
- Develop a briefing presentation for the Board members and the public to be presented by KPMG staff at the October 1, 2009 Board meeting
- Develop a draft report of observations and considerations for the Authority's review and comment prior to finalization
- Develop a final report of observations and considerations, including an organization plan and chart; also develop full position descriptions for proposed Authority Executive Staff



IV. Methodology

IV. Methodology

KPMG's Approach Involves Current-State Assessment, Benchmarking, and Gap Analysis

The Current-State Assessment provides a “starting point” from which the Authority’s future organizational plan can emerge, including:

- Objectives for the project and the Authority
- Key responsibilities of the Authority Board, Executive Staff, Contractors and others
- Governance and decision-making responsibilities and processes
- Existing provisions for oversight, accountability, and controls
- Current and requested staffing levels and organizational structure, as well as historical use of contracted personnel and services
- Project milestones and time-lines, as well as risks and risk management processes affecting ability to achieve these milestones
- Stakeholder views about the Authority’s accomplishments, challenges and opportunities

Benchmarking provides opportunities to apply lessons and leading practices, such as:

- Experiences and track record of other large-scale, complex infrastructure projects around the world
- Risks faced by other mega-projects
- Organizational structures utilized by other mega-projects
- Leading practices for managing complex infrastructure projects

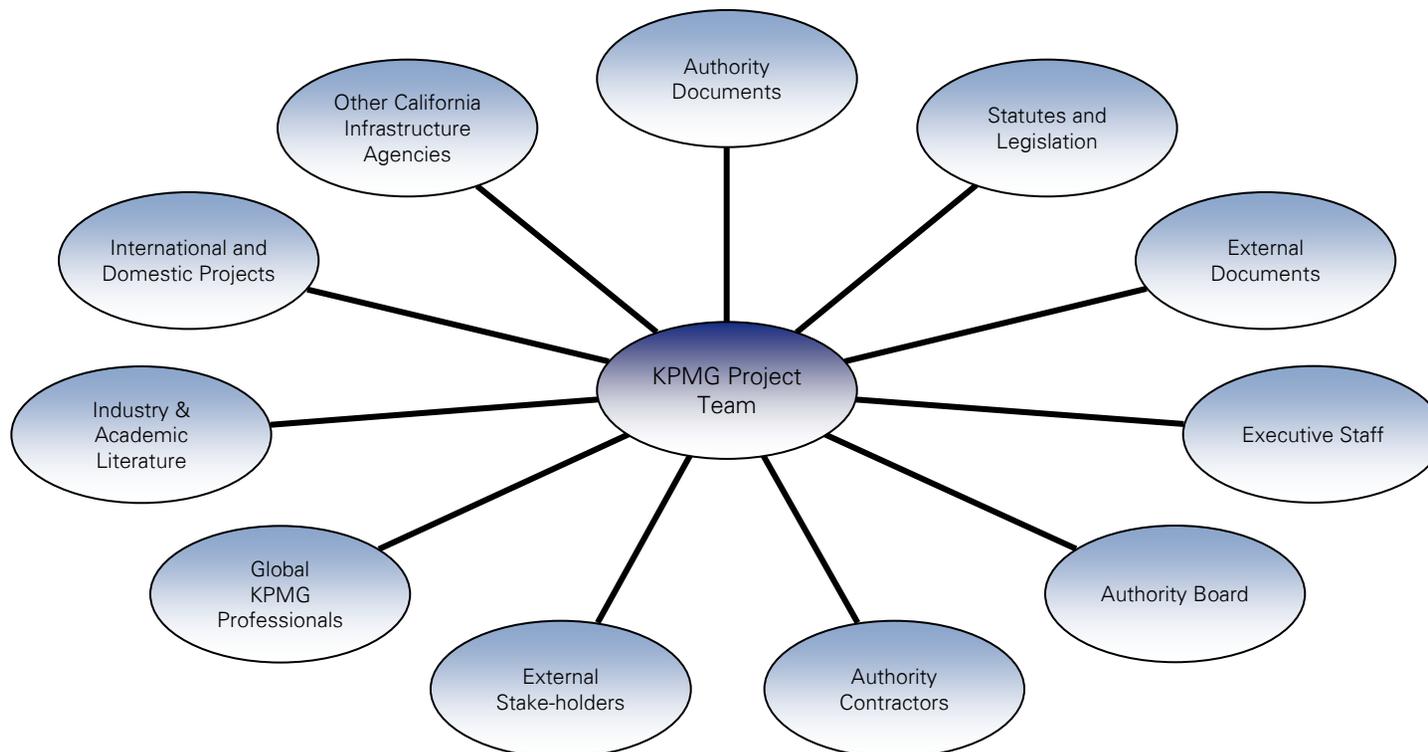
Gap Analysis applies guiding principles for developing an organization that can meet the Authority’s objectives

- Identifies areas where the Authority’s practices and organizational structure can be enhanced to more closely mirror leading practices that will enhance its likelihood of success in implementing the California High Speed Train

IV. Methodology

KPMG's Three-Pronged Approach to the Organizational Assessment Draws from Many Sources

Three-pronged approach combines reviewing documents, interviewing key players, and benchmarking with comparable organizations, with all phases drawing on KPMG's global network of subject matter professionals; the objective is to identify Authority's current situation and apply leading practices in the future



IV. Methodology

Document Reviews were Essential to Assessing the Current State of the Authority's Situation

The documents reviewed were related to the following topical categories: 1) Project; 2) Contracts; 3) Organizational; 4) Legal; and 5) Financial

Category	Information/Document	Purpose of Review
Project	Project Timeline	To identify the major project milestones and their timelines.
Project	Program Summary Report	To obtain a high-level overview of the project including the program management and development approach, organization, and progress to date.
Project	2005 Implementation Plan	To obtain additional overview information on the proposed implementation strategy of the new high-speed rail system and the initial staffing model to be used
Project	2008 Revised Business Plan	To obtain general program background and approach and cost-benefit information which has been shared with key stakeholders.
Project	Risk Management Information	To identify how risks are currently being captured, avoided and mitigated in the project and who is responsible.
Contracts	Program Manager Contract	To identify the major roles and responsibilities of the Program Management consultant in contrast to the Authority Board and staff.
Contracts	Program Management Oversight	To obtain information regarding the scope of the project oversight contractor's responsibilities
Contracts	Regional Prime Contracts	To identify the roles and responsibilities of the Regional contractors.
Contracts	Inter-Agency Contracts with other State Agencies	To identify the nature of the work being performed by other state agencies on behalf of the Authority.
Contracts	Memorandums of Understanding with other state and regional transportation agencies	To identify the purpose, scope, roles and responsibilities contained in these contracts
Contracts	Memorandum of understanding with any international organizations / countries	To identify the nature of these contracts and their potential impact on the future organization of the Authority

IV. Methodology

Document Reviews were Essential to Assessing the Current State of the Authority's Situation

Category	Information/Document	Purpose of Review
Contracts	Personal Service Contracts and Resumes	To identify the scopes of work, roles and responsibilities of these personal service contractors.
Contracts	Financial Plan Consulting Contract	To identify the scope of work, roles and responsibilities of the financial plan consultant.
Contracts	Simulations/Graphics/Web Admin	To identify the scope of work, roles and responsibilities of the contactor.
Contracts	IT Services	To identify the scope of work, roles and responsibilities of the contactor.
Organization	Names, Organizations and Contact Information for Key Stakeholders	To develop a listing of key stakeholder with whom to conduct individual interviews.
Organization	Names, Titles and Contact Information for Key Personnel and Service Providers	To identify individuals responsible for providing services to the Authority and to contact them with any questions.
Organization	Duty Statements	To identify the current roles, responsibilities and duties of current Authority staff and management.
Organization	Organizational Chart	To obtain information on the current organizational structure of the Authority.
Organization	May 8, 2000 letter to Senator Simitian regarding statutory impediments to the Authority hiring staff at a higher salary level	To obtain information that was transmitted to the legislature related to barriers to the Authority being able to attract and hire qualified staff and management.
Legal	Authorizing Statute	To obtain information on the enabling legislation that created the Authority and identify the legal requirements and restrictions place on the Authority
Legal	Bond Act	To obtain information on the voter-approved bond proposition and its financial impact on the project.

IV. Methodology

Document Reviews were Essential to Assessing the Current State of the Authority's Situation

Category	Information/Document	Purpose of Review
Legal	Legal Opinions re: interpretations of the Authority's statute and authorized activities, including the Bond Act, if any	To obtain information on any formal legal opinions that may have an impact on our recommendations or considerations.
Legal	Legal Opinions re Peer Review Commission and interface w/Authority	To obtain information regarding the legal relationship/interface between the Authority and the Peer Review Commission
Legal	Pending Legislation	To identify any pending legislation that may have an impact on our recommendations or considerations.
Financial	Current Budget and any preliminary Budget for FY 2009-10	To identify current budget and position status of the Authority and proposed budget and positions being requested through the State budgeting process
Financial	Project Financial Plan / Funding Plans	To obtain information on the financing strategy and model for the implementation of the high-speed train system.

IV. Methodology

Interviews Revealed Much about the Authority's Governance and Decision-making Environment

Interviews of internal and external stakeholders sought range of perspectives on Authority's responsibilities, accomplishments, future priorities, challenges, and opportunities

- **Authority Executive Staff**
 - Mehdi Morshed, Executive Director
 - Carrie Pourvahidi, Deputy Director
 - Dan Leavitt, Deputy Director
- **Consultants**
 - Kent Riffey, Engineering
 - Steve Schnaidt, Legislative
 - George Spanos, Legal, Attorney General's Office
 - Tony Daniels, Program Manager, Parsons Brinckerhoff
 - Kris, Deutchman, Public Relations, Deutchman Communications
- **Board Members**
 - Russell Burns
 - David Crane
 - Rod Diridon
 - Frances Florez
 - Richard Katz
 - Quentin Kopp
 - Curt Pringle
 - Lynn Schenk
 - Thomas Umberg
- **Peer Review Group**
 - John Chalker
 - Will Kempton
 - Gene Skoropowski
 - Louis Thompson
- **Other Key Stakeholders**
 - Art Bauer, Senate Transportation Committee
 - Cynthia Bryant, Governor's Deputy Chief of Staff
 - Dana Curry, Legislative Analyst's Office
 - Janet Dawson and Edward Imai, Assembly Transportation Committee
 - John Ferrera, Senator Ducheny's Chief of Staff
 - Randy Iwasaki and Bill Bronte, California Department of Transportation
 - Erica Martinez, Assembly Speaker Bass' Office
 - Dan Tokunaga and Barbara Hudson, California Department of Personnel Administration



IV. Methodology

Questions Focused on Both Current Situation and Prospects for the Future

There were three general areas of questioning utilized for all interviews: 1) Roles and Responsibilities; 2) Informational Interfaces; and 3) Organizational Structure

The lines of questioning for the interviews were similar for each of the groups, although tailored to reflect their differing relationships and responsibilities.

- **Roles and Responsibilities**

- Understanding and clarity of the various roles of the Board, Executive Staff and Consultants
- Accuracy of current duty or scope statement
- Level of importance of various functions to perform in house
- Additional roles and responsibilities need to be address by the organization

- **Informational Interfaces**

- Level and type of interactions with the Authority
- Quality and timeliness of interactions and information received
- Changes in the interfaces seen in the future

- **Organizational Structure**

- Strengths and challenges of the current organizational structure
- Thoughts regarding the future demands and resulting organizational needs, including the timing of those needs
- Comments heard from others regarding the Authority organizational structure needs
- Views on appropriate in-house versus contracted functions
- Suggestions for KPMG to consider in the evaluation of benchmark organizations

IV. Methodology

Benchmarking is Used to Take Lessons from Other Infrastructure Projects and Organizations

Benchmarking provides insight into leading practices and effective organizational structures, as well as lessons learned from other mega-projects

KPMG conducted a benchmarking process involving infrastructure organizations from within the United States, as well as from around the world.

- Candidate organizations were identified during stakeholder interviews, and from comparable agencies with which KPMG is familiar, or that we had reason to believe would be useful benchmarks for this effort due to their sector, magnitude or other characteristics.
- We also surveyed industry and academic studies of comparable agencies, particularly those considered “mega-projects.”
- This benchmarking was accomplished through publicly available information, interviews, and other data gleaned from KPMG’s global network of subject-matter professionals.

The organizations examined came from Europe, Asia, and North America, and included conventional and high-speed rail, transit, roads, water and housing.

- Various State of California agencies in sectors beyond transportation were examined due to their potential to illustrate precedents for successful executive organizational structures within state government.
- Details regarding the benchmark organizations are found in [Appendix A](#).

Benchmarking also included review of leading practices in project implementation, including project controls and risk management, gleaned from KPMG publications and senior subject matter professionals from within KPMG’s global network of member firms. These professionals included practitioners in:

- Global Infrastructure Projects Group / Infrastructure Advisory Services
- State and Local Government Services
- Major Projects Advisory Services
- Enterprise Risk Management

IV. Methodology

Benchmarks Sought from Transportation Sector and Global “Mega-Projects”

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IV. Methodology

Benchmark Agencies Were Diverse, but Primarily in Rail and Transportation

International Infrastructure Organizations	Country	Domestic Infrastructure Organizations	State / Region
RAVE (HSR)	Portugal	California Dept. of Transportation	California
TGV – SNCF / RFF	France	California Dept. of Water Resources	California
AVE (HSR) – RENFE / ADIF	Spain	California Housing Finance Agency	California
Singapore Land Transport Authority	Singapore	CalTrain / SamTrans	Bay Area
Trem Bala (ANTT) (HSR)	Brazil	Florida’s Turnpike Enterprise	Florida
High Speed Rail South (ProRail)	Netherlands	LA Metropolitan Transportation Authority	So. California
Deutsche Bahn (DB) / ICE (HSR)	Germany	Metropolitan Transportation Commission	Bay Area
Japan Rail District	Japan	Orange County Transportation Authority	So. California
Taiwan Bureau of High Speed Rail	Taiwan	San Diego Association of Governments	So. California
Crossrail	United Kingdom		
Irish Rail Procurement Agency	Ireland		



V. Current-State Assessment

V. Current-State Assessment

Diverse Project Objectives Reflect the Complexity of the High-Speed Rail Authority's Mission

Projected benefits of California High Speed Rail illustrate diverse nature of the Authority's policy objectives for the project

- Improved air quality
- Reduced greenhouse gas emissions
- Increased energy efficiency
- Lowered dependence on foreign oil
- Improved safety
- Relieved congestion on roads and highways
- Enhanced mobility
- More economical and reliable service
- Avoided costs for less cost-effective infrastructure expansions
- Preserved open spaces
- Revitalized community economic development
- Increased job creation – for both construction-related and permanent jobs
- Enhanced productivity and economic competitiveness
- Leveraged funding from multiple sources – user revenues, public funding, and private financing

V. Current-State Assessment

The Authority has Multiple Layers of Governance and Oversight

The Authority's key responsibilities are in the California High-Speed Rail Act (Public Utilities Code 185000 et seq)

- Direct the development and implementation of intercity high-speed rail service that is fully integrated with the state's existing intercity rail and bus network
- Prepare a plan for the construction and operation of a high-speed train network
- Develop a proposed high-speed rail financial plan
- Activities may include a wide range of studies, evaluations and other plans related to environmental impact, rights of way, franchisees, financial feasibility, technologies, systems, and operators
- Authorization and responsibility for passenger train service exceeding 125 mph in California is granted exclusively to the Authority

The Authority's governance and decision-making responsibility is shared with the Administration, the Legislature, and other state officials

- Administration and Legislature share appointing powers over the nine-member Authority Board of Directors
- Authority's operating and capital budgets require annual appropriation through the budget process
- A newly-authorized independent peer review group will play a role to review and analyze the Authority's funding plans; however, it has not been fully established

The "Safe, Reliable High-Speed Passenger Rail Train Bond Act for the 21st Century" includes additional provisions for oversight, accountability, and controls

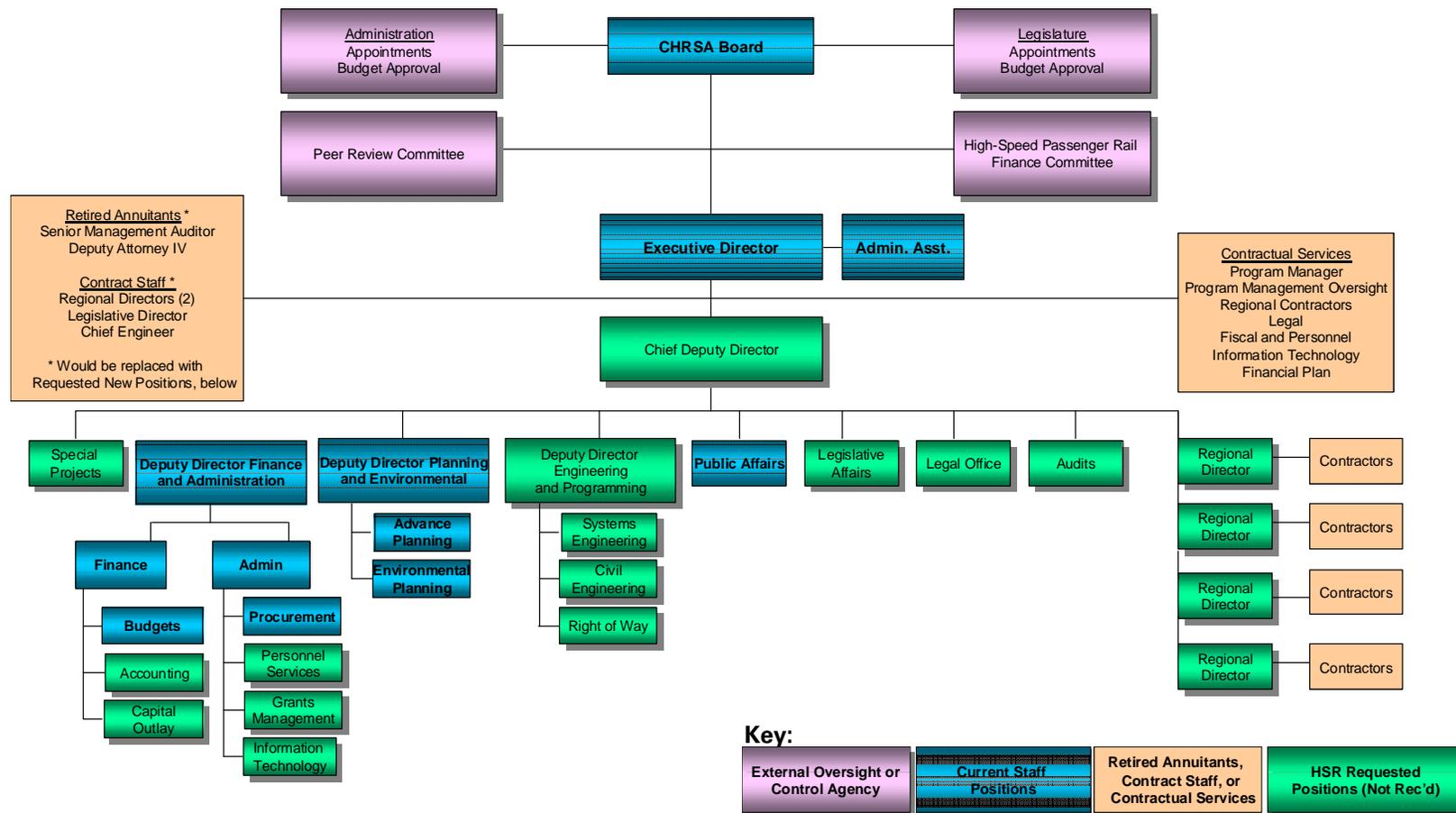
- Requires submittal of detailed funding plans to the Department of Finance and the Joint Legislative Budget Committee prior to contracting for construction of any given corridor or segment
- The High-Speed Passenger Rail Finance Committee must authorize the issuance of voter-approved General Obligation Bonds

V. Current-State Assessment

The Authority Must Obtain Support from the Administration and Legislature to Expand Staffing

The Authority has been operating with less than 11 full-time positions, augmented by retired annuitants, contract staff, and contractual services; A request for additional positions in the 2009-10 budget was not fully approved

CA High Speed Rail Authority Staffing – Proposed 2009-10 Fiscal Year



V. Current-State Assessment

Contractors Still Fill Many Vital Roles

Roles	Firms	Key Services / Duties
Program Manager	Parsons Brinckerhoff	Overall program management, including: plans; control systems; risk management plan; project insurance; quality management, public education, participation and outreach; design standards and coordination; project-level preliminary engineering /EIR/EIS management; and other program and project management services throughout design, pre-construction, construction, testing/pre-commissioning, and operations phases.
Program Management Oversight	Vacant	Monitoring for conformance to approved schedules, budgets, and plans; includes continuous monitoring of the Program Manager's performance to efficiently and effectively implement the project.
Regional Contractors	STV Inc.; HMM; HNTB; DMJM; URS; AECOM USA Inc; Parsons	Developing engineering, planning, and environmental data for Environmental Impact Report / Environmental Impact Statement (EIR/EIS) document(s) and for right-of-way preservation and acquisition services, as requested by the Authority.
Legal Services	State Attorney General's Office	Legal services, including contract preparation and review; litigation support and representation; legislative review and technical support; regulatory support (e.g., for , environmental impact review); and other services as requested.
Fiscal and Personnel Services	Dept. of General Services and CalTrans	DGS – Fiscal services including payments, encumbrances, fund accounting, reporting, and contact with the State Controller's Office, Department of Finance, State Treasurer, and auditors, as required. CalTrans – Classification and compensation services, position management, and personnel transactions.
Information Technology	Paperless Knowledge; Dept. of Tech. Services; and Newlands	Desktop support; Network services; and Development of realistic visual and audible simulations (respectively).
Regional Directors	Caltrans (Carrie Bowen) and Caltrain (Bob Doty)	Developing and maintaining relationships with local stakeholders, policy makers and CHSRA consultants; and building local communication strategies
Legislative Affairs	Steve Schnaidt	Advising on legislative strategies; researching and analysis transportation policy and budgetary issues affecting the Authority; preparing background/white papers; facilitating intergovernmental relations; assisting with and outreach efforts and responses to media and public inquiries.
Chief Engineer	Kent Riffey	Technical engineering and high-speed train support, including: review and evaluation of design, engineering, and operations documents produced by the Program Management Contractor; evaluation and monitoring of the project schedule, and assessment of the reasonableness of the project timelines and budget.
Financial Plan Consultant	Infrastructure Management Group	Preparing a financial plan, including funding sources and financing strategies, and related on-going technical support.

