APPENDIX 2-E: OPERATIONS AND SERVICE PLAN

California High-Speed Rail Authority

Los Angeles to Anaheim Project Section

Draft
Project Environmental Impact Report/Environmental Impact Statement

Appendix 2-E
Operations and Service Plan

December 2025

CALIFORNIA High-Speed Rail Authority

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 22, 2024, and executed by the Federal Railroad Administration and the State of California.

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ACRONYMS AND ABBREVIATIONS

Term	Definition
HMF	heavy maintenance facility
HSR	High-Speed Rail
LMF	light maintenance facility

1 INTRODUCTION

This summary provides background information on the intended service and operations of the California High-Speed Rail (HSR) System to provide sufficient detail for the environmental assessment of proposed HSR operations. Recognizing that the California HSR System is still at a relatively early stage of the planning process, and that many operational issues remain to be resolved, this section summarizes how the system is envisioned to operate at this point in project planning.

Inspired by successes of high-speed train systems around the world, California has been planning a statewide HSR line that would serve as a backbone and a needed alternative to the state's existing transportation network. The system would interface with and complement other modes of transportation—commercial airports, mass transit, the state's highway network, bike paths, and pedestrian traffic. It would be capable of up to a 220-mile-per-hour revenue operating speed. It would interconnect with other modes of transportation and provide an environmentally friendly alternative to vehicle and air travel.

The updated phasing strategy for the California HSR System estimates to initiate revenue service between Merced and Bakersfield in the Central Valley between 2030 and 2033. Following this, with additional funding secured, this initial service would be extended to operate between San Francisco Salesforce Transit Center, Merced, and Bakersfield.

Phase 1 would be realized with the expansion of the system to Los Angeles and Anaheim (refer to Table 1). Proven train technologies similar to those used in other countries with established high-speed train systems (e.g., Japan, France, Germany, Korea) would be used. This technology includes steel-wheel-on-steel-rail, entirely electric power, state-of-the-art safety and signaling and train control systems, and meeting Positive Train Control requirements. This technology, although new to North America, was introduced in Japan in 1964, France in 1981, and in many other countries within the past two decades.

High-speed trains would operate primarily on exclusive (dedicated) track with portions of the route shared with other existing passenger rail operations. The route (alignment) would be built either at grade, in an open trench, in a tunnel, or on an elevated guideway, depending on the terrain, physical constraints, environmental impacts, and community input along each section. The system would predominantly be within, or adjacent to, existing rail or highway.

Table 1 Summary of Phased Implementation

Section	Length (Approximate)	Endpoints	Service Description	Planning Schedule
Central Valley Service	171 miles	Merced and Bakersfield	• One-seat ride between Bakersfield and Merced • Connects to enhanced regional/ local rail for journeys to/from Northern California • Connects to buses at Bakersfield for journeys to/from Los Angeles	2030–2033

Section	Length (Approximate)	Endpoints	Service Description	Planning Schedule
Valley to valley	325 miles	San Francisco, Merced, and Bakersfield	▪ One-seat ride between San Francisco and Merced and Bakersfield ▪ Dedicated HSR infrastructure between Gilroy Station and Bakersfield station ▪ Shared use of existing and upgraded electrified infrastructure from Gilroy to San Francisco Salesforce Transit Center	Estimates would be defined with future funding awards.
Phase 1	489 miles (520 miles assumed for environmental analysis)	San Francisco and Los Angeles/ Anaheim	▪ One-seat rides between San Francisco and Los Angeles/ Anaheim, and Merced and Anaheim ▪ Dedicated HSR infrastructure between Gilroy Station and Burbank Station ▪ Shared use of existing and upgraded electrified infrastructure from Gilroy to San Francisco Salesforce Transit Center, and between Burbank and Anaheim ▪ Upgraded remodeled Los Angeles Union Station (Link Union Station project)	Estimates would be defined with future funding awards (2040 assumed for environmental analysis).

HSR = high-speed rail

2 SERVICE PLAN OVERVIEW

2.1 Implementation Phasing

Early operating segment: Implementation of the HSR system would be accomplished in phases beginning with an initial section that extends from Merced to Bakersfield in the Central Valley. Expected to be completed between 2030 and 2033, this 171-mile section would support the operation of 40 train runs a day.

Silicon Valley to Central Valley – valley to valley service: This option, which is subject to securing additional funding, would see the system expanded north to San Francisco from Bakersfield. This 325-mile system is also expected to operate at a level of 50 train runs per day with additional service between San Jose and Merced.

Phase 1: With full funding, the system would expand to 489 miles (520 miles assumed for environmental analysis) and include service between San Francisco and Anaheim at a level of 164 revenue service train runs a day.

