

2. Project Description

The Larkspur Ferry Service Expansion and Parking Project (Project) is being developed by the Golden Gate Bridge, Highway and Transportation District (District) to address growing demand for ferry service, improve regional transit connectivity, reduce greenhouse gas emissions, and provide a reliable transportation alternative to automobile travel along the United States Highway 101 (US 101) corridor.

The District's ferry ridership forecasts indicate ferry demand more than doubling from historic peak levels to 17,600 daily riders by 2050. To accommodate future demand, the Project would provide the District operational flexibility to incrementally expand ferry service beyond the current average limit of 42 daily ferry crossings, ultimately providing up to 76 daily ferry crossings as warranted by future ridership levels and funding availability. To accommodate additional passengers, the Project would develop landside access solutions, including parking, to meet future growth.

2.1 Existing Project Location

The Larkspur Ferry Terminal (LFT) and associated facilities are along the central San Francisco Bay near Sir Francis Drake Boulevard in Marin County, California, at latitude 37°56'40.2"N and longitude 122°30'31.4"W. The Project area is within the San Rafael U.S. Geological Survey 7.5-minute topographic quadrangle and the City of Larkspur city limits. The terminal is adjacent to San Francisco Bay wetlands and tidal areas and is bordered by a mix of transportation, commercial, and open-space land uses.

The Project site is connected to the wider transportation network via Sir Francis Drake Boulevard, which connects to US 101, the recently opened adjacent stop on the Sonoma–Marin Area Rail Transit (SMART), SMART Connect Larkspur shuttle, and the Golden Gate Transit Bus and Marin Transit Bus Service.

2.1.1 Existing Setting

The Golden Gate Ferry provides regular and special-event ferry service and is supported at LFT by multimodal access and two surface parking lots, the Main Lot and North Lot. Riders arrive via a mix of driving, drop-off/Transportation Network Company (TNC), bus transit, walking from the nearby SMART station, and regional bicycle and pedestrian routes. Ferry service levels include up to 42 weekday crossings, with additional trips during events and for maintenance operations and deadhead movements. Overall, the terminal is a key regional mobility hub in the Bay Area. Terminal parking frequently reached capacity before the COVID-19 pandemic. After the lots are full, ferry customers arriving by car are turned away and have to drive to San Francisco. At capacity, ferry ridership is constrained by parking, limited transit connections, and indirect pedestrian and bicyclist connections, which limit the terminal's ability to accommodate forecast ferry ridership growth.

2.1.1.1 Larkspur Ferry Terminal

The LFT serves as the base for Golden Gate Ferry operations, offering regular ferry service to locations in the Bay Area, including the San Francisco Ferry Building and Oracle Park during baseball season and select special events. The terminal was constructed between 1975 and 1976 on the site of the former Hutchinson's Rock Quarry, and it officially opened on December 11, 1976. The LFT was designed by architect Jacques de Brer and consists of an 18,000-square-foot open-air "space frame" canopy. The terminal is accessible and includes amenities for passengers, such as a covered waiting area, restrooms, and bicycle racks accommodating up to 80 bicycles inside the paid area and an additional 60 outside.

Immediately outside the terminal building, there are pickup and drop-off spaces for bus transit and private vehicles/TNCs, along with a surface parking lot to serve ferry passengers who choose to drive and park.

2.1.1.2 Landside Facilities

Landside facilities include the Main Lot and North Lot, which are surface lots and together have a total of 2,023 parking spaces, inclusive of parking spaces intended for ferry riders with accessibility requirements. The standard parking stalls have substandard dimensions, compared to the current guidelines from the City of Larkspur.