V. Current-State Assessment

Memorandum of Understanding Approach Facilitates Partnerships in California and Globally

The Authority has (or is considering) a Memorandum of Understanding with the following other California transportation entities to facilitate funding, staffing, or cooperative activities

Peninsula Corridor Joint Powers Board (PCJPB) – This agreement establishes an initial organizational framework whereby the Authority and the PCJPB engage as partners in the planning, design, and construction of improvements in the CalTrain Rail Corridor that will accommodate and serve both the near-term and long-term needs of the Authority inter-city high-speed rail service and PCJPB commuter rail rapid transit service.

Council of Fresno County Governments (COG) – This agreement provides for funding to the Authority which is intended to enhance the Authority’s study of possible rail consolidation and its impacts on the proposed high-speed rail system, and to benefit both the Authority and the Fresno COG with information which will allow each of the parties to consider the mutual impacts of future alternatives.

Transbay Joint Powers Authority (TJPA) – This agreement establishes a mutually beneficial and productive working relationship between the Authority and the TJPA to help these agencies meet the problems of establishing the Transbay Transit Center as a terminus station of the high-speed rail system, and to develop a process and mechanisms that will encourage and facilitate communications and collaboration between them. The intent is to allow the parties to efficiently address short-term, medium-term, and long-term problems in an effective manner.

Burlington Northern Santa Fe Corporation (BNSF) – This agreement establishes a cooperative relationship between the Authority and BNSF in which the BNSF will provide to the Authority information concerning the business and affairs of BNSF, including matters relating to rates and tariffs or any other information regarding BNSF’s freight rates, operations or business relationships. This information will assist the Authority to plan and to construct portions of the high-speed rail system efficiently and economically, at a reduced cost to the public.

International Agreements – The Authority also has entered into information-sharing agreements with several agencies from around the world, including from countries in Asia and the European Union with significant high speed rail networks.

V. Current-State Assessment

The Project has Many “Milestones” to Meet Over the Life of its Implementation

The Program Manager’s schedule shows the Project’s long life-cycle to completion, and the many activities that must be coordinated across distinct, but inter-dependent, geographic corridors

The following dates refer to the full system implementation.

Activity	Earliest Section Start Date	Latest Segment End Date	Duration * (Months)
Environmental Process	2-12-07	11-14-13	82
Preliminary Engineering	12-26-06	9-15-15	117
ROW Preservation/Acquisition	1-14-10	9-15-16	81
EIR/EIS	12-26-06	10-5-12	82
NOD/ROD Issued	3-1-11	12-15-14	46
Request for Expression of Interest (RFEI)	8-3-09	11-1-13	52
Request for Qualifications (RFQ)	9-2-09	5-1-14	57
Industry Review	1-4-10	12-12-14	60
Bid Period	3-2-11	9-15-15	55
Design-Build Contract	4-2-12	9-15-20	101
Testing/Acceptance/Pre-Revenue Operations	2-22-16	4-1-21	63

Source: Parsons Brinckerhoff, Overall Program Summary, June 2009.

* The above table aggregates activity start dates and end dates for multiple segments; durations of each activity for individual segments are far shorter.

V. Current-State Assessment

Several Categories of Significant Project Risk Have Been Identified

Risk identification and mitigation is a key factor in successful implementation of any large-scale, complex infrastructure project

The Authority's 2008 Business Plan summarized several risks and possible mitigation measures identified at that time. The 2008 Business Plan was not a comprehensive Risk Management Plan, but rather included a chapter on Risks and Mitigation as part of a broader discussion of the Project's costs, benefits, and steps for implementation. The chapter focused on only a small number of the typical hazards or risks identified in 2007 technical memoranda from the Program Manager. The Risks and Mitigation chapter included the following items:

Category	Risk Description	Possible Mitigation Measures
Construction	Materials pricing increases Contractor performance	Innovative contracting methods, cost contingencies Performance bonding
Technology and Operations	Integration issues among multiple contractors and/or systems	Contract incentives, standard criteria, proven providers, testing periods
Legislative	Future state or federal restrictions, or approval or funding delays	Protect and clarify powers for public-private partnerships, transparent and streamlined disbursements, pro-active federal funding strategies
Ridership	Forecast errors and revenue shortfalls	Partial risk transfer in PPP arrangements, state policies to encourage HSR ridership, strategic station locations with connections to other networks, effective marketing to future riders
Completion	Delays or shortfalls in funding to complete project	Phasing plan to promote maximum utility of usable segments during construction period

V. Current-State Assessment

Authority is Relying on External Program Manager for its Risk Management Plan

Available Risk Management Plan appears generic and incomplete

- Risk Management Plan documents received from the Authority were in the form of 2007 technical memoranda produced by the private-sector Program Manager, not the Authority, and appeared to be “generic,” incomplete and likely out of date.
- Creating “Risk Registers” is a standard means of identifying, cataloging, and assessing the likelihood and potential impact of various risks.
 - These were requested, but only an early, partial draft prepared by the Program Manager was provided by the Authority.
- Presently, it is not possible for KPMG to ascertain the full level of the Authority’s awareness of the Project’s risks and potential mitigation strategies.
- Our discussions with Authority executive staff reinforce the view that this is an area recognized as in need of greater focus as soon as resources to do so can be obtained.

General hazard or risk categories were identified by the Program Manager

- Right of Way Acquisitions/ Easements
- Regulatory Agencies Approvals
- City Moratoriums / Public Relations & Acceptance of Project
- Legal/ Funding / Insurance Delays and Constraints
- Health and Safety of Workers
- Compliance with Environmental Impact Statement / Report; Availability of Site(s) / Delays by Third Party Contractors
- Environmental / Public Impacts
- Subsurface Exploration / Obstructions / Differing Site Conditions
- Design Complications (Ground Support, Seismic, Site constraints, access, etc)
- Potential Third Party Impacts (including business disruption, noise, dust and other health and safety issues)
- Plant / Equipment Supply and Performance; Safety & Security; Logistical Impacts
- Sub Contracts & Materials Supplies
- Deficiencies in Quality and Inadequate Emergency Preparedness



VI. Interview Observations

VI. Interview Observations

Interviews Yielded Some Common Views of Authority's Strengths, Challenges, and Opportunities

Although appropriate for the planning phase, the roles and responsibilities of the Authority need to evolve

- Authority leadership has successfully navigated policy and political waters to win the mandate to deliver the Project
 - Authority has done a good job in the planning phase to get the project where it is today
 - The Authority has done a good marketing/promotional job, as evidenced by early phase success with the Program Level EIR
 - There is a strong commitment to the project on the part of the Board and Executive Staff
 - Stakeholders expressed a common desire to see the project succeed

- Decision-making needs to be in hands of the Authority's Board and Executive Staff, not contractors
 - It's difficult to tell who's in charge—the Authority or the consultants—Stakeholders are not sure how the decision process works
 - Authority needs to demonstrate greater leadership and accountability

- Authority independence and oversight of contractors need to be strengthened
 - Can't have contractors overseeing other contractors; this must be the job of the Authority
 - The interests of the Authority and its contractors are not always in alignment
 - The Authority needs to be provided the necessary staff to direct, manage, and control the project

VI. Interview Observations

Interviews Yielded Some Common Views of Authority's Strengths, Challenges, and Opportunities

The Authority's informational interfaces need to be strengthened

- Communication and transparency need to be enhanced
 - There should be Authority staff, not consultants, speaking on behalf of the Authority; consultants may not represent the Authority accurately
 - Board members require more complete analysis and information from staff
 - The Authority currently lacks the time and resources for adequate level of communication

- Significant effort will be required to forge crucial partnerships with the federal government, local agencies, and the railroads
 - Communication and collaboration with the Legislature and other state agencies needs improvement
 - The Authority is narrowly focused on its project and does not coordinate well with other systems/agencies
 - Local representation is needed to enhance communication and community relations
 - There is a need for strong, in-house leadership of external affairs, communications, and legislative affairs functions

VI. Interview Observations

Interviews Yielded Some Common Views of Authority's Strengths, Challenges, and Opportunities

The organizational structure requires enhanced internal capacity, as well as continued reliance on outside contractors

- Authority staff needs to grow and add highly-specialized expertise to meet the needs of the Project and protect the public interest
 - There are too many competing demands on the Executive Director and Deputies; more in-house senior resources are needed
 - Stakeholders expressed significant concern about the need for senior leadership with direct experience successfully delivering complex infrastructure projects
 - There is too much dependence on outside contractors, with insufficient in-house oversight capabilities
 - The Authority's legal needs are sufficient to justify a dedicated, in-house legal staff
 - Innovative project phasing and procurement strategies will be needed to attract significant private sector financial participation, requiring new contracting approaches and more complex agreements
 - Flexibility in hiring and compensation practices will be needed in order to attract and retain experienced executive leadership
 - including from outside the state civil service system when necessary to attract the best candidates for critical positions

- Authority should leverage expertise and capacity of other state agencies wherever practical; Stakeholders wanted the Authority work closely with other state agencies to avoid duplication of expertise and staffing, especially in light of current tight fiscal times
 - The Authority should consider contracting out significant right-of-way activities to Caltrans and/or DGS, since they already have the expertise and available personnel resources
 - Continued use of the Attorney General's Office is appropriate for legal support, even with in-house legal staff to coordinate activities
 - Administrative functions (human resources, accounting, information technology, facilities, etc.) can be considered for external contracting with other state agencies until the relevant workloads at the Authority warrant in-house staffing; the Authority's required level of service quality / responsiveness may influence choice between contracted and in-house functions



VII. Benchmarking Observations



VII. Benchmarking Observations

Trends Among Infrastructure “Mega-Projects” Reveal Reasons for Concern

Other large-scale, complex infrastructure projects provide lessons for consideration ¹

- Major cost overruns and schedule delays were prevalent
- Revenue forecasts often proved overly-optimistic
- Communication and transparency challenges were significant
- Risk analyses frequently failed to capture both probability of risk-events and magnitude of impacts
- Risk capital on the part of private parties appeared to improve the performance of projects
- Most projects failed to examine or “audit” their implementation performance on an *ex post facto* basis

Risks observed from other “mega-projects” are applicable to California High Speed Rail

- Completion (e.g., Technical, Construction, Interfaces, Operational)
- Financial (e.g., Markets, Funding Sources, Revenue Forecasts / Results)
- Institutional / Governance (e.g., Regulation, Social Acceptability, Political and Legal Requirements)

Many past “mega-projects” had sovereign sponsors, with “deep pockets,” so had fewer funding risks than currently are present for the California High Speed Rail Project

- Lack of a “deep pocket” partner makes effective project risk management a high priority for California

Sources include: *Megaprojects and Risk*, Flyvbjerg, Bruzelius and Rothengatter, 2003; and *Decision-Making on Mega-Projects*, Priemus, Flyvbjerg & van Wee, 2008



VII. Benchmarking Observations

Successful Project Delivery Requires Diverse Skills and Focused Leadership

Successful projects require organizations with strengths across multiple functions

- Leadership capable of attracting and retaining resources, personnel, and stakeholder support
- Project delivery focus and expertise
- Deep financial resources and robust financial management
- Strong accountability mechanisms
- Transparency in decision-making to earn the public trust
- Pro-active risk identification and management capacities
- Effective management of complex relationships – among sponsors/partners, contractors, regulators, funders, investors, and other stakeholders
- Appropriate private-sector involvement to drive efficiencies and improve “bottom line” performance
- Clear objectives and performance measures to avoid over-runs and delays or other obstacles



VIII. Gap Analysis

VIII. Gap Analysis

The Organizational Assessment is Driven by Four Guiding Principles

The guiding principles emphasize the protection of the public interest

Governance and Decision-making in the Public Interest	Accountability and Transparency
<ul style="list-style-type: none">● Responsibility for decisions needs to be clearly vested in public officials● Oversight over consultants needs to be performed by public officials● Decision-making processes and documentation need to be timely, detailed, and accurate – to facilitate informed decisions	<ul style="list-style-type: none">● Accountability to the public and protection of the public interest must be central to the organization● Information and communication needs to fairly and objectively inform decision-makers, stakeholders, “partners,” and the public● Outreach needs to reach the general public and policy-makers throughout the State
Expertise and Institutional Capacity to Drive Project Implementation	Project Controls, Quality Assurance, and Risk Management
<ul style="list-style-type: none">● Executive leadership needs expertise and experience aligned with the technical requirements and status and scale of the Project● Leading practices in management structure and work environment will be needed to attract the “best and the brightest” to the Project	<ul style="list-style-type: none">● Strong internal program management and risk management culture and systems are needed to support success of the Project● Independent project controls and quality assurance mechanisms are needed “in-house”● Robust and continuing risk identification and management/mitigation mechanisms are needed

VIII. Gap Analysis

Authority Needs Enhanced In-house Staffing and Systems

KPMG’s observations show a need to enhance mechanisms to protect the public interest

Governance and Decision-making in the Public Interest	Accountability and Transparency
<ul style="list-style-type: none"> • Staffing and oversight mechanisms are inadequate to ensure the public interest is fully protected • The Board appears to need more in-depth, timely information to make well-informed decisions • Staffing enhancements could improve decision-making 	<ul style="list-style-type: none"> • The Authority needs a strong Internal Audit function • Key stakeholders do not feel adequately informed • Expanded outreach is needed to provide accountability and transparency – and to forge public consensus need for Project’s success
Expertise and Institutional Capacity to Drive Project Implementation	Project Controls, Quality Assurance, and Risk Management
<ul style="list-style-type: none"> • Authority needs several additional in-house “specialists” on its executive management team in order to drive successful project implementation and funding strategies • Flexibility in personnel and procurement practices will be needed • Time is of the essence 	<ul style="list-style-type: none"> • Authority needs an in-house team dedicated to independent Project Controls and Risk Management activities • Authority needs robust, transparent, and credible in-house policies and procedures for all key functions and activities



VIII. Gap Analysis Governance and Decision-making in the Public Interest

The Gap Analysis points to the following governance and decision-making considerations

- Disproportionate responsibility and discretion appears vested with private contractors, without sufficient oversight by state officials
 - Staffing and oversight mechanisms are inadequate to ensure the public interest is fully protected
 - Enhanced leadership and staffing is an important step to mitigate concerns

- The Board appears to need more in-depth, timely information in order to make well-informed decisions
 - Creation of Board Committees is a positive step
 - Staff needs to enhance the supporting rationale for its recommendations

- Two senior positions – General Counsel and Chief of Staff – could assist the Authority to improve the timeliness and quality of information provided to decision-makers
 - These positions build on concepts presented in the Authority’s proposed 2009-10 organizational structure



VIII. Gap Analysis Accountability and Transparency

The Gap Analysis points to the following accountability and transparency considerations

- Authority needs a strong Internal Audit function
 - Expected growth in Authority activities warrants a dedicated, in-house audit function to enhance accountability and to protect against fraud, waste, and abuse

- Key stakeholders do not feel adequately informed about the project
 - Past reports and plans are viewed as “marketing” the project rather than “informing” the reader
 - Some remaining uncertainties about the project make it nearly impossible to meet all stakeholder expectations for detailed information, given the available data

- An expanded outreach effort spearheaded by a “Chief of External Affairs” is needed to achieve the Project’s accountability and transparency requirements – as well as to forge the public consensus needed to ensure the Project’s success
 - Contractors, no matter how informed and valuable, are not viewed as accountable to the public
 - Ultimate responsibility rests with the Authority, so the public’s confidence requires a higher degree of involvement by senior Authority officials in crucial project activities
 - Important stakeholders will demand direct access to Authority officials for information, especially for sensitive project partnership negotiations

VIII. Gap Analysis

Expertise and Institutional Capacity to Drive Project Implementation

The Gap Analysis points to the following expertise and institutional capacity considerations

- Authority needs a “Chief Executive Officer” to lead the Authority in achieving its new mission
 - Although the current “Executive Director” title has been sufficient in the past, establishing a Chief Executive Officer position at the helm of the Authority will convey to the public, policy-makers, industry, and the markets that the Authority “means business” as it embraces this new phase
 - Since the title of CEO is not common in state government, it also will convey that this is a leadership position that is different from traditional department director positions found in typical state agencies
 - The CEO title is more widely used in certain local government and non-profit organizations, especially those that operate utilities or other “enterprises” that must attract and retain users in order to generate revenues, much like private businesses

- Authority needs an experienced, in-house “Chief Program Manager”
 - The position is more than a “Chief Engineer” – encompassing responsibility for the Project life cycle, from planning and environmental, design and construction, to implementation and operation
 - Hybrid organization can continue to leverage best capabilities of both state staff and private sector consultants while enhancing accountability and prospects for the Project’s success

- Authority needs an experienced, in-house “Chief Financial Officer”
 - The Authority needs a highly-credible financial specialist for driving funding strategies and communicating with policy makers and the markets
 - Innovations in financing and procurement strategies will be needed to achieve Authority’s goal of maximizing private sector financial participation and securing vital public partnerships, as well



VIII. Gap Analysis Project Controls, Quality Assurance, and Risk Management

The Gap Analysis points to the following project controls, quality, and risk considerations

- Authority needs a dedicated office for Project Controls and Risk Management (including quality assurance and health and safety)
 - Importance of these functions warrants a direct line to the Chief Executive Officer
 - Office needs input and cooperation from other Authority Senior Executives

- Authority needs robust, transparent, and credible policies and procedures for all key functions and activities
 - Internal policies and procedures need to be developed, imposed and enforced
 - Policies and procedures applicable to Authority contractors should reflect the same considerations for transparency and credibility



VIII. Gap Analysis

Enlarged Executive Staff Would Provide Greater Expertise and Capacity

Several key functions could be brought “in-house” and/or strengthened to ensure sufficient expertise and capacity to oversee the Project and protect the public interest.