3 SERVICE PLANS

Concept-level rail operations and service plans have been developed to serve several purposes:

- Confirm the level of service assumptions (travel times and service frequencies between station pairs) used to develop the estimates of system ridership and revenue.
- Validate the operational feasibility of the desired level of service at a conceptual level.
- Identify operable patterns of train service, particularly the general requirements for nonstop or limited-stop trains to pass slower trains that need to make a greater number of stops along the route (i.e., the locations and frequencies of occurrence of these “overtakes” at various times of day).
- Provide a basis for estimate of the number of trainsets and overall fleet requirements for the full build-out.
- Provide a basis for estimating platform track and storage track capacity to support operations at the end terminal stations.
- Provide a basis for sizing train storage and maintenance facilities throughout the HSR system.
- Provide a basis for planning passenger-handling operations at stations, which can be used to help size and configure station facilities.

The HSR system ridership and revenue estimates are used in developing the operations and service plans so the level of service that would be provided at each station is generally equivalent to the level of service assumed in developing the ridership and revenue estimates. Weekday ridership demand is assumed to reach peak levels during a 3-hour period in the morning and again in the afternoon. Train service density would be greatest during these periods, reverting to a slightly lower level of service during the remainder of the day.

Currently, the proposed mix of services would offer regular clockface patterns,[1] with each service type leaving passenger stations at the same time each hour, with relatively limited exceptions. Slightly more service is assumed during the 3-hour peak periods in the morning and late afternoon than during off-peak hours, consistent with expected ridership peaking.

Trains would run in diverse patterns between various terminals. Three basic service types are envisioned:

- Express trains, which would serve major stations only, providing the fastest travel times
- Limited-stop trains, which would stop at selected stops along a route to provide faster service between stations served
- All-stop trains, which would focus on regional service and connection from/to faster trains

In early phases of revenue service, the service would be generally structured with all-stop trains. As the system expands, limited-stop and express trains would be introduced. In Phase 1, most trains would provide express services or limited-stop service and offer a relatively fast run time between the largest metropolitan areas while connecting various intermediate stations by all-stop service. Stations with higher ridership demand potential would generally be served by more trains than those with lower estimated ridership demand. The service plan would provide direct train service between most station pairs at least once per hour.

These service plans provide a useful initial estimate of the level of service that matches projected long-range demand on the HSR system. As the HSR system is implemented and both the operating plan and the ridership estimates are refined, it would be possible to make informed benefit and cost tradeoffs to develop the most appropriate mix of limited, express, and all-stop

[1] Clockface schedules, sometimes referred to as *pulsed schedules*, are an operational concept where customers can expect regular and repeatable train times from stations. It is a *clockface* because a train would always depart at the same time every hour, such as 10:45, 11:45, and 12:45, providing a clear and simple customer experience.

services, which would affect the trip times between stations and the frequency of service offered at each station for each route.

3.1 Central Valley Service: Early Operating Segment, Estimated 2030–2033

The service plan for the early operating segment (depicted on Figure 1) is planned to provide one train per hour in each direction, departing on a clockface schedule, stopping at all intermediate stations between Merced and Bakersfield. There is no distinction made between peak and off-peak, or between weekday and weekend days/holidays.

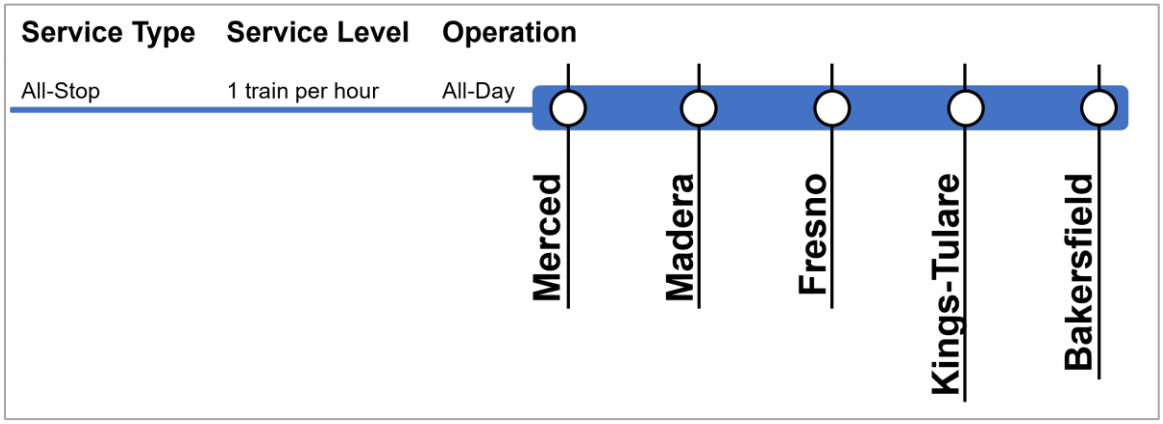


Figure 1 Early Operating Segment Service Plan Stringline Diagram

3.2 Silicon Valley to Central Valley: Valley to Valley Service

Similar to the early operating segment service, the valley to valley service (depicted on Figure 2) would continue with a clockface approach. Two trains are planned between San Francisco and Bakersfield, with an all-stop service operating every hour and stopping at all intermediate stations (including a reversing stop at Merced) and a limited-stop service operating every 2 hours avoiding Merced.