The Main Lot is accessed from Sir Francis Drake Boulevard and has 1,808 parking spaces. The parking lot is an approximate hexagon shape, keeping with the original design of the terminal and surrounding areas. A road around the edge of the Main Lot provides circulation and internal access to all parking aisles, connects to the ferry terminal's pickup and drop-off area, and leads to a designated staff parking area southwest of the Main Lot. Onsite bicycle parking is available at the ferry terminal building for 140 bicycles. Four fuel storage tanks are used for daily ferry service; located just beyond the employee lot, each tank holds 75,000 gallons. Before the COVID-19 pandemic, the Main Lot regularly reached full capacity by midmorning on weekdays, resulting in overflow demand to the North Lot.

The North Lot is to the north of the Main Lot across Sir Francis Drake Boulevard near the SMART station and is accessed from Larkspur Landing Circle. It has 215 parking spaces and is intended to serve as an overflow car park once the Main Lot is filled.

2.1.2 Existing Ferry Operational Activities

Before the COVID-19 pandemic, the District was operating at the approved maximum (Baseline) ferry operations, with up to 42 regular service crossings between the City of Larkspur and San Francisco on weekdays. As of April 2026, the District currently operates below the baseline level, with 32 regular service crossings on weekdays and 15 crossings on weekends and holidays between the City of Larkspur and San Francisco. Deadhead trips and maintenance trips are estimated to be up to 10 trips and 2 trips, respectively. The District also runs special service for home games at Oracle Park, consisting of two crossings per game, for the entire season, as well as infrequent special service for large concerts or events. The Larkspur–San Francisco service is operated using a fleet of catamarans with a capacity ranging from 400 to 450 passengers. Based on forecast ferry ridership demand, services are forecast to return maximum revenue crossing levels of 42 trips per day in 2035. Detailed discussion of forecast ferry service demand is provided in Section 2.3.3.1 and are shown in Table 2-1. The District has begun the process of upgrading the entire ferry fleet to new, Liwa-class vessels; this conversion will be completed by 2033 before completion of the proposed Project. Compared to the legacy fleet, Liwa vessels have an improved hull design reducing wake generation and wave energy, a shallower 20-degree jet angle that will reduce disturbance and water turbidity, Tier 4 engines that result in reduced emissions, and higher fuel efficiency. The Liwa vessels are handicap-accessible, carry 50 more passengers (500 passengers total), and have space for 75 bicycles. Ferry operations staff onsite include 88 employees covering land and waterside operations and purchasing and general administration.

2.1.2.1 Existing Ferry Storage and Maintenance Activities

In addition to the daily ferry service operations discussed previously, LFT is the home base for the District's ferries. Up to seven ferries can be stored at the LFT overnight, but the actual number stored varies depending on offsite maintenance requirements and U.S. Coast Guard and Project inspection schedules.

The ferries receive daily fuel service onsite. Fuel is stored onsite in a 300,000-gallon tank farm that is adjacent to the employee parking southwest of the Main Lot.

The majority of in-water vessel maintenance for the ferries is completed at LFT by 20 maintenance and engineering staff. These activities include maintenance and repair activities for all vessel and facility systems and at times require the use of a large landside crane adjacent to a berth to support vessel repair and maintenance activities. Maintenance and repair activities generally include welding and fabrication, engine overhaul, oil changes, electrical work, facilities painting, and vessel auxiliary systems maintenance. The channel around the LFT requires periodic maintenance dredging to ensure safe ferry operation and to avoid damage to the vessels. Maintenance dredging is completed, as needed, under a separate permit for each event. Dredging was last completed in 2022 and is anticipated to be completed next in 2027.

2.1.3 Existing Access and Connectivity

Ferry riders access the LFT via a range of modes, including driving, transit, walking, bicycling, and rail. The estimated mode shares in 2018 (before the COVID-19 pandemic) and 2024, the most recent year for which data are available, are shown on Figure 2-1. The shift in mode share is largely because of commencement of SMART operation in 2019; consequently, SMART mode share is 8% in 2024 compared to 0% in 2018. Other changes in 2024 include drive and park decreasing by 6%, and bus transit decreasing by 3.5% as the connector between the San Rafael Transit Center and LFT discontinued service with the opening of the Larkspur SMART station. Combined, the walk and bike/scooter mode share increased 1.7% by 2024.