Position Summaries for these and other key positions can be found in **Appendix B** of this report.

- **Chief Executive Officer** – Responsible for executive leadership of all Authority activities. Qualifications include strong knowledge of and demonstrated experience in: transportation planning, design and implementation, ideally in rail sector; advanced project management, budget and administration principles and concepts; and advanced marketing, media, and public relations principles and concepts.
- **Chief Program Manager** – Responsible for direction and oversight of program management / project management activities and facilitation of successful project/program delivery. Qualifications include strong knowledge of and demonstrated experience in: transportation planning, design and implementation, ideally in rail sector; and advanced project management, budget and administration principles and concepts.
- **Chief Financial Officer** – Responsible for direction and oversight of financing, procurement, and other business service activities. Responsible for facilitation of needed funding for successful project/program delivery, including communication with market participants. Qualifications include strong knowledge and demonstrated experience in: transportation finance; project budgeting and finance; government budgets and accounting; public finance; and innovative financing and procurement strategies, including public-private partnerships.
- **General Counsel** – Responsible for oversight of all Authority legal activities, including significant legal contracting with the State Attorney General’s Office and private counsel. Responsible for strategic legal advice to Board and other executive leadership. Qualifications include strong knowledge and demonstrated experience in: state law; governance principles; and contracting, including innovative hiring and procurement activities.



VIII. Gap Analysis

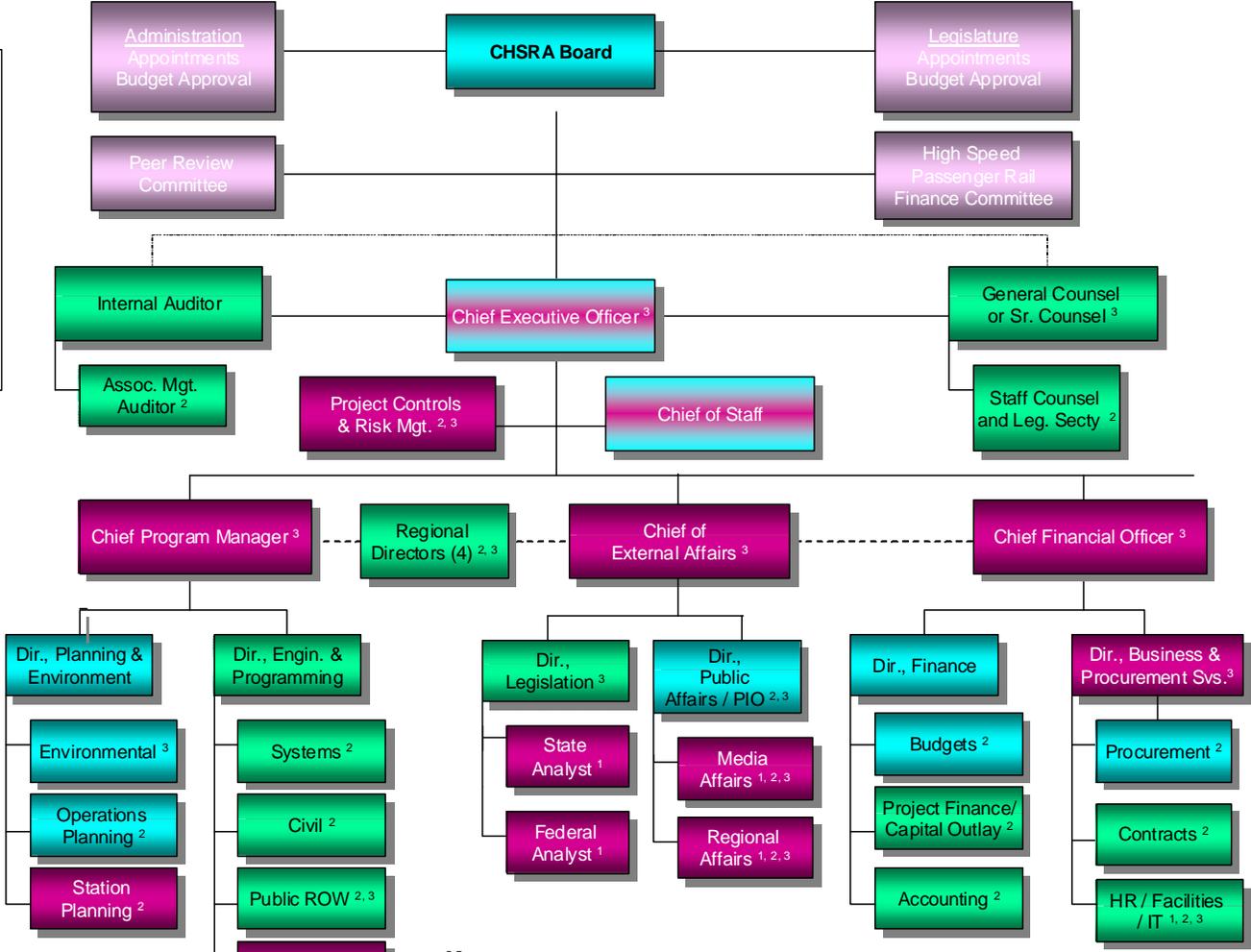
Enlarged Executive Staff Would Provide Greater Expertise and Capacity

- **Chief, External Affairs** – Responsible for the development and implementation of a comprehensive state and federal government relations program. Responsible for the development and implementation of comprehensive plans, strategies and approaches for use in marketing the Authority to the public, potential partners, and the media. Qualifications include extensive community outreach, media relations, and legislative background, as well as strong written and verbal communication skills
- **Chief of Staff** – Responsible for the oversight and coordination of all Authority staff activities, including administrative support for the Board, on behalf of the Chief Executive Officer. Resolves problems, mediates disputes, and addresses issues to avoid the need for escalation to the Chief Executive Officer. Qualifications include strong experience and knowledge of general management practices and principles in the government sector, and superior coordination and problem solving skills.
- **Internal Auditor** – Responsible for the development and implementation of a comprehensive internal audit program for the Authority, including management of a variety of complex administrative, operational, financial, performance, and management studies and audits of the Authority’s activities, functions, services and programs. Qualifications include strong background and experience in the leadership of an internal auditing function of a significant program or project.
- **Chief, Project Controls and Risk Management** – Responsible for the development and implementation of an effective quality assurance and project control program, as well as a risk management policy and plan, containing robust risk identification, management and mitigation mechanisms that are needed to avoid project implementation failures. Oversees the regulatory and environmental health and safety requirement of the project. Qualifications include a strong project management and oversight background, including experience in risk management and mitigation strategies, quality assurance, and project controls.

VIII. Gap Analysis

New Executive Structure Would Address Areas of Greatest Complexity and Risk

Notes:
 1) State employees or contractors.
 2) Chart does not include administrative/office tech positions, so additional positions would be required to serve these functions, commensurate with workload. Overall "headcount" would vary in functions below the Director level, primarily small in the near-term, and growing only as workload required.
 3) Also interfaces frequently to oversee / coordinate with other contracting state agencies and private consultants, in some cases.



VIII. Gap Analysis

Contracting with State and Local Agencies is Reasonable in Select Situations

Other state agencies have specialized expertise and available capacity

- Right of way expertise and capacity is available, and can be utilized with limited Authority staffing to provide coordination and oversight. Specifically, Caltrans has experienced right of way staff that can either be loaned from Caltrans or be obtained via an interagency agreement with Caltrans.
- Some design assistance could be obtained from Caltrans, especially where project interacts with roads. Again, this assistance could be obtained through a loan arrangement or an interagency agreement with Caltrans.
- The Attorney General's Office will continue to be an important source for legal support, even with in-house Authority legal staff. Because the AG's Office has been providing quality legal assistance to date for the Authority, it can continue to be a valuable resource for all legal issues, and may be required for litigations purposes, if the Authority legal staff is not provided with the ability to conduct its own litigation. Most state departments are not afforded the ability to conduct their own litigation and typically utilize the services of the AG's Office for this purpose.
- Accounting functions can be brought in-house because growth in workload and future activity warrant. As additional contractors are brought on board through future phases of the project, the number of invoices will grow significantly and the number of staff resources need will increase, as well.
- Given the current and near-term HR and IT needs, these functions can continue to be met with use of part-time or loaned staff, or through contracts with other state agencies or private vendors. This situation should be revisited upon significant growth in staffing and/or other related activities, or if the Authority's required level of service quality / responsiveness dictate in-house capacity.

Contracting with local agencies for staff support has opportunities and limitations

- Current plans focus on interim regional staffing requirements that can be met with local agencies. Local agencies have expressed interest in assisting the Authority's regional operations, either by supplementing with necessary staff or by providing facilities, equipment, or other services.
- The need for Regional Directors to speak and negotiate on behalf of the Authority will limit ability for individuals to "wear two hats" if independence and conflict of interest issues arise.
- In the future, the focus of attention with local agency relations must shift to contractual and financial arrangements needed for finalizing routes and developing and funding stations, among other issues.
- Local agencies also can be valuable sources of information and expertise on project implementation and operations, especially where rail projects and operations are involved.



VIII. Gap Analysis

Contracting with Private Sector will be a Complex Undertaking

The Authority needs to maximize private sector financial participation, which requires innovative “Public-Private Partnership” contracting strategies not typically utilized in California

- Current integration of project phasing, procurement, and financing remains a “work in progress”
- The Financial Plan relies on the Authority’s ability to engage in complex public-private partnership arrangements in order to obtain significant private sector financial participation in the funding of the project
- Statute requires state bond funds to be supplemented, with at least 50% of funding for each segment or corridor arising from non-state sources (e.g., federal, local, or private sources)
- Procurement and financing must be integrated within the Authority’s organizational structure to ensure effective implementation and protection of the public interest
- Even “traditional” procurement strategies will be more complex than usual due to the large scale, geographic diversity, and technological complexity of the project
- New federal reporting, accountability and transparency requirements will come into play if the Authority achieves its goals of receiving federal funding for the project, whether through ARRA or future programs
- Public scrutiny of contracts, expenditures, and related decisions require sophisticated leadership
- The new Chief Financial Officer must possess the requisite expertise to guide the Authority’s procurement and financing priorities, develop workable implementation strategies, and interface with a myriad of external legal and financial advisors, potential investors, other private parties, and other governmental regulators and public sector partners



IX. Next Steps



IX. Next Steps

Implementation Requires a Number of Important and Time-sensitive Actions

Secure support from Administration, Legislature and key stakeholders for Authority's desired staffing, organizational structure and timing

- Prioritize the most critical positions for immediate hiring. Not all proposed positions can wait until enactment of the 2010-11 budget.
- Legislative and Administration support should include the necessary legislative and executive actions to provide the Authority with additional “exempt entitlements” to facilitate the hiring of high quality individuals from either inside or outside of state service at competitive salaries
- Contract employees or new cooperative arrangements would be less optimal, and more complex to implement and administer

Carefully manage recruitment to attract world-class talent

- Engage qualified search firm(s) or human resources consultant(s) to refine position parameters and assess competitive landscape, before establishing positions or commencing recruitment
- Obtain necessary administrative approvals for establishing desired position levels and compensation ranges
- Recruit the best candidates (internal and external) to fill all key leadership positions

Make additional assessments, secure needed advice, and develop and implement plans to reach successful implementation

- Undertake an independent enterprise risk management assessment; implement an effective risk management program
- Secure other independent technical, legal, and financial advisors as needed to assist the Authority leadership in fully assessing and demonstrating the feasibility of the project
- Develop and implement strategic and tactical plans to secure the necessary private and public partnerships at federal, state, and local levels to implement the Project



IX. Next Steps

Position Priorities and the Hiring Path Forward

Key executive staff positions should be high priority for immediate action

- Action on the following positions should begin as soon as practical. (Potential position type is in parentheses.)
 - Chief Executive Officer (Exempt)
 - Chief of Staff (Career Executive Assignment (CEA))
 - Internal Auditor (CEA or permanent civil service)
 - General Counsel (CEA or permanent civil service)
 - Chief, Project Controls & Risk Management (CEA or permanent civil service)
 - Chief Program Manager (Exempt)
 - Chief Financial Officer (Exempt)
 - Chief, External Affairs (Exempt)
 - Regional Directors (Exempt or CEA)

Note: We have been informed by the Deputy Attorney General assigned to the Authority that legislation will be required in order for the Authority to be able to hire in-house legal counsel

- Other senior staff responsibilities may be met with existing staff or with temporary/loaned staff pending 2010-11 Budget action.
 - Director, Planning and Environment
 - Director, Engineering and Programming
 - Director, Legislation
 - Director, Public Affairs/PIO
 - Director, Finance
 - Director, Business and Procurement Services



IX. Next Steps Position Priorities and the Hiring Path Forward

Budget process provides opportunity for intermediate-term action

- Positions below the leadership level will need to be assessed for workload to determine appropriate staffing levels
 - Some functions may require additional personnel within the 2010-11 budget cycle
- Authority staff has prepared update budget request
 - Understood to be in line with prior correspondence to Senate Committee on Budget and Fiscal Review (May 12, 2009)
 - New recommended positions would not be reflected in current budget change proposal, although positions could be reallocated to meet new needs, as available
- Authority should confer with appropriate legislative and administration / control agency personnel regarding options for near-term action
 - Will “immediate-need” position authorizations and funding need to be pursued through a separate appropriations bill (2/3 vote; urgency) or do other options exist?



IX. Next Steps Position Priorities and the Hiring Path Forward

There are few options for creating and filling key executive-level positions

- Flexibility in hiring and compensation practices will be needed in order to attract and retain experienced executive leadership – including from outside the state civil service system
 - The Authority needs to attract and hire the best state employees and outsiders
 - The state pay structure will be a barrier to hiring the right individuals for critical positions
 - The state classification system is not conducive to the Authority’s organizational model

- Existing civil service classifications
 - Most lists for existing classification at the levels needed are “promotional” and contain only names of current state employees
 - Must hire from existing list (timeframe can be short) or administer a new examination, which may be time consuming
 - Classification descriptions and minimum qualifications are set and cannot be altered without significant time and effort
 - Little salary flexibility; existing salary range is set and may not be conducive to recruit the quality of candidates desired

- New civil service classifications
 - Permits hires to come from outside of state service
 - Individual appointed would gain permanent civil service status upon completion of a one-year probationary period
 - Upon creation of the classification, salary can be negotiated with the Department of Personnel Administration (DPA)
 - DPA and the State Personnel Board (SPB) are reluctant to create new classifications
 - The process to create a new civil service class could take six months or more



IX. Next Steps Position Priorities and the Hiring Path Forward

Options for senior executive positions include two distinct types

- Career Executive Assignments
 - Hires limited to current state employees with permanent civil service status (no outside hires)
 - Some salary flexibility within existing salary bands
 - Hiring process is relatively quick
 - Individual can be separated with 20-days notice (no permanent status in the position)
- Exempt Entitlements
 - Maximum recruitment and hiring flexibility; candidates can come from within or outside of state service
 - Maximum salary flexibility (must be approved by the Governor's Office and DPA)
 - Appointees serve "at will" and gain no permanent status
 - California State Constitution provides the Authority Board with one exempt entitlement (currently filled by the Executive Director)



IX. Next Steps

Position Priorities and the Hiring Path Forward

Although use of exempt entitlements appears to best meet Authority's needs, barriers exist

- Exempt appointments to proposed new executive-level positions likely will require support of Legislature and Administration
- It does not appear that the Governor currently has the ability to provide the Authority with additional exempt entitlements
- It appears that the only means to obtain additional exempt entitlements is through legislation, which would designate the Governor's appointment authority for a specific number of appointments or to specific positions/functions within the Authority
 - These additional exempt positions, although “belonging to the Authority” under the legislation, still would need to satisfy the Constitution's requirement that the appointments to fill the additional exempt positions be made by the Governor (this has been discussed with DPA, which is in agreement that this would work and has precedent)
 - The statute may need to specify the Authority's role in identifying and forwarding one or more candidates for each exempt position to the Governor for appointment consideration and approval
 - The Authority may wish to include language in the statute that exempts the salary setting for some or all of the new exempt entitlements from DPA approval (similar to California Housing and Finance Agency legislation passed in 2006); this legislation could include provisions which, for expediency purposes, permit the Governor to establish the initial exempt position salaries
 - The Authority may also want to include language in the legislation which will permit it to hire in-house legal counsel, since currently there is no authorizing statute which provides for this



X. Acknowledgements



X. Acknowledgements

KPMG would like to acknowledge the many individuals who contributed their time, ideas, and information to this organizational assessment

We owe particular gratitude to the individuals who generously participated in the formal interview process. These individuals spoke candidly and even passionately about the factors they believe will drive the success of the California High Speed Rail project. Their names and organizations can be found in Section III. Methodology. In addition, the responsiveness of the following individuals and organizations was greatly appreciated:

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 - Vickie Janek
 - Rosemary Mejia
 - Gurgit Singh
 - Tony Majewski

- California Regional Transportation Agencies
 - San Diego Association of Governments
 - Orange County Transportation Authority
 - LA Metropolitan Transportation Authority

- KPMG Subject Matter Professionals
 - We also extend our appreciation to the many colleagues whose contributions to this important assignment included their time and their extensive knowledge of benchmark agencies and leading practices from around the globe.