Figure 2 Valley to Valley Service Plan Stringline Diagram

3.3 Phase 1

The service plan concept for Phase 1 (depicted on Figure 3) estimates that the main HSR line through the Central Valley would have up to six trains per hour in each direction during the peaks, and three trains per hour during the off-peaks. Because of capacity constraint coming from the shared-use operations between Caltrain regional rail service and HSR service, the level of HSR service along the Peninsula Corridor would be limited at four trains per hour in each direction.

In the peak periods, the base level of service would include (in each direction):

- Three trains per hour between San Francisco and Los Angeles
- One train per hour between San Francisco and Anaheim
- One train per hour between San Jose and Merced
- One train per hour between Merced and Anaheim

Trains between the same terminal stations would have varying end-to-end stopping patterns. For example, one of the San Francisco to Los Angeles trains would be all-stop and the other two would be limited stop.

During off-peak periods, the base level of service would include (in each direction):

- One train per hour between San Francisco and Los Angeles
- One train per hour between San Francisco and Anaheim
- One train per hour between San Francisco and Merced
- One train per hour between Merced and Anaheim in each direction

Two trains per day per direction between San Francisco and Los Angeles, one in the morning and one in the evening, would provide a direct express service with no intermediate stops.

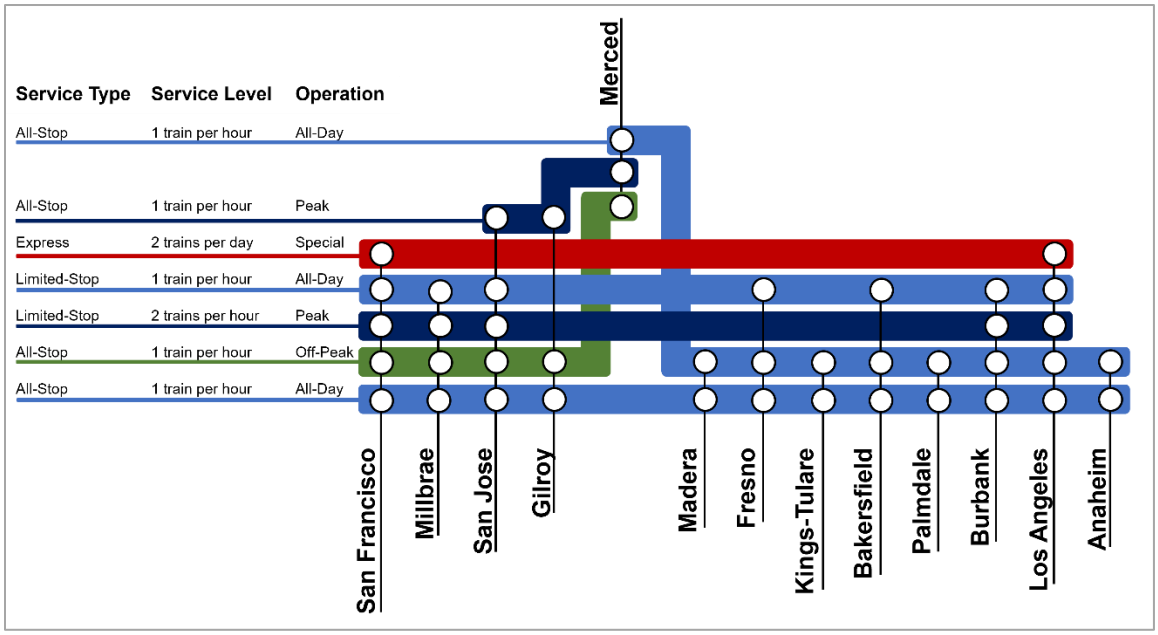


Figure 3 Phase 1 Service Plan Stringline Diagram

4 PASSENGER STATION OPERATIONS

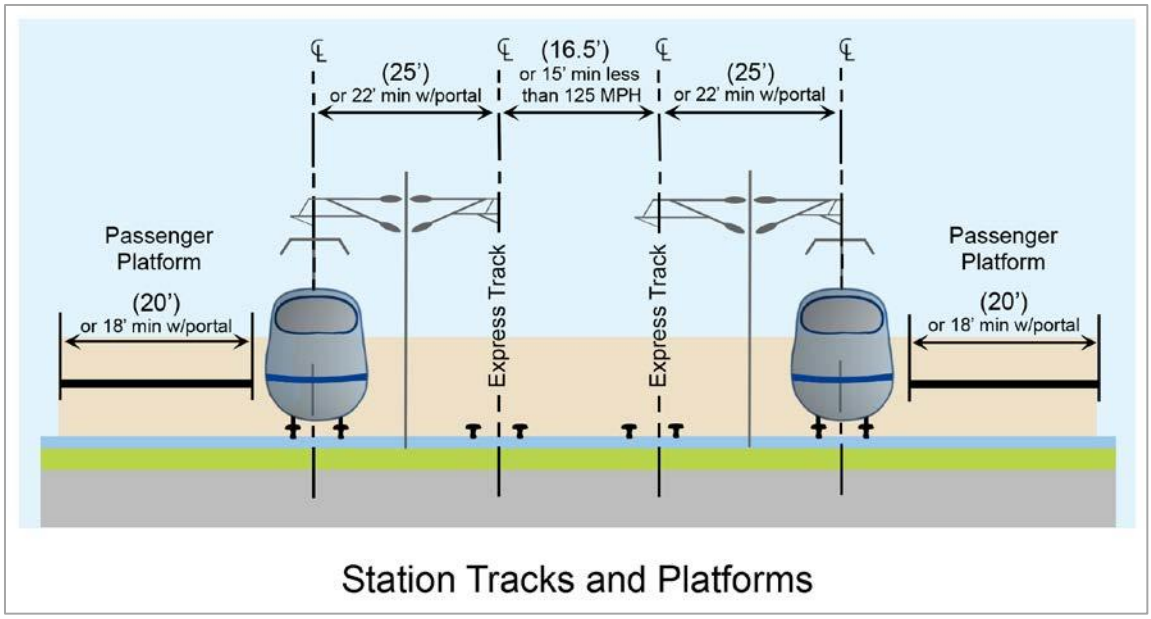
The Phase 1 service plan encompasses 15 passenger stations, including 12 intermediate stations and 3 terminal stations. The early operating segment service plan (expected to be operational between 2030 and 2033) envisions three intermediate and two terminal stations. The valley to valley service plan, if advanced with sufficient funding, envisions seven intermediate stations and three terminal stations (inclusive of those served by the early operating segment service plan). Station platforms are assumed to be typically 800 feet long, with the ability for potential future extension to 1,410 feet long should future ridership growth require longer trains.

In accordance with Code of Federal Regulations that require that platform design meet the Americans with Disabilities Act Accessibility Guidelines, the HSR platforms would be designed to allow for level boarding.

4.1 Intermediate Stations and Platform Tracks

Because the Los Angeles HSR station is both a terminal station and intermediate station in Phase 1, and a high-volume station, it has a special layout that incorporates intermediate and terminal station features. Full details of the layout of Los Angeles Union Station are still in development by the Link Union Station Project being led by Los Angeles County Metropolitan Transportation Agency in which the California High-Speed Rail Authority is an active partner.

The typical intermediate station would have the configuration depicted on Figure 4, with platform tracks on the outside flanked by side platforms. The platforms would be high level and tangent and would extend typically 800 feet to cover the full length of a single high-speed trainset, permitting level boarding through all train doors.