XI. Appendices



Appendix A

Benchmarking Case Studies

Benchmarking Case Studies

International Rail Projects

Project	Country	Sponsor / Organizational Characteristics	Roles
RAVE / Refer (HSR)	Portugal	<ul style="list-style-type: none"> 40% Nat'l rail provider Refer (State owned) 60% Portuguese State via Ministry of Finance 	<ul style="list-style-type: none"> Develop network from initial design through procurement
TGV – SNCF / RFF	France	<ul style="list-style-type: none"> “Agreement of 31 August 1937” established a French National Railway Company or “SNCF” (Société Nationale des Chemins de fer Français) 	<ul style="list-style-type: none"> Trains owned and operated by French National Railroads RFF responsible for rail traffic control, allocation of available infrastructure and the construction of additional infrastructure pursuant to government instructions
AVE (HSR) – RENFE / ADIF	Spain	<ul style="list-style-type: none"> Railways nationalized in 1941 under RENFE (Red Nacional de los Ferrocarriles Españoles) 	<ul style="list-style-type: none"> RENFE owns the rolling-stock and remains responsible for the planning, marketing and operation of passenger and freight services ADIF controls the construction
Singapore Land Transport (planned HSR)	Singapore	<ul style="list-style-type: none"> Merger of multiple registries, corporations, divisions, departments and ministries into the new Statutory board under the Ministry of Transport 	<ul style="list-style-type: none"> Spearheads all land transport developments Plans, develops, and manages the long-term transport needs of Singapore
Trem Bala (ANTT) (HSR)	Brazil	<ul style="list-style-type: none"> Private company with a DBFO concession 	<ul style="list-style-type: none"> Infrastructure and passenger service operations
High Speed Rail South (ProRail)	Netherlands	<ul style="list-style-type: none"> Part of NS Railinfratrust, the Dutch railway infrastructure owner Government task organization 	<ul style="list-style-type: none"> Rail Infrastructure Management, capacity allocation, and traffic control
Deutsche Bahn (DB) / ICE (HSR)	Germany	<ul style="list-style-type: none"> Deutsche Bahn AG is a private German national railway company Made up of DB Netz and DB Mobility Logistics 	<ul style="list-style-type: none"> DB Netz responsible for the operations, maintenance, renewal and upgrade of the network DB Mobility Logistics AG responsible for operations and marketing of rail transport

International Rail Projects (continued)

Project	Country	Sponsor / Organizational Characteristics	Roles
Japan Railways Group (HSR)	Japan	<ul style="list-style-type: none"> Privatization of Japanese National Railways, which was split into 6 companies 	<ul style="list-style-type: none"> High speed rail technology and operation reform Operates a large proportion of intercity rail service and commuter rail service
Taiwan High Speed Rail	Taiwan	<ul style="list-style-type: none"> Bureau of High Speed Rail Coordination with and assignment of HSR and MRT responsibilities from Taiwan's Provincial Govt. Public- Private Build-Operate-Transfer model 	<ul style="list-style-type: none"> Design-build and operate functions Owns and operates rolling stock
Crossrail	United Kingdom	<ul style="list-style-type: none"> Department of Transport and Transport for London (TfL) with full ownership by TfL now 	<ul style="list-style-type: none"> Delivery agent Main interface to delivery supply chain TfL retains design responsibility and health and safety roles
Irish Rail Procurement Agency	Ireland	<ul style="list-style-type: none"> Established under the Transport Railway Infrastructure Act of 2001 	<ul style="list-style-type: none"> Provision of light rail and metro infrastructure and procurement of light rail and metro service provision. Statutory powers to enter into concession, joint venture, PPP or other arrangements

Other US and California Transportation and Infrastructure Agencies

Organization	State / Region	Organizational Characteristics	Roles
California Dept. of Transportation	California	<ul style="list-style-type: none"> The current framework of Caltrans was set down by Assembly Bill 69 in 1972 Government department 	<ul style="list-style-type: none"> Design, construction, maintenance, and operation of the California State Highway System, as well as that portion of the Interstate Highway System within the state's boundaries
California Dept. of Water Resources	California	<ul style="list-style-type: none"> Formed in 1957 with commencement of Water Resources Development System construction 	<ul style="list-style-type: none"> Responsible for planning, construction, and operation of Water Resources Development System, composed of dams, reservoirs, pumping plants, power plants, aqueducts and pipelines
California Housing Finance Agency	California	<ul style="list-style-type: none"> Chartered by State in 1975 Self-supporting state agency 	<ul style="list-style-type: none"> Provides financing and programs to renters and homebuyers Housing bank to make low interest rate loans through the sale of tax-exempt bonds
Caltrain	Bay Area	<ul style="list-style-type: none"> Formation of the Peninsula Corridor Joint Powers Board in 1987 	<ul style="list-style-type: none"> Design, schedule, and service Amtrak is a contract operator
Florida's Turnpike Enterprise	Florida	<ul style="list-style-type: none"> Self-sufficient enterprise 	<ul style="list-style-type: none"> Responsible for all operations on every FDOT-owned and operated toll road and bridges; Includes 600 miles of roadway and 80 percent of all toll facilities in Florida
Los Angeles Metropolitan Transportation Authority	So. CA	<ul style="list-style-type: none"> Governed by 13-member Board of Directors 	<ul style="list-style-type: none"> Transportation planner and coordinator, designer, builder and operator
Metropolitan Transportation Commission	Bay Area	<ul style="list-style-type: none"> Created by the state Legislature in 1970; Governed by 19 member policy board 	<ul style="list-style-type: none"> Transportation planning, coordinating and financing agency for the nine-county San Francisco Bay Area
Orange County Transportation Authority	So. CA	<ul style="list-style-type: none"> Consolidation of seven separate transportation agencies in 199; Governed by 18-member board 	<ul style="list-style-type: none"> Countywide bus service, Metrolink rail service, the 91 Express Lanes, freeway, street and road improvement projects, and by regulating taxi operations
San Diego Association of Governments	So. CA	<ul style="list-style-type: none"> Governed by a Board of Directors composed of mayors, council members, and county supervisors from each of the region's 19 local governments 	<ul style="list-style-type: none"> Toll collection, highway and transit projects, transit planning, programming, project development, and construction



Benchmarking Case Studies
RAVE / Refer, Portugal

- **Board / leadership**

- RAVE board is same as Refer's; positions vary among officers of the two boards

- **Ownership / foundation**

- 40% by Nat'l rail provider - Refer (State owned)
- 60% by Portuguese State via Ministry of Finance

- **Organizational responsibilities**

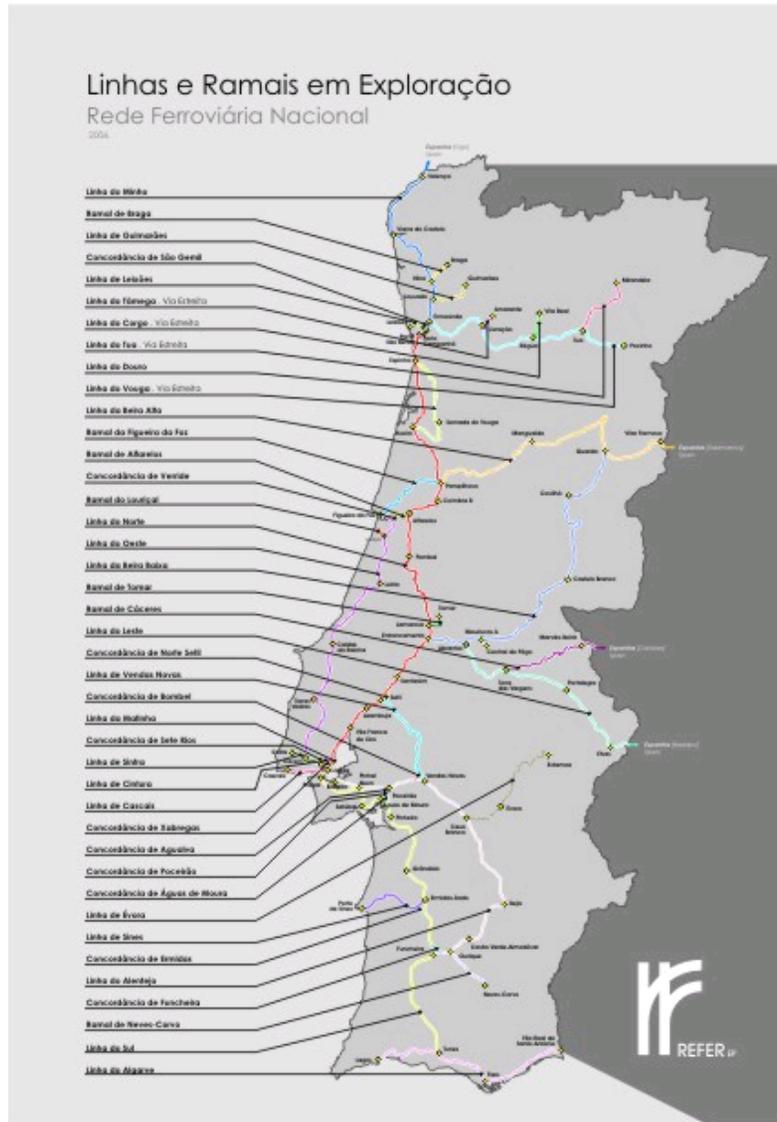
- Manages contracts, trains, & safety after contract awards
- Develops network from initial design
- Permits and environmental impact
- Procurement
- Signaling and telecom
- Infrastructure
- Private sector responsible for detailed design, construction and maintenance

- **Staff roles**

- Rail engineering
- Legal
- Procurement
- Finance
- Support team for HR and admin

Benchmarking Case Studies

RAVE / Refer, Portugal



Source: Refer

- **Board / leadership**

- RFF is a state-owned corporation created in 1997 to manage the French rail infrastructure
- SNCF was created in 1938 after the nationalization of the five main railways in operation at that time

- **Ownership / foundation**

- SNCF is a state-owned company that operates like a private company

- **Organizational responsibilities**

- RFF is responsible for rail traffic control, allocation of available infrastructure and the construction of additional infrastructure pursuant to government instructions
- RFF acts primarily as the network manager, defining the objectives
- SNCF is responsible for national railway operations, for both the conventional and High Speed rail

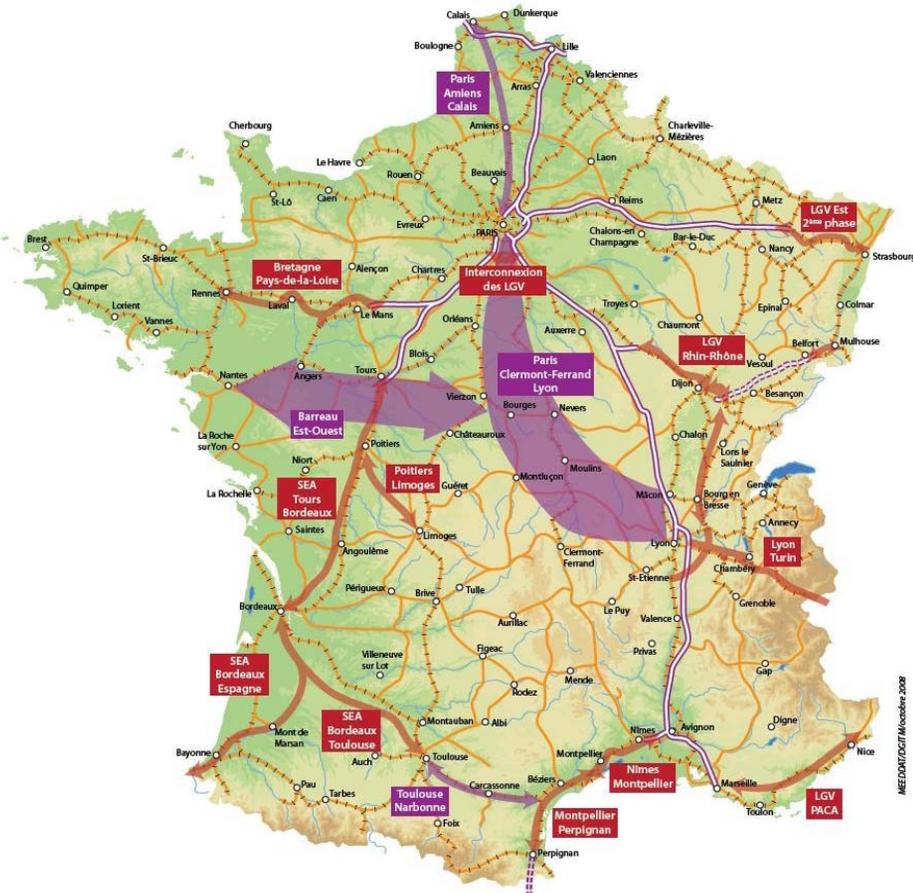
- **Staff roles**

- RFF has a small structure with less than 800 employees. It acts primarily as the network manager, defining the objectives
- SNCF has a large structure with more than 200,000 employees, of which 55,000 are allocated to SNCF Infra and 14,400 are dedicated to the management of the infrastructure network

Benchmarking Case Studies

TGV – SNCF / RFF, France

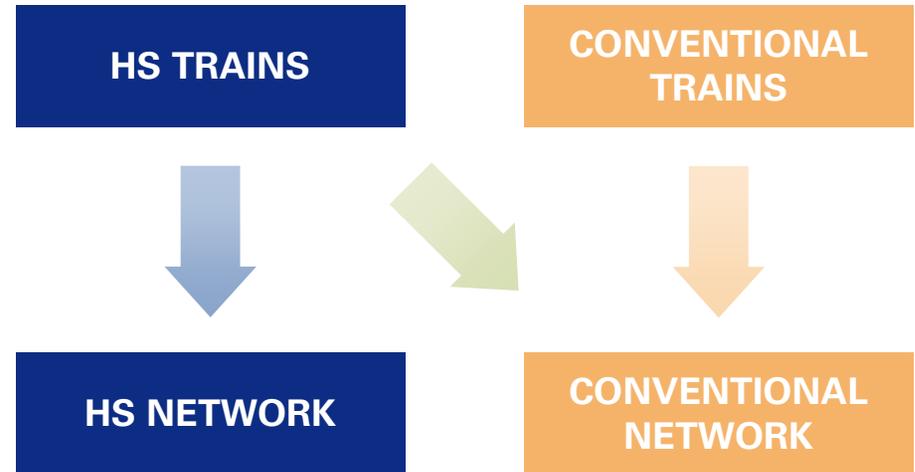
HSR NETWORK IN FRANCE



- Légende
- Ligne à grande vitesse (LGV)
 - - - LGV en construction
 - Ligne classique électrifiée
 - - - Ligne classique non électrifiée
 - ↔ Projet de LGV pouvant être lancé d'ici 2020
 - ↔ Programme supplémentaire de LGV



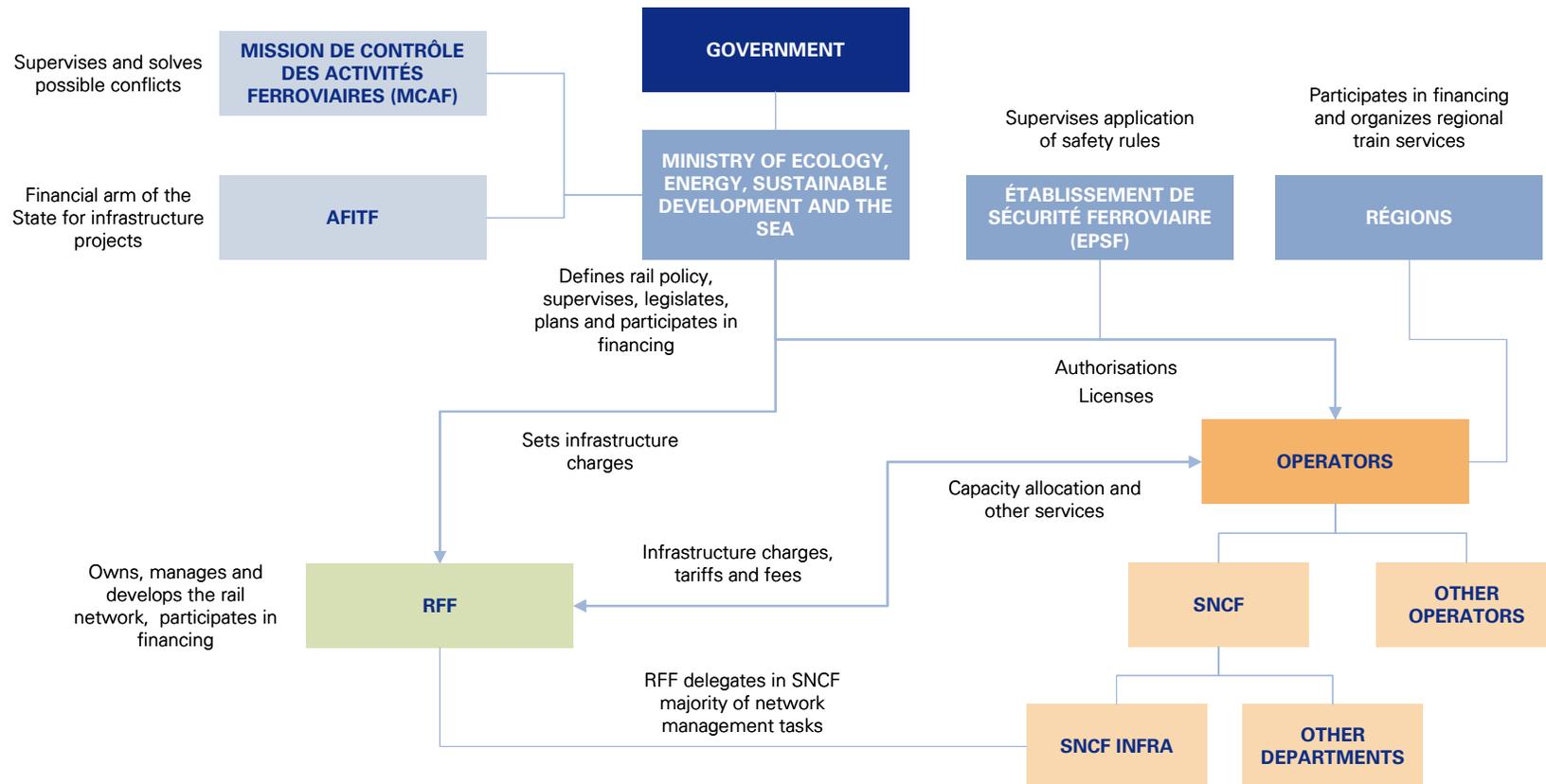
HSR OPERATING MODEL IN FRANCE



Benchmarking Case Studies

TGV – SNCF / RFF, France

HIGH SPEED RAIL (TGV) SECTOR ORGANIZATION IN FRANCE



- **Ownership / foundation**

- ADIF is a public limited liability company with managerial autonomy that was created by the Railway Act of 2005
- RENFE is the State owned national railway operator, both for conventional and High Speed rail

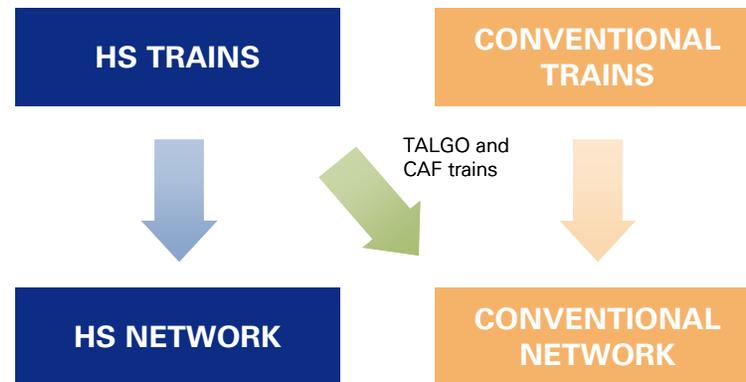
- **Organizational responsibilities**

- ADIF is the owner and manager of the infrastructure
- ADIF is responsible for the construction of any lines commissioned by the Stat also operates and maintains rail infrastructure networks, including RFIG (Red Ferroviaria de Interés General / Spanish General Interest Rail Network) but excluding FEVE.
- RENFE key responsibilities include the management of the railway operations and the related commercial activities
- RENFE owns operating assets, including the trains

- **Staff roles**

- ADIF: rail traffic control, allocation of available infrastructure and the construction of infrastructure upon central government instructions

HSR OPERATING MODEL IN SPAIN



Source: UIC

Benchmarking Case Studies

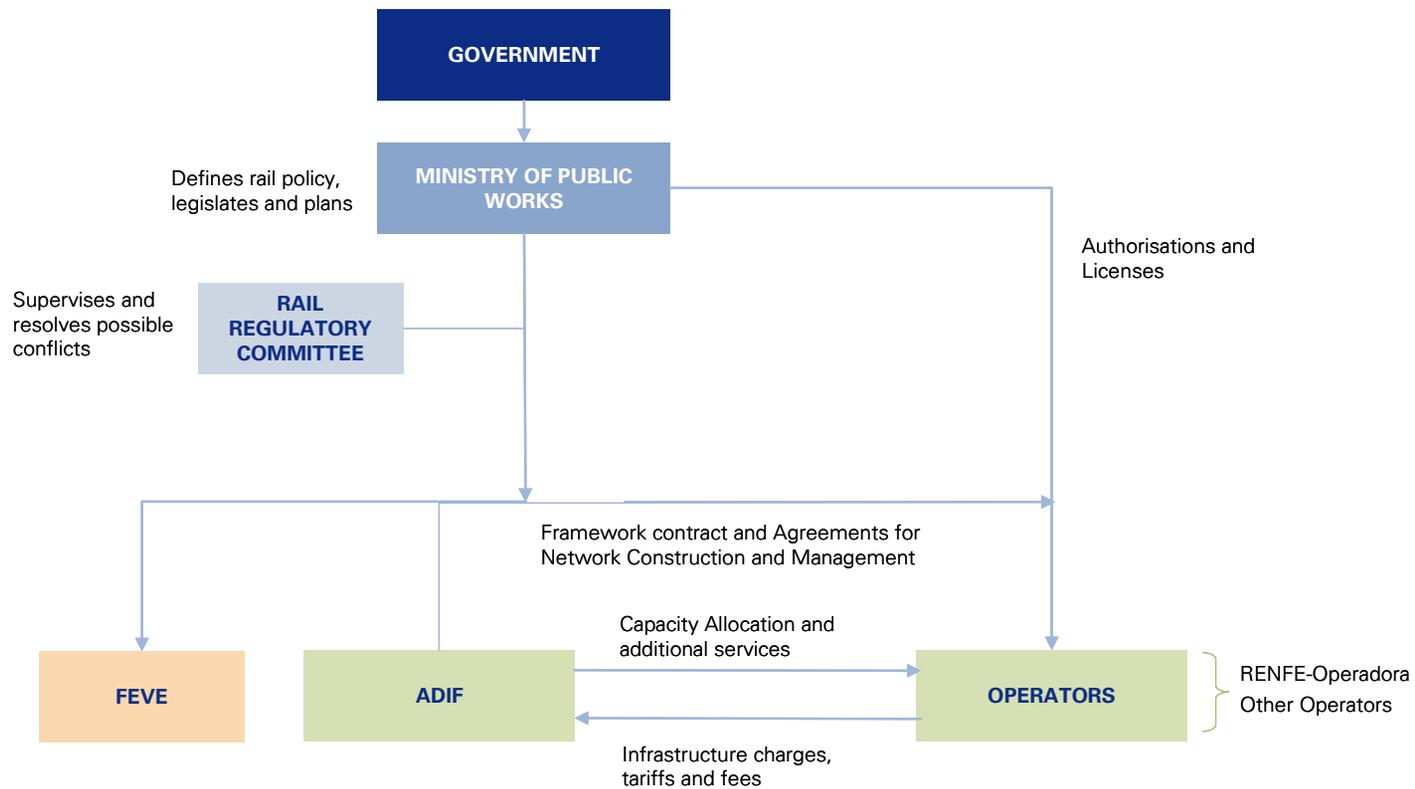
AVE – RENFE / ADIF, Spain

SPANISH HSR NETWORK, 2020



Source: PEIT

RAIL SECTOR ORGANISATION IN SPAIN



Source: ADIF Network Statement (2009) and Ministerio de Fomento, www.fomento.es

Singapore Land Transport, Singapore

- **Board / leadership**

- Department for Transport is main interface to Central Gov't and HM Treasury
- Transport for London is main interface to Local Gov't and the Mayor London's Office