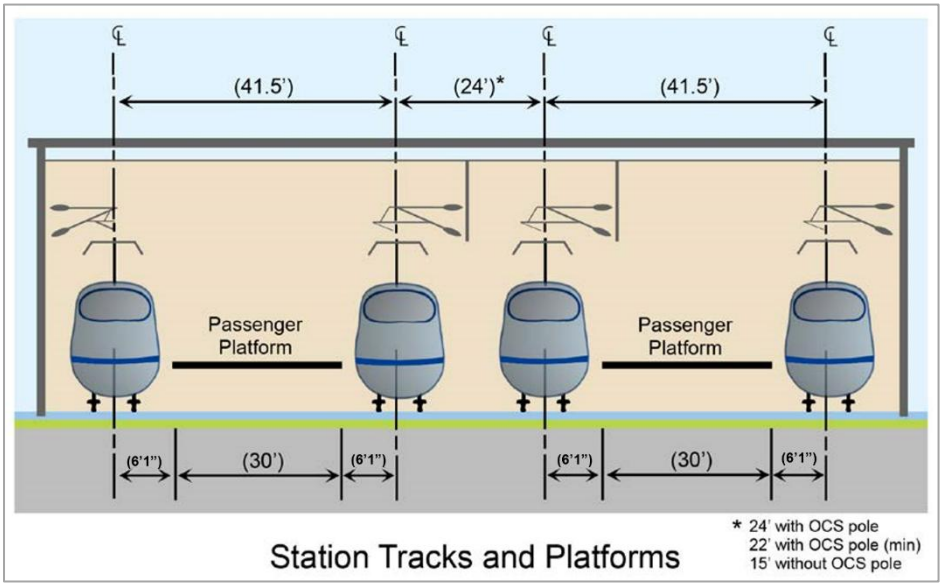


min = minimum; MPH = miles per hour

Figure 4 Intermediate Station Typical Cross Section

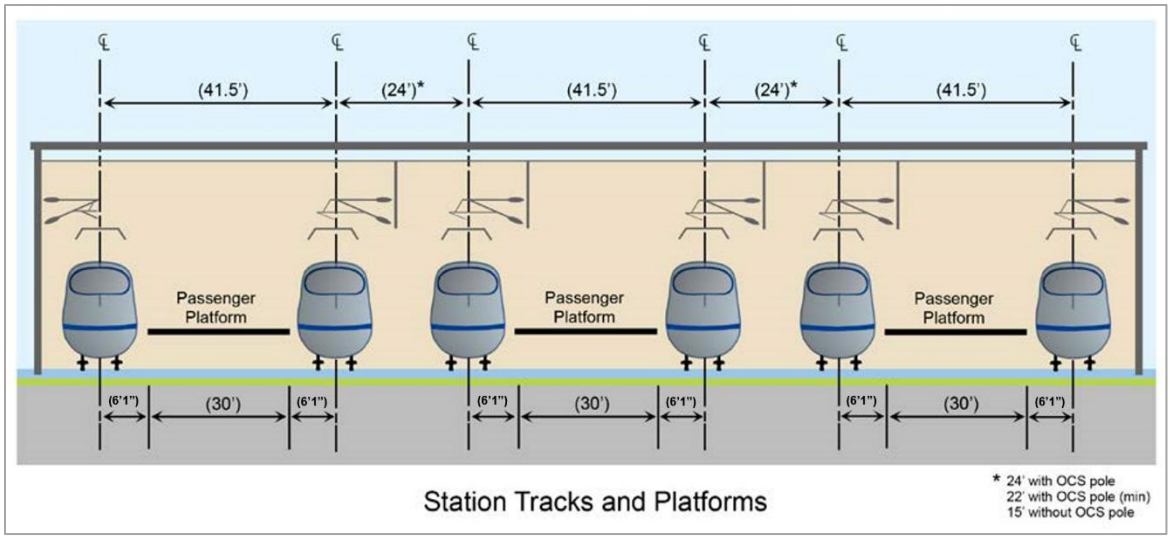
4.2 Terminal Stations

Terminal stations are envisioned to have island platforms serving tracks on both sides and be able to accommodate train cleaning, restocking with on-board food service, mandatory train inspection, and as-needed maintenance and repair of trainset components, along with the alighting and boarding of passengers. The track and platform configurations at terminal stations would vary based on the level of projected train service, local physical constraints, and requirements for other (non-high-speed) train services that would be adjacent to the HSR facilities. Figure 5 and Figure 6 depict typical configurations for a four-track and six-track terminal.



min = minimum; OCS = overhead contact system

Figure 5 Typical Cross-Section of Terminal Station with Four Tracks



min = minimum; OCS = overhead contact system

Figure 6 Typical Cross-Section of Terminal Station with Six Tracks

4.3 Passenger Boarding

There are several different ways in which passenger boarding could be managed at HSR terminal stations. The HSR project has not finalized the preferred methods for passenger-handling[2] systemwide, and the HSR operator likely would want consistent passenger-handling practices across the entire system. Passenger-handling requirements affect the design and configuration of the physical facilities used for passenger processing, waiting, queuing, and horizontal and vertical circulation.

Examples of potential variations in passenger-handling procedures and required facilities encompass the following.

Advance staging of boarding passengers

- Retain all boarding passengers at concourse level until cleaning/servicing is substantially complete and the train is ready for boarding.
- Permit boarding passengers to descend to platform level as soon as the load of detraining passengers has cleared the platform (passengers and service personnel and equipment would occupy the platform level simultaneously).

Number and location of boarding concourse points

- Board from a single concourse location.
- Board from dual locations.
- Board from multiple locations spread along a mezzanine or longitudinal concourse situated above or below the platform level, with multiple vertical circulation connections to the platforms.

Reserved seat policy

- Open seating, where passengers select the car that they will board

[2] *Passenger-handling* is the terminology used by rail operators (and similarly by airlines) to refer to the management and processing of passengers through a station and on-board trains. Services include ticket sales, customer information, seat reservations, waiting facilities, and service alerts.

- Reserved seating (like most European and Asian HSR systems), where passengers are assigned to a seat in a particular car, and where the time required to board the train can be minimized by prepositioning passengers either on the platform or at concourse level close to where their seat will be located

These options have differing implications in terms of required facilities, the configuration of concourse and vertical circulation elements, and the station operating costs associated with managing the boarding process.

4.4 Train Cleaning and Servicing

At terminal stations, train servicing[3] would be done using the passenger platforms. Because of space constraints at the proposed terminal sites, dedicated service platforms are not envisioned. To maximize passenger safety and servicing operations efficiency, and to achieve predictable layover (train parking) times, normal operating procedures would plan for providing temporal separation between the passenger unloading and loading processes and train-servicing activities at the terminal platforms.

To attract and keep a dedicated passenger clientele, it is important to establish and maintain a cleanliness standard aboard the train. This service is accomplished by cleaning techniques implemented at selected times in a service day. Two types of cleaning are envisaged:

- **"Normal" (Layover[4]) Cleaning:** This service is performed at a train storage and maintenance facility and is generally done when a train is parked for sufficient time to receive a thorough interior cleaning of the passenger areas to include seats and bathrooms. It is usually scheduled daily and is completed prior to a train entering revenue service in the morning. All trash is removed, seats and floors cleaned, and bathrooms sanitized.
- **"Light" (Pick-Up) Cleaning:** When a train turns around (i.e., the rear end of the train arriving at the station becomes the front end of the train departing) in a terminal station or on a storage track with insufficient opportunity for a full normal cleaning, this service is performed to return the interior to an acceptable condition.

Cleaning toilets (and emptying the "holding" tanks) could occur during the overnight layover period at maintenance facilities and would not occur in the terminals during the turnaround time.

4.5 Train Layover Times at Terminal

Because the terminals are stub-ended,[5] all high-speed trains would change directions (turn around with rear end of the arriving train becoming the front end of the departing train) at terminal stations. Four types of train turnaround would occur in terminal stations:

- **Revenue to Nonrevenue:** Revenue trains (with passengers) arrive, with the equipment turning around and going to the maintenance facility for storage or servicing, without passengers.
- **Nonrevenue to Revenue:** Trains enter the terminal from the maintenance facility (without passengers), departing passengers board (the train), and the train departs as a revenue train (with passengers).

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[3] *Train servicing* is the terminology used by rail operators to refer to the management and upkeep of trains in service to maintain a consistent quality of on-board experience for passengers. It includes, for example, replenishment of on-board catering supplies, emptying of toilets, in-service cleaning, and updating on-board computer systems.

[4] *Layover* is the terminology used by rail operators to refer to the storage of trains out of service. For example, trains may be laid over before beginning service again.

[5] Stub-ended terminals are those where a train cannot continue in the same direction it arrives, effectively terminating at the end of the track. The front of the arriving train effectively becomes its rear as the train departs in the opposite direction.

- **Revenue to Revenue:** Revenue trains (with passengers) arrive and passengers unload; the train would park at the platform while it is inspected, cleaned, and restocked with bathroom and food service supplies; departing passengers board the train; and the train departs as a revenue train (with passengers).
- **Revenue Ongoing:** Revenue trains (with passengers) arrive allowing arriving passengers to leave and departing passengers to board (the train), and the train operator moves to the cab at the other end of the train and then departs as an ongoing revenue service (with passengers) in the opposite direction. This maneuver is planned at Merced terminal station under the valley to valley service plan.

Estimating the time required to carry out the various terminal turnaround train servicing and passenger processing functions, and identifying which functions can proceed in parallel with each other and which depend upon the prior completion of other activities, allows definition of a "critical path" of activities that governs the minimum time necessary between an inbound train arrival and the subsequent outbound train departure.

The required sequence that must be followed for five basic processes that occur during the turnaround layover period are as follows:

- Passenger alighting and boarding
- Restocking of food and beverage service items
- Coach cleaning and restocking of bathroom supplies
- Train safety system predeparture preparation
- Minor equipment repairs that can be accomplished during the layover (parking) period are addressed

Facilities would need to be provided at the terminals to support the food service provisioning (commissary), coach cleaning, and railroad mechanical department (equipment maintenance and repair). These facilities would need to be in proximity to the HSR platforms, to minimize the time required to access a train when it arrives at the terminal. Direct service elevator access would be required between these facilities and the HSR platforms, separate from the elevators and access points used by passengers.

The HSR scheduled terminal station turnaround time is composed of four primary "critical path" factors: passenger alighting, interior cleaning, passenger boarding, and a "Recovery Time Factor." Table 2 summarizes HSR assumptions for the minimum exception and minimum standard scheduled turnaround times (based on a single high-speed trainset).