- **Ownership / foundation**

- Statutory board under the Ministry of Transport
- Formed in 1995 through the merger of Registry of Vehicles, Mass Rapid Transit Corporation, Roads & Transportation Division of the Public Works Department, and Land Transport Division of the then Ministry of Communications

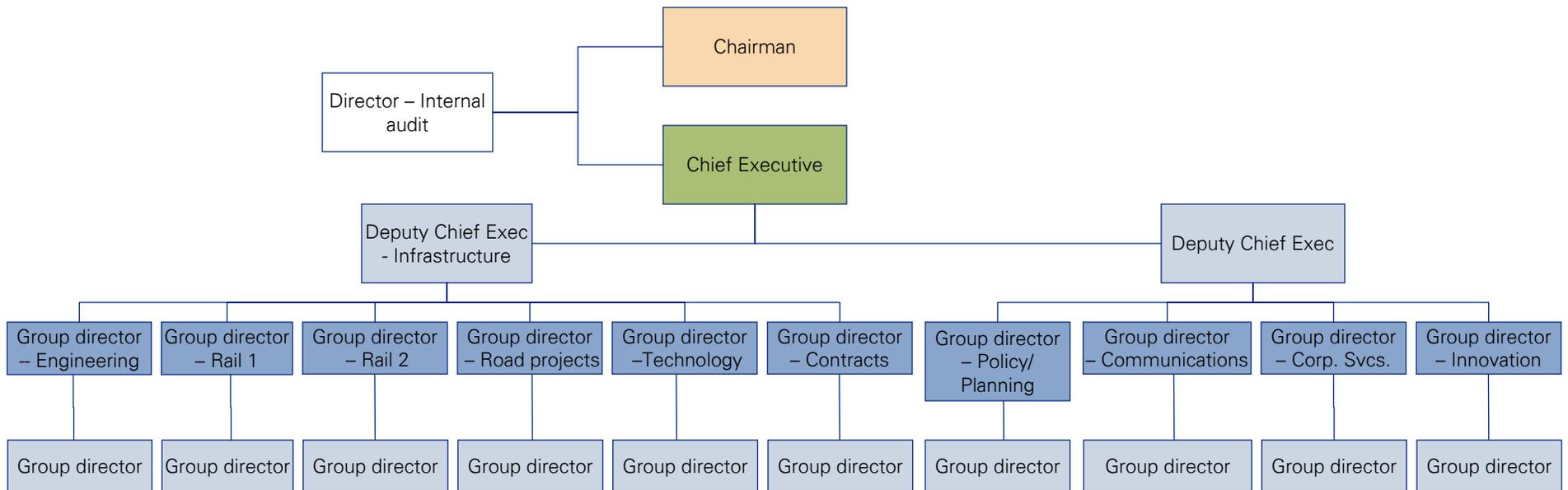
- **Organizational responsibilities**

- Spearheads land transport developments in Singapore
- Focus is planning and management

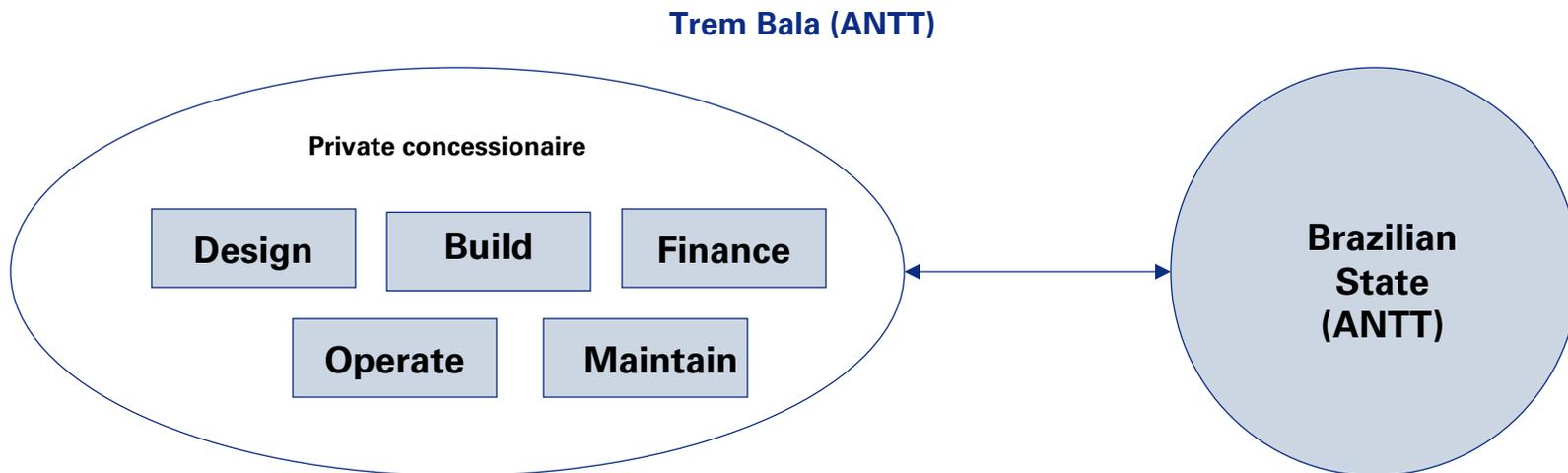
- **Staff roles**

- Corporate Communications and Corporate Services
- Engineering
- Innovation & Info Communication Technology
- Policy & Planning
- Rail & Road Projects
- Road Operations & Community Partnership
- Safety & Contracts
- Vehicle & Transit Licensing

Singapore Land Transport, Singapore



Trem Bala – ANTT, Brazil



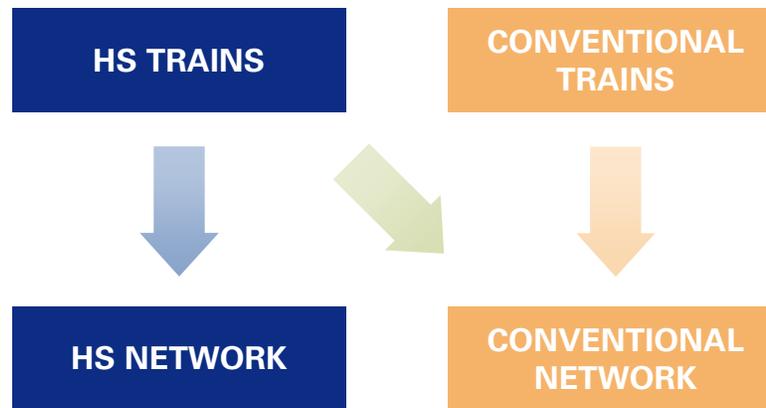
A single company including both infrastructure provision and passenger service operations will have a concession to design, build, finance, operate and maintain the High Speed rail line between Rio de Janeiro, São Paulo and Campinas.

A contract will be signed between:

- 1) A private entity, consisting of (envisaged) a (partly) international operator and rolling stock provider, national infrastructure builders and maintenance companies and primarily financed through the national development bank (BNDES), and
- 2) The Brazilian State represented by the National Agency for Road and Rail Transport (ANTT); this Agency reports to the ministry of transport and indirectly to the 'Casa Civil' (meaning the prime-ministers office)

Trem Bala (ANTT)

ENVISAGED HSR OPERATING MODEL IN BRAZIL



Benchmarking Case Studies

Trem Bala – ANTT, Brazil



Source: PAC presentation, May 7th, 2008

●—● Bullet Train ●—● BR 116 Highway

High Speed Rail South (ProRail), Netherlands

- **Board / leadership**

- NS Railinfratrust Ltd was founded as a result of the separation of track and trains in 1995

- **Ownership / foundation**

- ProRail is part of NS Railinfratrust, the Dutch railway infrastructure owner
- Government task organization; consists of
 - Railinfrabeheer
 - Railned
 - Railverkeersleiding
- Funding for ProRail is provided by a government subsidy, and a fee paid by the railway operators

- **Organizational responsibilities**

- Railinfrabeheer (Rail Infrastructure Management, RIB)
- Railned (railway capacity allocation) (planning more than 52 hours before the day of the train service)
- Railverkeersleiding (Traffic Control) (planning from 52 hours before the day of the train service)

- **Staff roles**

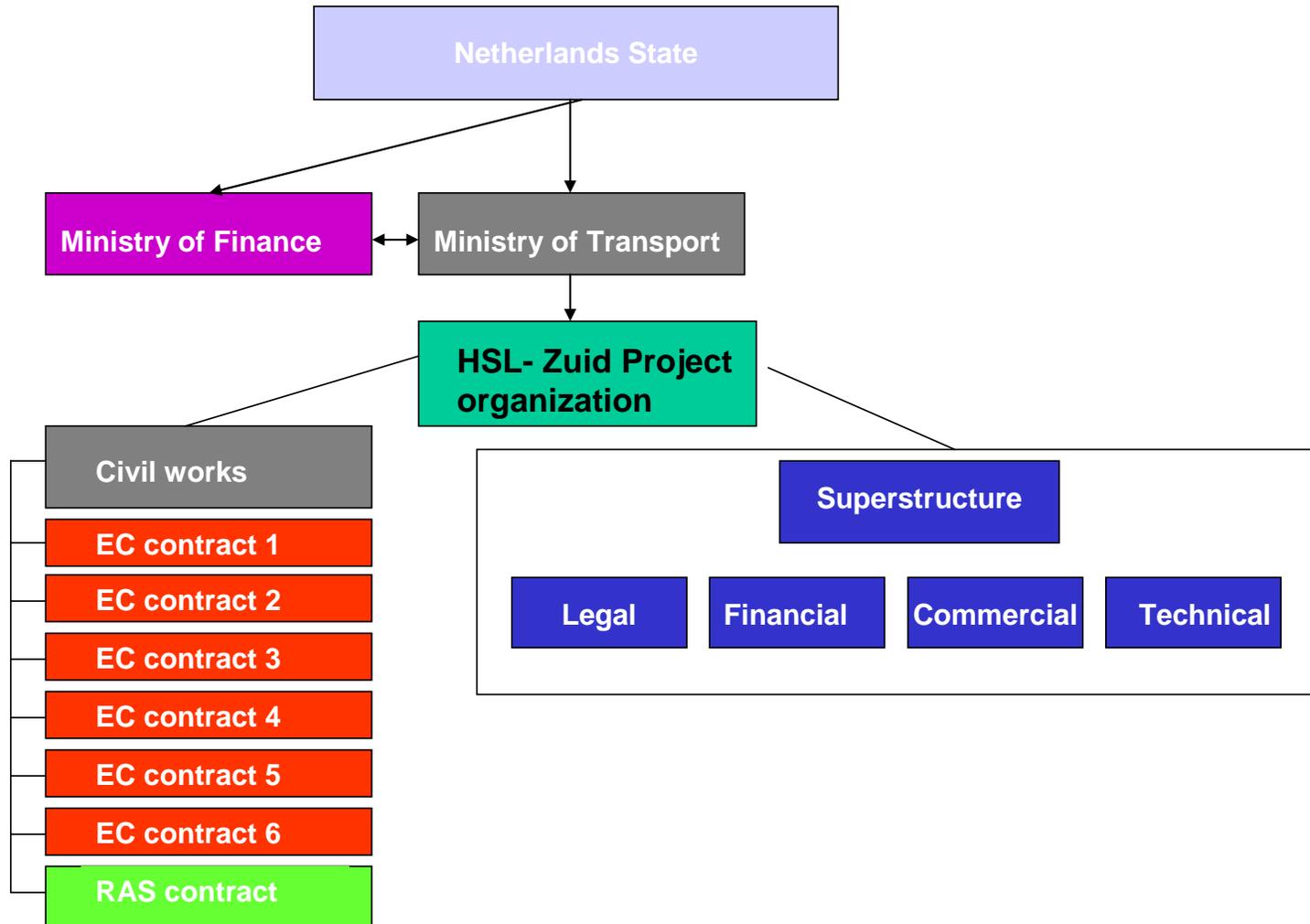
- Transfer capacity in stations and information on rail traffic
- Analyze the risks linked to the use and management of the railway infrastructure, and take suitable measures to sufficiently control those risks

High Speed Rail South (ProRail), Netherlands



Source: Network Statement 2010 Combined Network - version 1.0 dated 12 December 2008

High Speed Rail South (ProRail), Netherlands



Deutsche Bahn (DB) / ICE, Germany

- **Ownership / foundation**

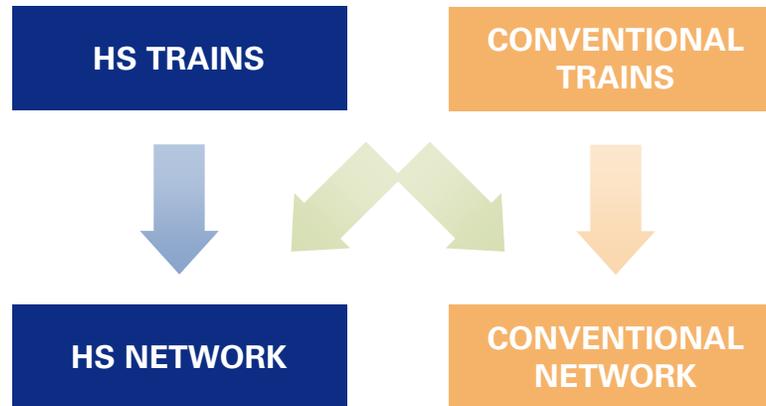
- DB Netz Tracks, DB Netz Stations and Services and DB Netz Energy
- DB Mobility Logistics AG (DB ML) is a subsidiary of DB AG

- **Organizational responsibilities**

- DB Netz is the owner of the rail network and the infrastructure provider
- DB Netz responsible for the operations, maintenance, renewal and upgrade of the network
- DB Mobility Logistics AG responsible for operations and marketing of HSTs long distance passenger traffic , cross-country or regional passenger traffic, urban mass transit, and freight transport

Deutsche Bahn (DB) / ICE

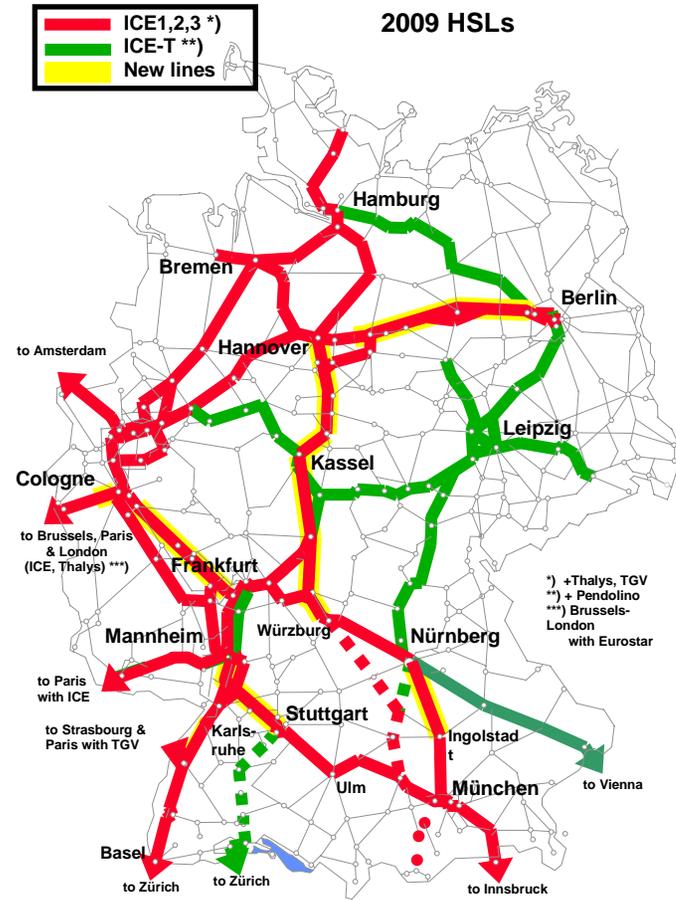
HSR OPERATING MODEL IN GERMANY



Source: UIC

Deutsche Bahn (DB) / ICE, Germany

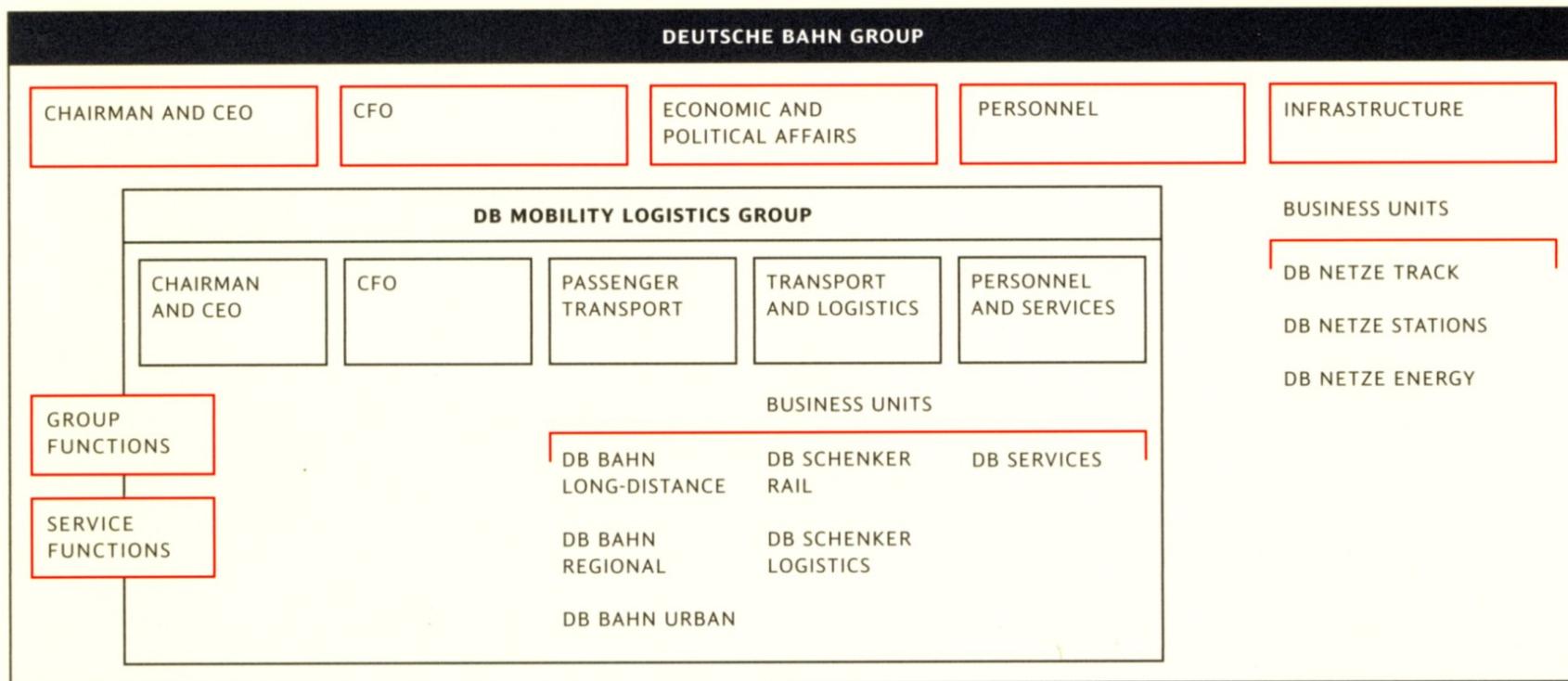
THE GERMAN HSR NETWORK IN 2009



Source: DB

Deutsche Bahn (DB) / ICE, Germany

ORGANIZATIONAL STRUCTURE OF DB AG GROUP OF COMPANIES AS OF MARCH 2009



Source: DB

- **Ownership / foundation**

- JR Group consists of seven for-profit companies that took over most of the assets and operations of the government-owned Japanese National Railways in 1987 after financial difficulties triggered privatization
- JR Group is made up of independent companies, and it does not have group headquarters or a holding company to set the overall business policy
- Independent companies are geographically separated; Freight company operates across geographic areas

- **Organizational responsibilities**

- Compan(y)(ies) own the locomotives, rolling stock and stations, hire track from member passenger companies when necessary for long distance routes
- Linkages to airports generally provided by smaller regional private rail companies
- JR Group seeks to export its technologies and equipment worldwide
- JR Group pursues innovations in high speed rail technology and operation reform; provides significant funding to Railway Technical Research Institute (also funded by Japanese government and private contracts)

Japan Railways Group, Japan

Japan introduced high-speed train technology in 1964 with the Shinkansen bullet trains, now expanded throughout the islands of Japan.