Table 2 Time Required for Terminal Layover Activities (High-Speed Rail Planning Assumptions, Revenue Train to Revenue Train)

Critical Path Activity	Minimum Exception	Minimum Standard
Passenger alighting	5 minutes	5 minutes
Cleaning, restocking, servicing and provisioning	5 minutes	10 minutes
Passenger boarding	5 minutes	5 minutes
Total scheduled turnaround time assumptions	**15 minutes**	**20 minutes**

5 ROLLING STOCK STORAGE AND MAINTENANCE

5.1 Fleet Requirements

In 2040, 58 trainsets[6] would be required to operate the 164 daily revenue service train runs envisioned for the full build revenue service plan on business days. Each train set would be approximately 675 feet long and seat a minimum of 450 passengers. The train could be potentially extended to approximately 1,350 feet long and seat at least 900 passengers in double trainset formations. Estimated requirements for Phase 1 revenue trainsets are presented in Table 3.

Table 3 Phase 1 Revenue Trainsets Required at Each Terminal to Start Weekday Morning Train Service

Terminal	Total Single Sets
San Francisco Salesforce Transit Center	14
San Jose	2
Merced	4
Fresno	1
Bakersfield	1
Los Angeles Union Station	14
Anaheim	8
Total Sets Required	**44**

The Horizon Year (2040) Phase 1 operations and service plan envisions the need for 44 revenue trainsets. Also, as indicated in Table 4, the estimated number of trainsets along with an allowance for spare trainsets for maintenance and repair substitute and hot standby trainsets, and extra trainsets to accommodate higher demand on peak demand days, results in an overall fleet estimate of 58 total trainsets. The 15 percent total spare ratio is the mid-range of spare ratios for U.S. and international intercity and HSR fleets. The estimated fleet requirement numbers will be modified as the operating plan, demand projections, and maintenance plans are refined.

Table 4 Phase 1 Train Fleet Requirements

Trainset Description	Trainsets Required
For revenue service	44
Protect trainsets for contingency	6
Spare equipment (assume 15%)	8
Total sets required	**58**

5.2 Train Storage and Maintenance Facilities

Train storage yard facilities should be as close as physically possible to the terminal stations.

[6] A trainset is a single electric-multiple-unit consisting of semipermanently coupled coach cars.

Generally, the terminal stations are in heavily urbanized areas that do not have land available immediately adjacent to the terminal for new train storage yards. As a result, trains that are entering or leaving service at a terminal station will have to operate as non-revenue or "deadhead" train movements to and from storage and maintenance facilities.

Train storage and maintenance are expected to be provided in four locations. To the north of the system, storage yards and a light maintenance facility (LMF) are planned to be located along the Peninsula Corridor at Brisbane near San Francisco. At the southern end of the system, an LMF with layover tracks is planned to be in the Los Angeles area with additional layover tracks near Anaheim. Finally, layover tracks and a heavy maintenance facility (HMF) would be provided in the Central Valley area.

LMFs provide facilities for smaller maintenance activities, cleaning, and periodic technical checks and the HMF provides capability for trainset overhauls and component refurbishment. An example of a typical concept configuration for an overnight storage facility equipped with a shop to perform periodic inspections is depicted on Figure 7.

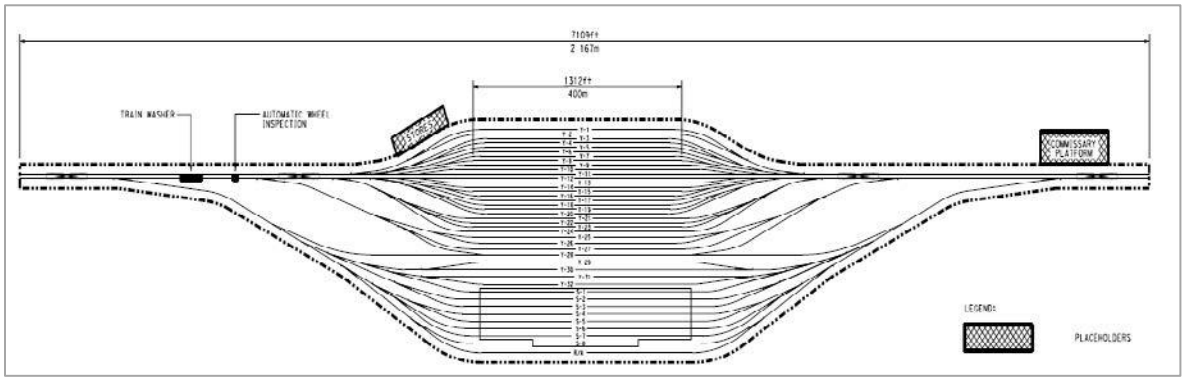

Figure 7 Example of Typical Configuration for Overnight Layover Tracks with Maintenance Facilities

The storage capacity of each facility is based on the number of trains estimated in the Full Build-Out Operations and Service Plan and is summarized in Table 5.