Taiwan High Speed Rail, Taiwan

- **Ownership / foundation**

- Taiwan High Speed Rail Corporation formed to bid for the HSR BOT Project and was selected the Best Applicant
- Public – Private Build-Operate–Transfer model; coordination with and assignment of HSR and MRT responsibilities from Taiwan Provincial Government

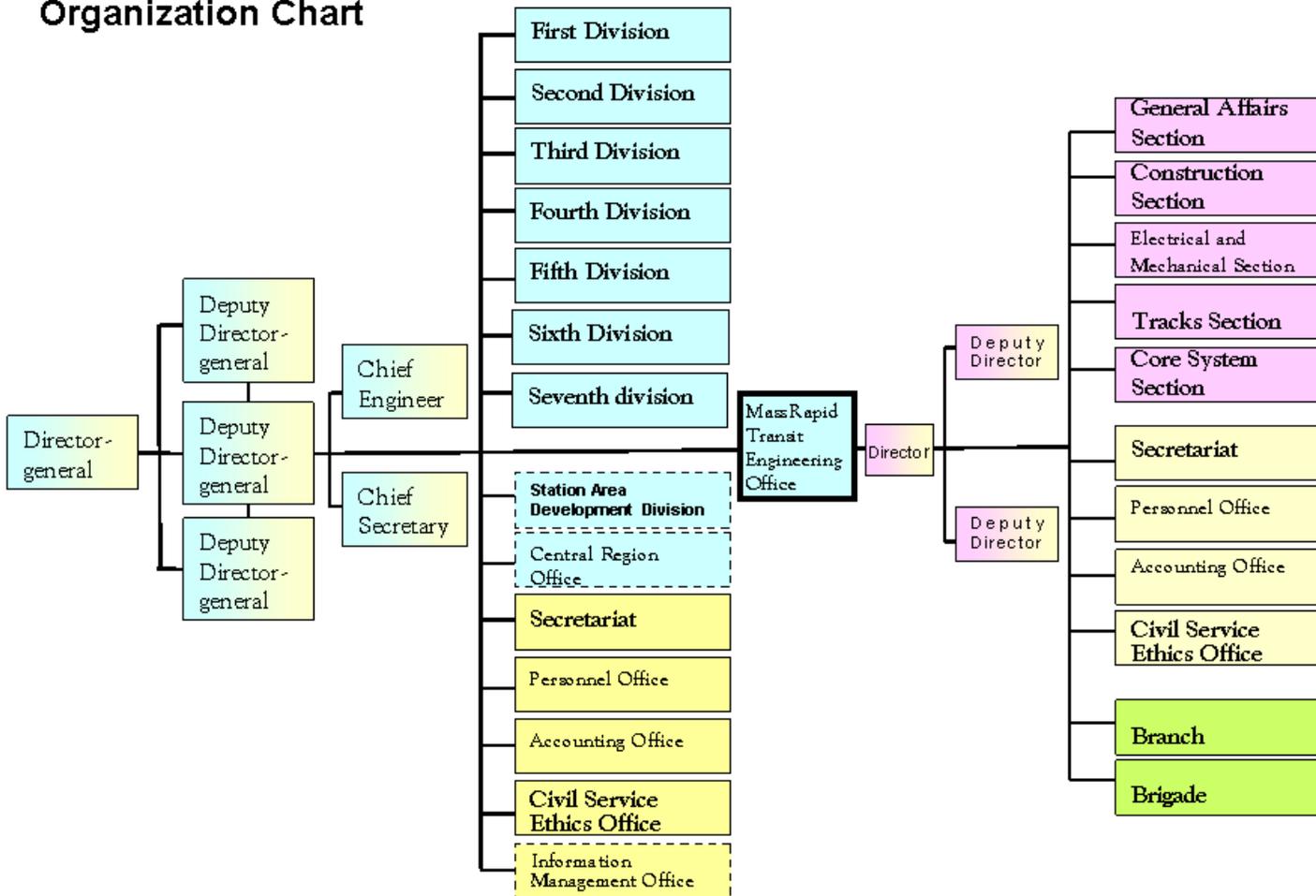
- **Organizational responsibilities**

- Granted a concession to finance, construct, and operate the High Speed Rail System for a period of 35 years and a concession for HSR station area development for a period of 50 years

- **Staff roles / divisions**

- 1st Div. - Management and coordination of private investment cases, market analysis and transport planning, integration of engineering and operational platforms, management of train operation safety, commissioning inspections, financial planning, etc.
- 2nd Div. - Route, structure, civil engineering, surveying, location control, architecture, bridge piers, tunnels, water and power supply, air conditioning, planning, analysis and design for landscape, technical support for construction, etc.
- 3rd Div. - Power supply, cables, signaling, communication, ventilation, trains and relevant maintenance, the planning and design of equipment for stations and work sites, technical support for construction, etc.
- 4th Div. - Official submissions of contracted job, entering into contracts, contract management inspection, safety and hygiene at construction site, engineering litigation, planning control, quality control, engineering inspection, completion and settlement of accounts, and other engineering management affairs.
- 5th Div. - Service land construction restrictions, management of urban plans (making and changing them), land acquisition and expropriation, land purchase, right-of-way and land registration, management of photos, books and property, land planning, usage and development, etc.
- 6th Div. - Planning and design for track engineering and other engineering platforms, stipulation and inspection of technological standards and regulations, integration of technological platforms, system integration testing, environmental protection, forms for management and other affairs regarding technical development and training.
- 7th Div. - MRT and light rail transit planning, plan management, change of urban plans, land development, etc.
- Info. Mgt. Office - Establishment of engineering information systems, establishment and management of networks, technical document management, information technique support, hardware maintenance, information management, training, etc.
- Station Area Dev. Div. - Development in HSR station specified areas, land planning and usage, etc.
- Central Region Office - Monitoring record of construction, public petitions, Bureau's engineering inspection, publications, communication
- Other Offices: Secretariat, Accounting, Personnel and Civil Service Ethics

Organization Chart



Taiwan High Speed Rail, Taiwan

After beginning public operation in January 2007, the HSR has since become an important means of transportation along Taiwan's Western Corridor, and has spurred upgrading of the economic structure at many places along its route.



Source: THSRC



Benchmarking Case Studies

Crossrail, UK

- **Board / leadership info**

- Department for Transport is main interface to Central Gov't and HM Treasury
- Transport for London is main interface to Local Gov't and the Mayor London's Office

- **Ownership / foundation**

- Department of Transport and Transport for London with ownership transferred to TfL in 2008
- Expires in 2017

- **Organizational responsibilities**

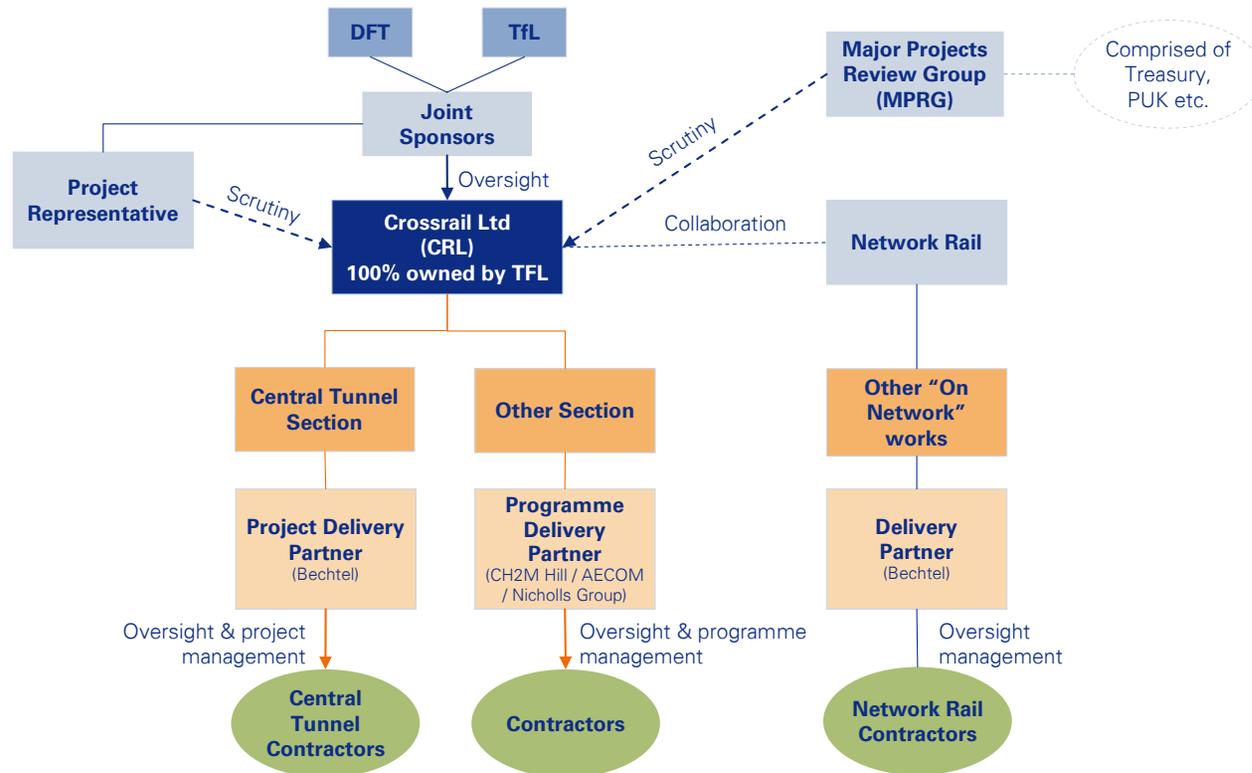
- Delivery agent
- Main interface to delivery supply chain
- Retains design responsibility
- Retains health and safety roles

- **Staff roles**

- Technology
- Commercial
- Corporate affairs
- Finance
- HR
- Legal
- Bill, Land & Environmental Mgmt
- Operations and Maintenance
- Program delivery and implementation
- Health Safety and Quality
- Procurement
- Engineering and systems integration

Benchmarking Case Studies

Crossrail, UK



NB: Project/Programme Delivery Partners (PDP) do not contract with contractors – they just provide project management / integration. CRL places all contracts direct with suppliers / contractors but advised by Delivery Partners. The PDP will manage the design process and administer construction contracts and as such will need strong commercial capability and will be held accountable.

Irish Rail Procurement Agency, Ireland

- **Ownership / foundation**

- Independent statutory body that was established under the Transport Railway Infrastructure Act of 2001

- **Organizational responsibilities**

- Principal statutory functions of RPA are the provision of light rail and metro infrastructure and procurement of light rail and metro service provision
- Also has the function of providing integrated ticketing arrangements in Ireland.
- Overseeing the operation of the Luas system, along with the planning of new Luas and Metro lines for Dublin as laid out under the Irish Governments Transport 21 investment program
- Statutory powers to enter into concession, joint venture, PPP or other arrangements

- **Staff roles**

- Corporate and project support
- Projects and infra mgmt
- Corporate Services is made up of Human Resources, Information Technology, Public Relations, Marketing and Facilities
- Finance is made up of Financial Control, Financial Accounts, Treasury, Invoice Control and Internal Payroll
- RPA Design & Construction is made up of Engineering Design, Traffic Management, Transport Planning, Environment and Health & Safety
- Project Services is made up of Procurement, Quality Control, Project Commercial, Planning Management and Risk Management
- Project teams for each of the Luas and Metro projects in development

Irish Rail Procurement Agency, Ireland

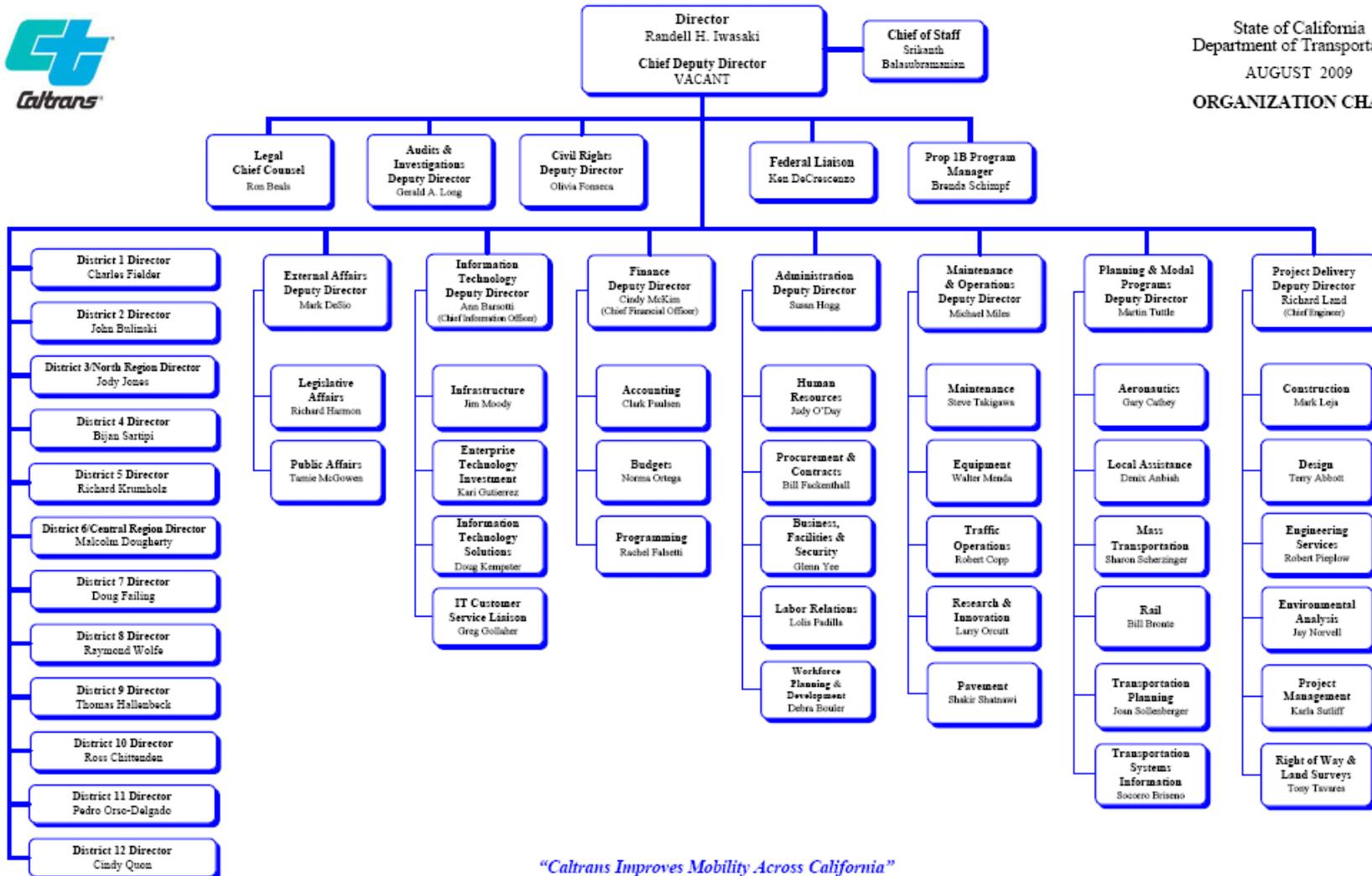


Source: RPA

California Department of Transportation / Caltrans



State of California
Department of Transportation
AUGUST 2009
ORGANIZATION CHART

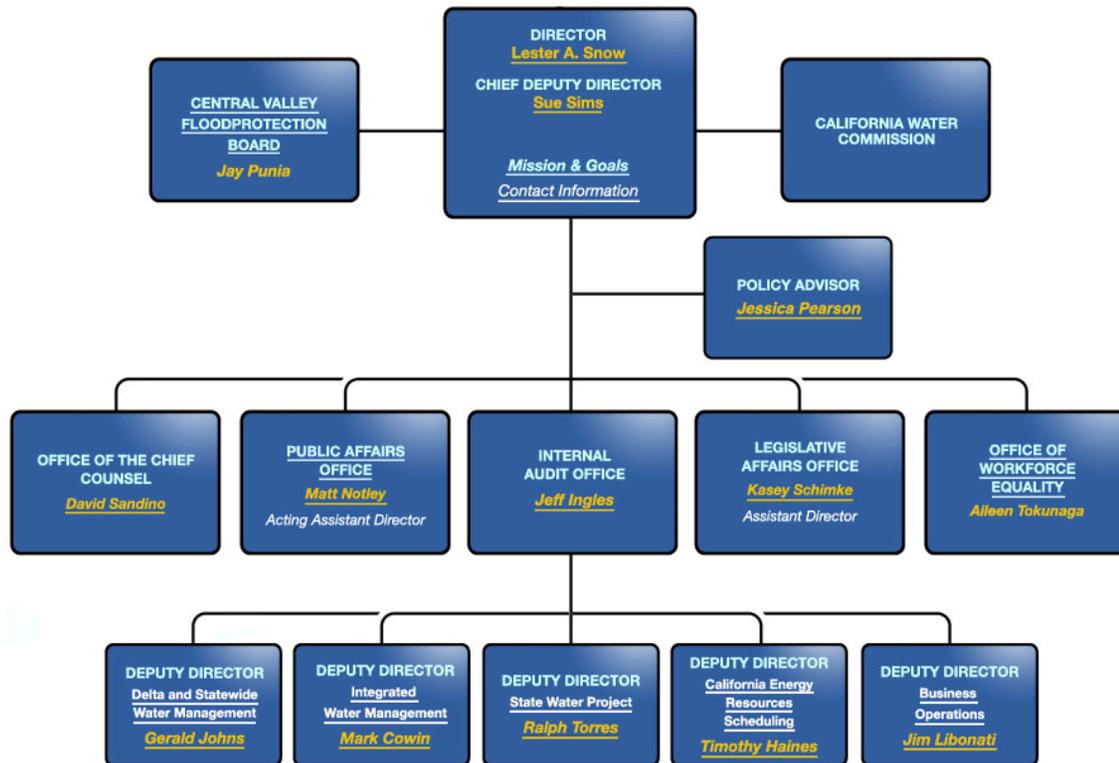


"Caltrans Improves Mobility Across California"