Table 5 Phase 1 Storage/Layover Track Requirements

Location	Total Trains to Be Laid Up at Facility	Train Capacity at Each Facility[1]
Brisbane	18	20
Central Valley HMF	16	40
Los Angeles area (Southern California LMF and layover tracks)	20	20
Anaheim layover tracks	4	4
Total	**58**	**84**

[1] Excess capacity would allow some flexibility to move trains around to meet actual level of demand and provide redundancy in the system to allow for future maintenance of the facilities themselves and trainset fleet expansion or replacement in the future.
HMF = heavy maintenance facility; LMF = light maintenance facility

5.3 Trainset Maintenance Program

Consistent with international methods, the California HSR System is planned to provide five different levels of train maintenance activity:

- **Level 1 – In-Service Monitoring:** Daily testing and diagnostics of certain safety sensitive apparatus on the train in addition to automatic on-board and on-ground monitoring devices.
- **Level 2 – In-Service Examinations:** Inspections, tests, verifications, and "quick" replacement of certain components on the train. Examples include inspection and maintenance tasks associated with the train's running gear, bogies, underbody elements, and pantographs.
- **Level 3 – Periodic Inspections:** Part of the planned preventive maintenance program requiring specialized equipment and facilities. Examples include examination of interior fittings and all parts of the train in the immediate environment of the passengers; in-depth inspection of axles and underbody components critical to train safety by identifying and repairing any condition in the running gear and connecting components; and wheel condition diagnostics and re-profiling (wheel truing).
- **Level 4 – Overhauls (HMF only):** Part of the planned life cycle maintenance program requiring a specialized heavy maintenance shop with specific heavy-duty equipment. Activities include the complete overhaul of train components replaced during Level 1, 2, and 3. In addition, a full complement of heavy maintenance is completed on each trainset.
- **Level 5 – Rolling Stock Modifications and Accident Repair (HMF only):** Activities to support installation of a major modification to the design of the trainset for purposes of improving safety, reliability, and passenger comfort. In addition, this category includes repair to a trainset that has suffered significant damage.

The frequency with which these maintenance procedures are performed would vary by level. To minimize cost, maximize flexibility, and address all the levels of maintenance and inspections, these maintenance functions would be undertaken at a relatively small number of facilities spread across the HSR network. The locations at which maintenance would occur can be broken into three groups:

- Layover facility: Provides Level 1 maintenance and inspections
- LMF: Provides Levels 1 to 3 maintenance and inspections
- HMF: Provides Levels 1 to 5 maintenance and inspection, including overhauls and component refurbishment

5.4 Estimated Site Requirements[7]

Based on a conceptual rendering of LMF and HMF facilities, they would require the following land parcel footprints (depending on the shape of the land parcel), inclusive of buildings, outdoor service areas, storage, roadways, and parking:

- Merced to Bakersfield HMF: approximately 150–175 acres
- Los Angeles LMF: 40–70 acres
- Brisbane LMF: 40–70 acres

5.5 Commissioning of Trainsets

In addition to the in-service maintenance regimen, a Trainset Certification Facility would be used during the prerevenue service period (estimated to begin from 2028) for the assembly, testing, acceptance, and commissioning of the HSR system new rolling stock fleet. Implementation of the testing, acceptance, and commissioning activity would also require a main line test track between 80 and 105 miles in length connected directly to the Trainset Certification Facility.

[7] Further details can be found in the Authority's *Requirements for High-Speed Trainset Fleet and Infrastructure Maintenance Facilities*, version 4.0, June 2024.

Preliminary maintenance would be performed at the Trainset Certification Facility until the HMF is operational.

The HMF would also be used for decommissioning or retirement of equipment from the system to make way for the next generation of rolling stock.

6 TRAIN DISPATCHING AND CONTROL

6.1 Operations Control Center

A train operations control center is planned to be in the Fresno area. The facility would provide centralized facilities to manage train dispatch, incident management, and service recovery and provide space for coordination between passenger services. Space for employee parking, pedestrian access and egress, and appropriate bathroom and lunchroom facilities has been accounted for.

The operations control center would also contain control desks for staff from the train operator, infrastructure maintenance contractor, and the trainset maintainer to allow for real-time management of the day-to-day train service.

Operators in the operations control center would also be in full communication with station operations control rooms on the HSR system and with other train operators and infrastructure managers when operating on blended sections.