Source: Caltrans



California Department of Water Resources



Source: water.ca.gov

CalHFA Executive Leadership

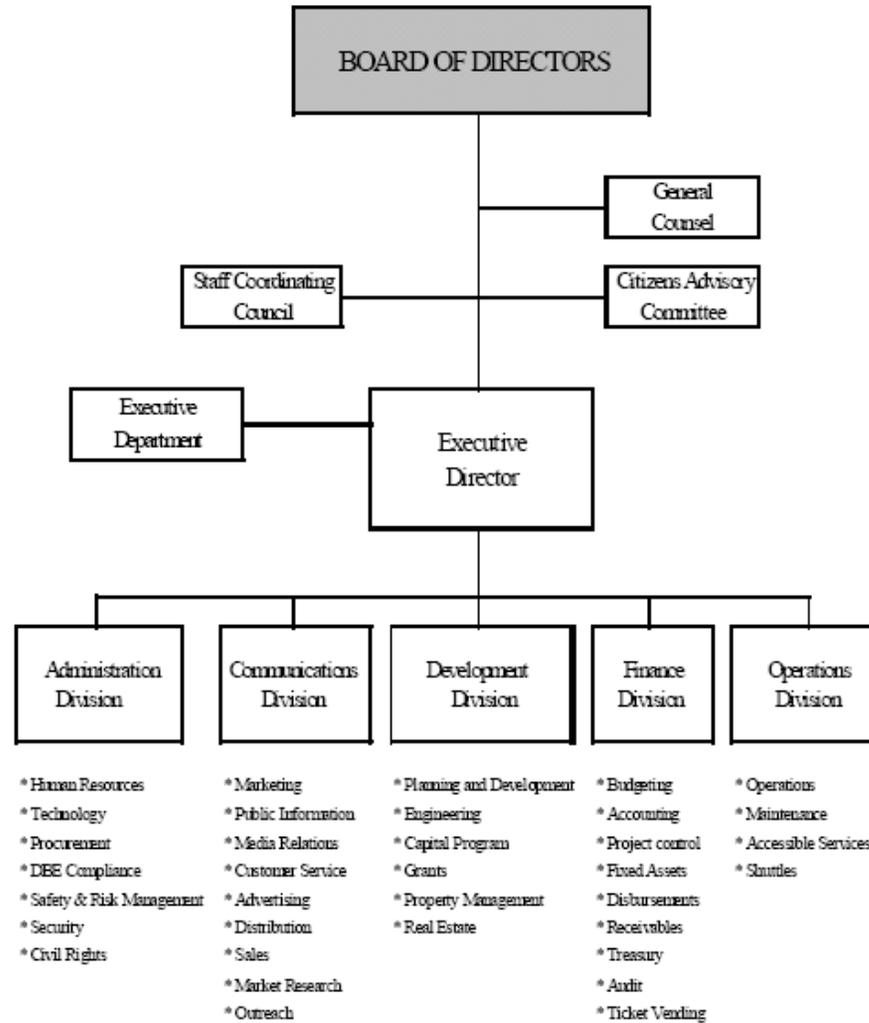
Executive Director
Chief Deputy Director

Director of Asset Management
Director of Legislation
Director of Financing
Comptroller

Director of Mortgage Insurance
Director of Multifamily Programs
Director of Homeownership

General Counsel
Director of Administration
Director of Marketing
Chief Information Officer

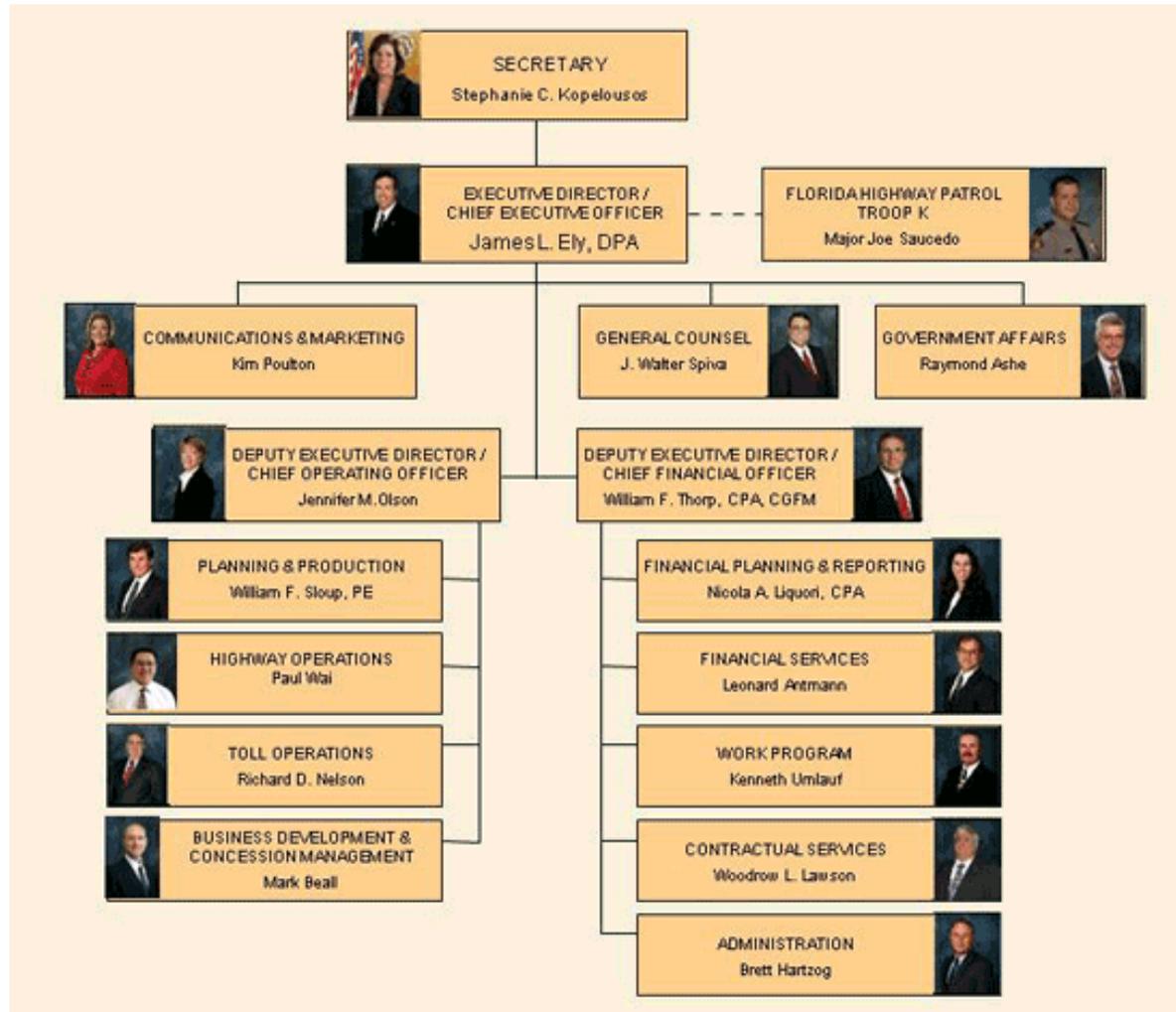
ORGANIZATION CHART



Source: Caltrain annual statements

Benchmarking Case Studies

Florida's Turnpike Enterprise



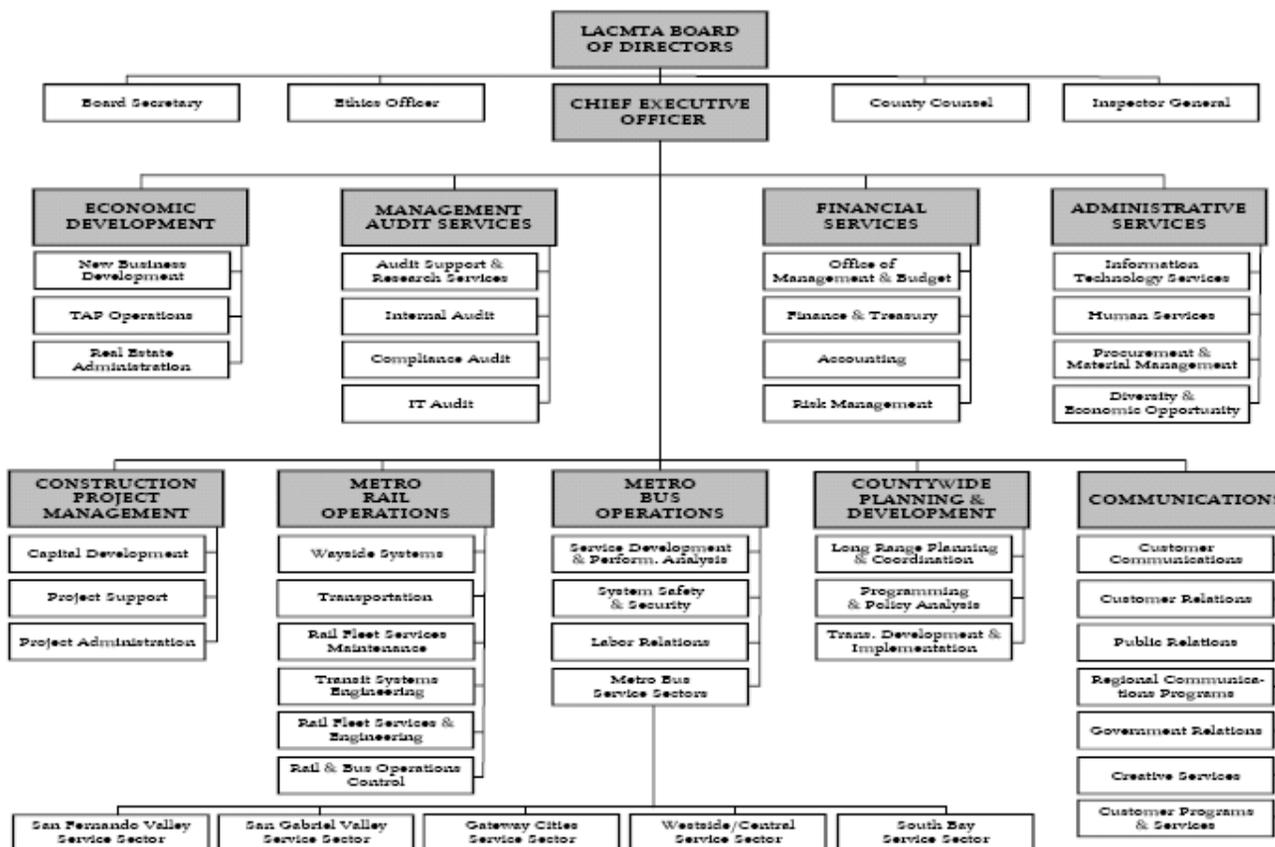
Source: floridasturnpike.com



Los Angeles Metropolitan Transportation Authority

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Management Organization Chart



Source: LA MTA Annual Report 2008

Metropolitan Transportation Commission / BATA

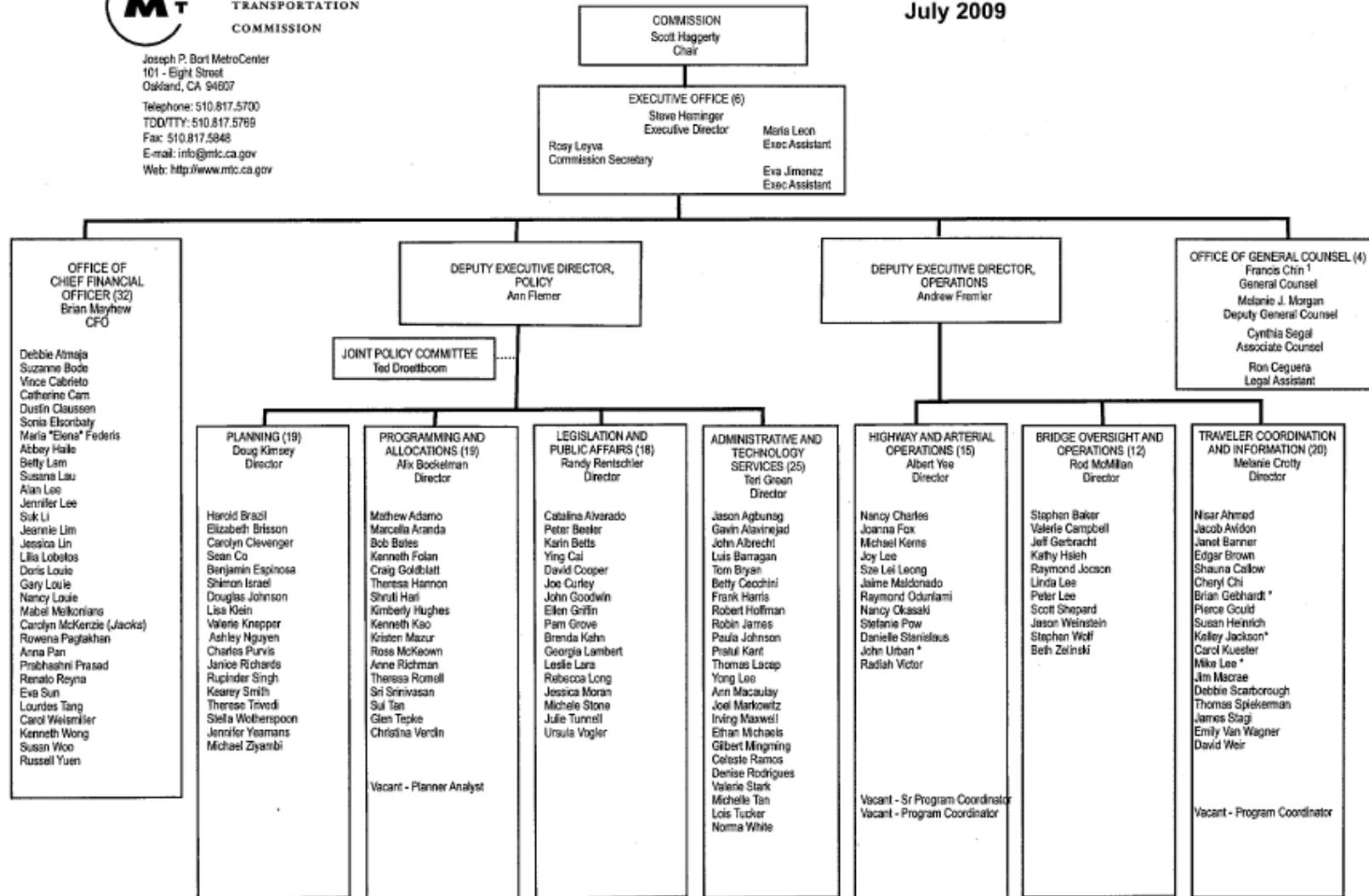


**METROPOLITAN
TRANSPORTATION
COMMISSION**

Joseph P. Bort MetroCenter
101 - Eight Street
Oakland, CA 94607
Telephone: 510.817.5700
TDD/TTY: 510.817.5789
Fax: 510.817.5848
E-mail: info@mtc.ca.gov
Web: http://www.mtc.ca.gov

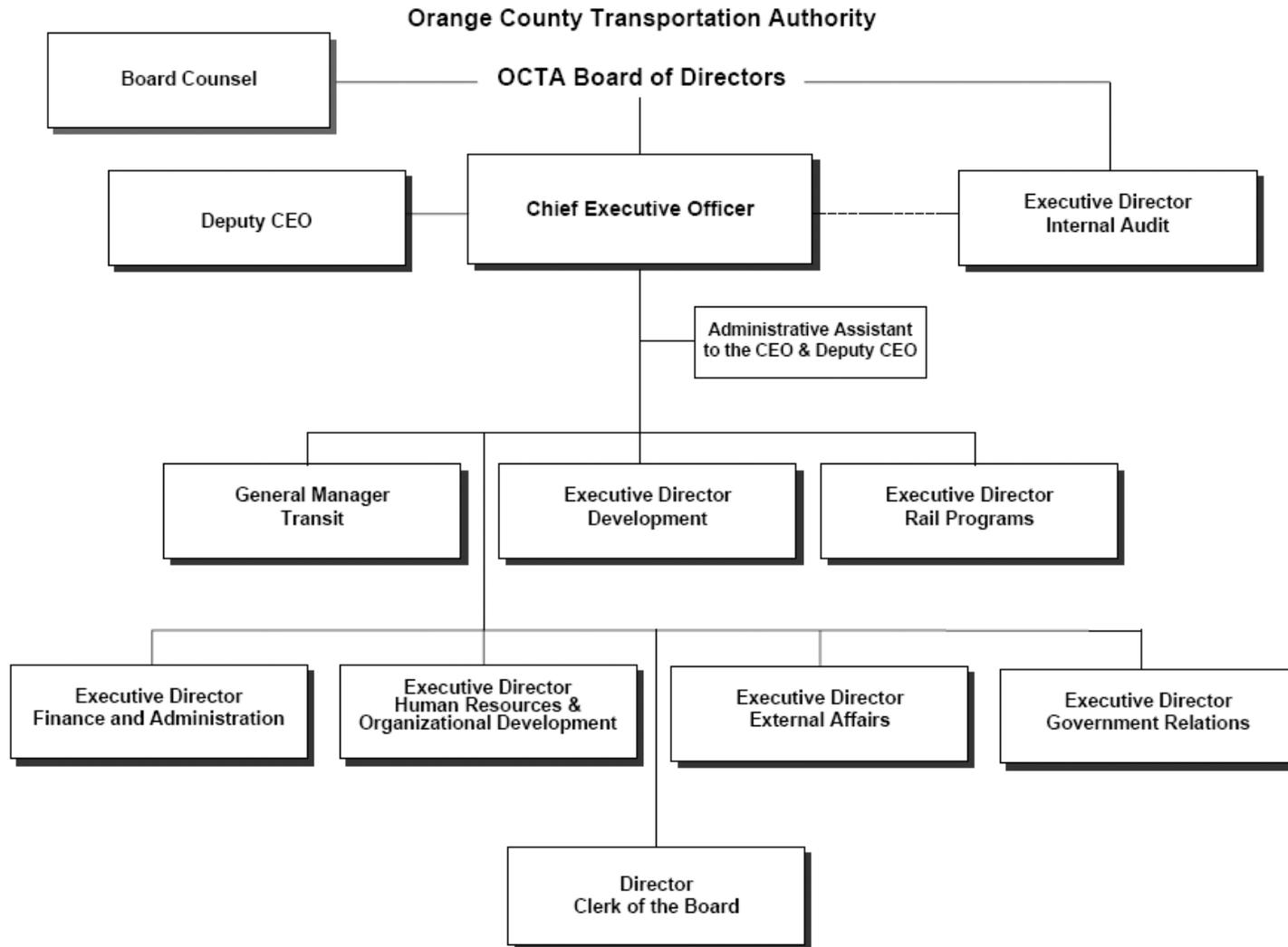
STAFFING ORGANIZATION

July 2009



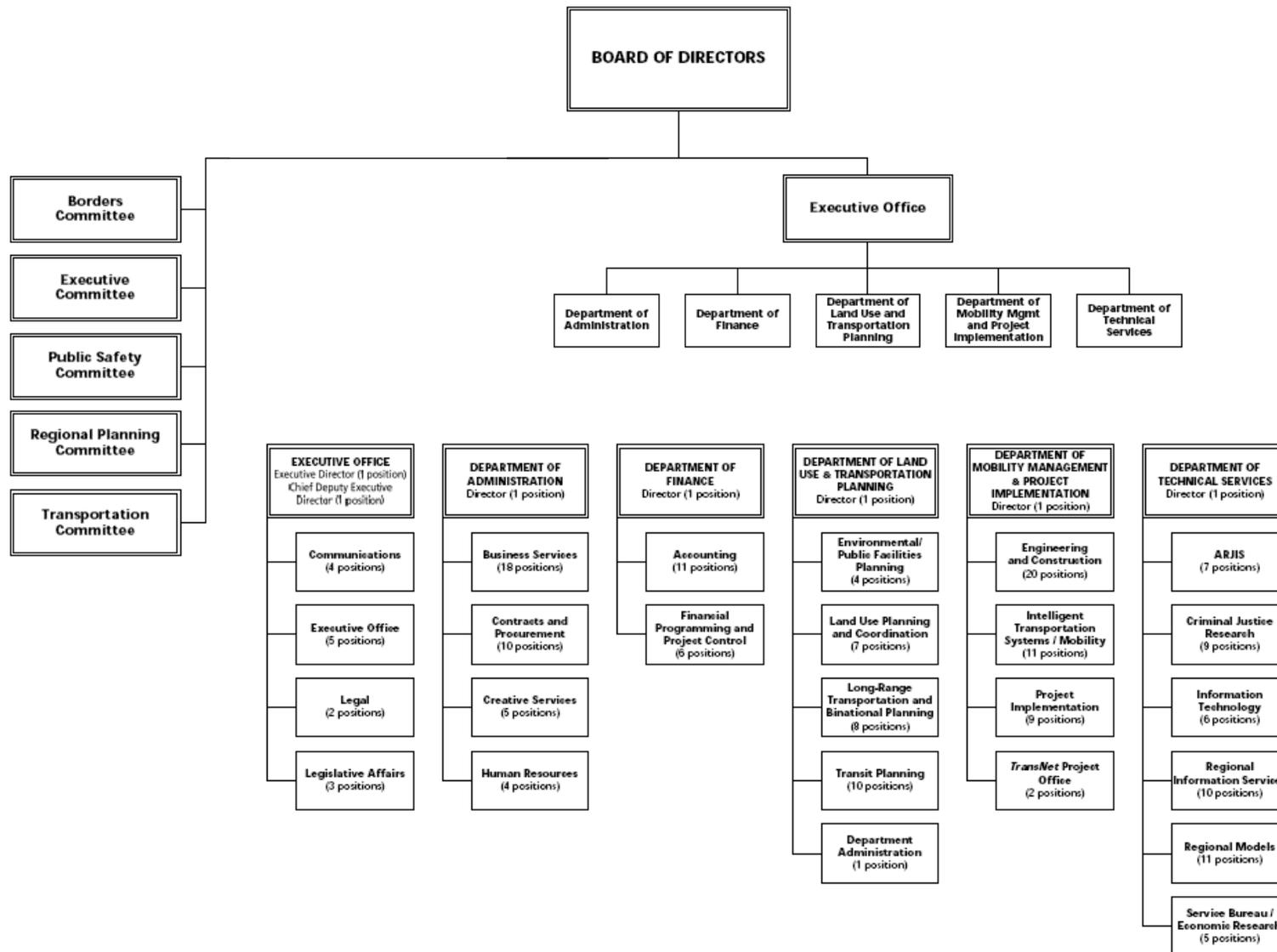
Source: mtc.ca.gov

Orange County Transportation Authority



Source: OCTA

San Diego Association of Governments





Appendix B

Position Summaries



Position Summaries

Position Summaries for the following proposed and refined positions are included in this Appendix:

- Chief Executive Officer
- Chief of Staff
- Chief Internal Auditor
- General Counsel
- Chief Program Manager
- Chief, External Affairs
- Chief Financial Officer
- Chief, Project Controls and Risk Management
- Regional Director
- Director, Planning and Environment
- Director, Engineering and Programming
- Director, Public Affairs
- Director, Legislation
- Director, Finance
- Director, Business and Procurement Services



Position Summaries

Chief Executive Officer

TITLE: Chief Executive Officer

LEVEL: Exempt

REPORTS TO: CHRSA Board

DIRECT REPORTS:

- Chief of Staff
- General Counsel
- Chief Internal Auditor
- Chief Program Manager
- Chief Financial Officer
- Chief, External Affairs
- Project Controls and Risk Management Director
- Regional Directors

KEY FUNCTIONS:

- Directs the operations of the Authority through subordinate managers
- Carries out the purposes dictated by law
- Chief policy maker
- Makes recommendations to the Authority Board to facilitate the selection and plan of development and of the statewide high-speed train system
- Approves staffing needs for the Authority
- Approves annual Authority budget
- As chief spokesperson, represents the Authority at meetings, hearings, and conferences with a variety of stakeholders on major high-speed train program policies and problems

POSITION RATIONALE:

- Position required by statute (PUC Section 185024)
- Provides highest-level organizational leadership and ultimate accountability



Position Summaries

Chief of Staff

TITLE: Chief of Staff

LEVEL: CEA

REPORTS TO: Chief Executive Officer

DIRECT REPORTS:

- None, however the entire CHSRA management team has an indirect reporting relationship to this position

KEY FUNCTIONS:

- Oversees and coordinates CHSRA staff activities on behalf of the Chief Executive Officer
- Assists in CHSRA policy development as a member of the Executive Staff
- Oversees the administrative support function for the CHSRA Board
- Resolves problems, mediates disputes, and deals with issues to avoid escalation to Chief Executive Officer
- Directs the preparation of reports, and written and verbal correspondence on behalf of the Chief Executive Officer
- Conducts research and special projects for the Chief Executive Officer
- Has close working relationship with the Chief Executive Officer and has knowledge about a wide variety of key issues and is able to state the Chief Executive Officer's position on those issues

POSITION RATIONALE:

- The Executive Director will need someone with strong experience and knowledge of general management practices and principles in the government sector to play a vital coordination role as the organization grows in size and complexity.
- Other members of the Executive Staff will need someone who is the "right hand" of the Chief Executive Officer to whom they can go to in the absence of the Chief Executive Officer for consultation, guidance, and coordination



Position Summaries

Chief Internal Auditor

TITLE: Chief Internal Auditor

LEVEL: CEA/Senior Management Auditor

REPORTS TO: Chief Executive Officer and Board of Directors (dotted line)

DIRECT REPORTS:

- Associate Management Auditor

KEY FUNCTIONS:

- Plans, develops, and manages the internal audit activities and operations of the CHSRA
- Manages a variety of complex administrative, operational, financial, performance and management studies and audits of CHSRA activities, functions, services and programs
- Performs pre-award evaluations on consultant cost proposals, reviews of interim and final contract cost audits and close-outs for compliance with funding agency requirements
- Conducts risk assessment analyses and develops and prioritizes internal audit plans
- Identifies potential performance audit areas and participates in audit planning meetings
- Continuously monitor and evaluate the efficiency and effectiveness of service delivery methods and procedures
- Assesses and monitors workload, administrative and support systems, and internal reporting relationships
- Oversee/conducts fiscal and performance audits of state bond funds
- Oversee/conducts fiscal and performance audits of federal ARRA funds

POSITION RATIONALE:

- State bond funds and ARRA funds require strict fiscal and performance controls and reporting
- Authority needs a robust internal audit function, led by a permanent, full-time, senior-level auditor, given the expected growth in Authority activities



Position Summaries General Counsel

TITLE: General Counsel

LEVEL: CEA/Staff Counsel III/IV

REPORTS TO: Chief Executive Officer and Board of Directors (dotted line)

DIRECT REPORTS:

- Staff Counsel
- Legal Secretary

KEY FUNCTIONS:

- Provides legal consultation to the CHSRA Board and Chief Executive Officer
- Provides advice on the legal requirements and consequences of proposed actions
- Provides guidance on ethics, financial disclosure, public records and related requirements
- Conducts ongoing legal research in connection with legal issues pertaining to the CHSRA
- Reviews rules, regulations, and policies for legal compliance
- Reviews and approves contracts and administrative actions
- Performs a wide variety of complex legal research and issues legal opinions on behalf of the CHSRA
- Provides litigation support for the Dept. of Justice
- Writes and reviews proposed legislation and provides legal support to the Legislative Office
- Oversees and/or responds to media requests concerning legal issues and presents and explains legal issues and opinions in public meetings

POSITION RATIONALE:

- Need for legal services will be expanding due to large number of environmental documents progressing in all eight corridors
- The Authority will require skills and expertise to defend project-level EIR/EIS documents
- The occasional need to utilize Department of Justice staff has increased substantially during the current fiscal year
- Day-to-day legal support of the Project has become necessary
- Require coordination of the external legal necessary as the project progresses into right-of-way procurement, construction contracting, and Public-Private Partnership arrangements



Position Summaries

Chief Program Manager

TITLE: Chief Program Manager

LEVEL: Exempt

REPORTS TO: Chief Executive Officer

DIRECT REPORTS:

- Director, Planning and Environment
- Director, Engineering and Programming

KEY FUNCTIONS:

- Has executive-level responsibility for engineering and planning services and activities including project design, plans, specifications, contracts, payments, budgets, changes and schedules.
- Oversees the management of the development and implementation of the CHSRA engineering and planning goals, objectives, policies and priorities
- Oversees the development of ridership, cost-benefit, and other planning and environmental studies
- Oversees the management of the environmental review and approval process, station planning and development activities, and operational planning and integration activities
- Develops policies for departmental high-speed train program implementation

POSITION RATIONALE:

- Need for legal services will be expanding due to large number of environmental documents progressing in all eight corridors
- An executive-level position is needed with responsibility for the entire project life cycle (not just a Chief Engineer), from planning and environment, design and construction, to implementation and operation.
- The position is needed to function as a “Program Manager” to direct and oversee program management/project management activities and facilitate successful delivery



Position Summaries

Chief, External Affairs

TITLE: Chief, External Affairs

LEVEL: Exempt/CEA

REPORTS TO: Chief Executive Officer

DIRECT REPORTS:

- Director, Legislation
- Director, Public Affairs

KEY FUNCTIONS:

- Develops legislative and public affairs strategies and policies on behalf of the CHSRA
- Manages and oversees CHSRA legislative, marketing, public and media relations, community relations and local government outreach activities
- Develops and implements communication programs in support of the CHSRA goals, objectives and initiatives
- Prepares reports, correspondence, speeches, background materials and other material for the CHSRA Chief Executive Officer and Board
- Staff policy advisory, citizen advisory, and special needs advisory committees, as well as stakeholder working groups, as needed

POSITION RATIONALE:

- There is a need for strong , centralized coordination and leadership of outreach, messaging, legislation, and regulatory advocacy in the CHSRA
- Strategic use of both state staff and consultants could allow tailoring staffing to meet evolving demands
- The success of the project is greatly dependent on the outreach, community relations, and communications efforts of the CHSRA



Position Summaries

Chief Financial Officer

TITLE: Chief Financial Officer

LEVEL: Exempt

REPORTS TO: Chief Executive Officer

DIRECT REPORTS:

- Director, Finance
- Director, Business and Procurement Services

KEY FUNCTIONS:

- Oversees all financial and administrative activities of the CHSRA
- Advises the CHSRA Chief Executive Officer and Board on the financial and budget matters
- Guides the development of long-term capital financing methods
- Directs and supervises all business/finance functions including accounting, payroll, budgeting, accounts payable, contracting, procurement, human resources, information technology and facilities
- Plans, directs and manages the development and implementation of CHSRA financial goals, objectives, policies and priorities
- Direct the grants management programs to ensure maximum and effective participation in all available local, state, and federal grants

POSITION RATIONALE:

- A project of this magnitude requires a strong Chief Financial Officer to direct and oversee financing and procurement activities and facilitate needed funding
- There is a need for a strong executive-level “chief financial officer” position filled by someone with the requisite expertise to guide the Authority’s procurement and financing priorities, develop workable implementation strategies, and interface with a myriad of external legal and financial advisors, private parties, and other governmental regulators and partners
- This positions requires direct access and reporting relationship to the Chief Executive Officer
- Funding and procurement are critical pieces that will need to be very closely tied together as the project moves ahead
- Human resources, information technology and facilities services can remain as contracted services and under the oversight of the Procurement function



Position Summaries

Chief, Project Controls and Risk Management

TITLE: Chief, Project Controls and Risk Management

LEVEL: CEA/SSM III

REPORTS TO: Chief Executive Officer

DIRECT REPORTS:

- Governmental Program Analysts

KEY FUNCTIONS:

- Develops and implements a risk management policy and plan, containing robust risk identification and management/mitigation mechanisms that are needed to avoid project implementation failures
- Oversees qualitative and quantitative risk analyses
- Develops and implements an effective quality assurance and project control program
- Responsible for the CHSRA project scope management and change management efforts
- Oversees regulatory and environmental health and safety requirements

POSITION RATIONALE:

- Because of the unprecedented magnitude of this project and the number of private consultants engaged, the Authority needs a dedicated office for Project Controls and Risk Management (including quality assurance and health and safety) that, because of its importance, should report directly to the Chief Executive Officer



Position Summaries Regional Director

TITLE: Regional Director

LEVEL: Exempt/CEA

REPORTS TO: Chief Executive Officer

DIRECT REPORTS:

- State and/or consulting staff to assist in local planning and outreach efforts

KEY FUNCTIONS:

- Represents the Chief Executive Officer on local government and community issues that may impact the high-speed train project and with community leaders
- Represents the CEO among the community at-large and with business and community leaders in the Region.
- Builds and maintains public trust, understanding, and support for the high-speed train project in the Region
- On behalf of the CEO, raises awareness, interest, involvement and support for the high-speed train project from preliminary environmental preparation through project construction
- Serves as the focal point for regional project issues including meeting with state, regional and local elected officials, planning organizations and the general public to resolve problems and efficiently implement project objectives
- Works with the Chief Program Manager to develop and implement right-of-way and other program policies in concert with federal, state and regional transportation and regulatory agencies within the Region.
- Serves as the CHSRA representative for multi-project/program level negotiations with federal, state and local transportation and resource agencies and the public in the Region

POSITION RATIONALE:

- The CEO needs high-level management staff to be his representative with community leaders, since the issues relating to the Authority are constant and statewide, and his presence is not possible
- Because of the statewide impact and importance of the high-speed rail project, there is a need to have a local community presence and involvement throughout the impacted areas
- Many stakeholders interviewed agreed that the importance of this local presence is critical to the outreach effort needed for the success of the project



Position Summaries

Director, Planning and Environment

TITLE: Director, Planning and Environment

LEVEL: Exempt/CEA

REPORTS TO: Chief Program Manager

DIRECT REPORTS:

- Environmental Planners
- Operational Planners
- Station Planners

KEY FUNCTIONS:

- Plans, conducts, and supervises the development of ridership, cost-benefit, and other planning and environmental studies
- Manages the environmental review and approval process, station planning and development activities, and operational planning and integration activities
- Assists in the development of policies for departmental high-speed train program implementation
- Represents the CHSRA in Agency Coordination meetings as well as other meetings with state, local, and regional elected officials, other planning organizations, and the general public
- Serves as the CHSRA liaison to the Federal Rail Administration, California Department of Transportation, California Transportation Commission, state and federal resource agencies, local and regional planning and environmental organizations and transportation planning agencies, and municipal governments

POSITION RATIONALE:

- Existing position will need to be retained; responsibilities will be tailored to reflect this position's primary focus on policy-driven aspects of program management, such as environmental review and approval, station planning/development, and operations planning/integration



Position Summaries

Director, Engineering and Programming

TITLE: Director, Engineering and Programming

LEVEL: Exempt/CEA

REPORTS TO: Chief Program Manager

DIRECT REPORTS:

- Systems Engineers
- Civil Engineers
- Railway Engineers
- Right of Way Agents

KEY FUNCTIONS:

- Has full management responsibility for engineering and planning services and activities including project design, plans, specifications, contracts, payments, budgets, changes and schedules.
- Develops and implements the CHSRA engineering and planning goals, objectives, policies and priorities.
- Reviews and evaluates design, engineering, and operations documents produced by the PMC, the evaluation and monitoring of the project schedule, and assessment of the reasonableness of the timelines and budget.
- Assesses significant program risks and recommend courses of action to avoid or mitigate impacts.
- Monitors the overall management of integrated contractor plans and performance and recommend actions as required

POSITION RATIONALE:

- Existing position filled under contracting arrangement; Authority eventually should have full-time, permanent position within state service



Position Summaries Director, Public Affairs

TITLE: Director, Public Affairs

LEVEL: Information Officer II

REPORTS TO: Chief, External Affairs

DIRECT REPORTS:

Information Officer for media and public affairs

KEY FUNCTIONS:

- Serves as the CHSRA Public Information Officer
- Develops comprehensive plans, strategies and approaches for use in marketing the CHSRA to the public, potential partners, government officials, and the media
- Works closely with outside community groups and organizations in coordinating public information, marketing and promotional activities
- Works closely with the Regional Directors to provide centralized support for community outreach efforts
- Consults with management and recommends actions to improve organizational communication and in formulating policies that strengthen community relations
- Coordinates media relations and contacts

POSITION RATIONALE:

- In addition to the community outreach performed by the Regional Directors, there is a need for a centralized coordination point for all statewide communication and outreach efforts
- An individual well-versed in media relations and community outreach is critical to the effective communication of the CHSRA mission, vision and direction
- This is not a function that should be contracted out. The spokesperson for the CHSRA must be an employee of the CHSRA to be viewed as credible and accountable



Position Summaries

Director, Legislation

TITLE: Director, Legislation

LEVEL: CEA/SSM II/III

REPORTS TO: Chief, External Affairs

DIRECT REPORTS:

Governmental Program Analysts

KEY FUNCTIONS:

- Directs the development and implementation of a comprehensive state and federal government relations program, including management of lobbyists and consultant contracts and the coordination with other agencies
- Directs the development of an annual legislative program, including sponsored bills for the CHSRA Board's adoption
- Develops state and federal legislative priority issues in conjunction with the Chief Executive Officer, CHSRA Board, and the CHSRA staff
- Develops and implements strategies and action plans to advance legislative issues in consultation with the Executive Director and the CHSRA Board
- Responds to questions from state officials and congressional delegation members' staff on legislative and regulatory activities.
- Prepares testimony to be used before state and federal legislative committees
- Drafts state and federal legislation and reviews/analyzes bills developed by others
- Represents the CHSRA and its position on legislation and regulatory affairs at legislative meetings, hearings, and conferences

POSITION RATIONALE:

- There is a need to create an in-house capacity to develop and maintain a strong, positive working relationship with both state and federal legislative members and staff
- This role must be held by an individual who is well-versed in the state and federal legislative processes



Position Summaries Director, Finance

TITLE: Director, Finance

LEVEL: CEA/SSM III

REPORTS TO: Chief Financial Officer

DIRECT REPORTS:

- Budget Analysts
- Accounting Officers
- Governmental Program Analysts

KEY FUNCTIONS:

- Works with the Executive Staff to develop CHSRA financial strategies
- Oversees the CHSRA capital outlay program
- Maintains project financial records
- Prepares financial statements on behalf of the CHSRA
- Prepares the CHSRA annual budget
- Oversees the CHSRA fiscal accounting services

POSITION RATIONALE:

- Because of the key role that financing and funding plays in the CHSRA administration, this position should be separated from the other traditional administrative functions (human resources, information technology, facilities, etc.)



Position Summaries

Director, Business and Procurement Services

TITLE: Director, Business and Procurement Services

LEVEL: Exempt/CEA

REPORTS TO: Chief Financial Officer

DIRECT REPORTS:

- Procurement/Contracting Analysts
- Governmental Program Analyst
- Information Technology Analyst

KEY FUNCTIONS:

- Identify the procurement requirements of the CHSRA
- Develop and implement a procurement strategy
- Implement procurement in a fair, equitable, and controlled manner in accordance with procurement policy
- Produce and provide purchasing, expenditure and other data, information and statistics for management reporting and analysis
- Maintain a detailed awareness of the marketplace, identifying innovation opportunities, potential new suppliers, etc.
- Identify opportunities for entering into public-private funding partnership contracts
- Coordinate and oversee the human resources, information technology and facilities needs and contracts for the CHSRA

POSITION RATIONALE:

- There is a need for strong integration of project phasing, procurement (contracting) and financing
- There is a need for strong procurement policies, procedures and controls to assist in developing and administering a fair, consistent, effective and efficient procurement process which provides the CHSRA with highly-qualified vendors
- There is a need for someone with a strong background in contracting related to public-private partnerships
- Basic administrative services (human resources, information technology, facilities) will likely continue to be contracted out. Coordination of the needs and resulting contracts should be housed within a business operations organization