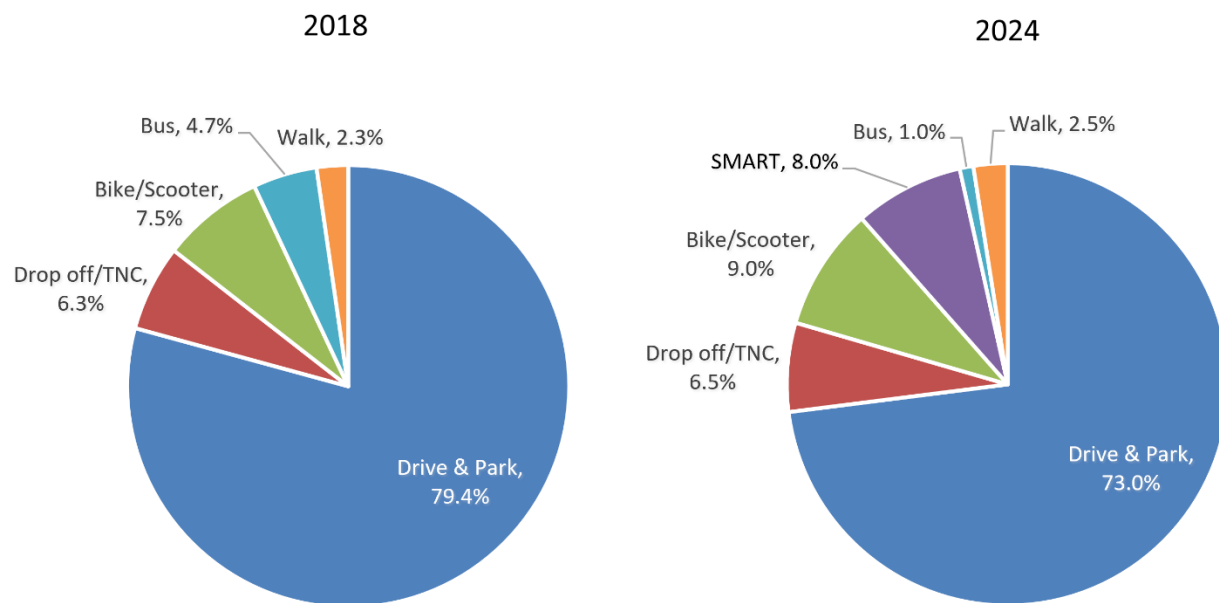


Figure 2-1. Mode of Arrival to Larkspur Ferry Service

Currently in San Francisco, 45% of Larkspur ferry customers walk to and from the San Francisco Ferry Terminal, 18% bike or scooter to and from the terminal, 17% arrive from MUNI, 10% are picked up or dropped off by car (private car, taxi or Uber/Lyft/Waymo), while the remainder use other means (such as AC Transit, Amtrak, bus, other ferry, company shuttle, etc.).

2.1.3.1 Private Vehicles – Drive and Park

The parking payment at both the Main and North Lots is a \$2 daily rate or \$20 for a 30-day permit (as of September 2026). Payment is required between 5 AM and 1 PM on weekdays, with parking free after 1 PM on weekdays, weekends, or holidays with ferry service.

2.1.3.2 Drop Off/Transportation Network Companies

The existing loading area includes approximately 145 feet of white curb, consisting of one 95-foot segment and one 50-foot segment separated by a crosswalk. The curb is designated for passenger pickup and drop-off activities, with a posted 10-minute time limit, and is used by private vehicles, taxis, and TNCs such as Uber and Lyft.

2.1.3.3 Transit – Bus and Sonoma–Marin Area Rail Transit

Transit includes the following:

- **Bus:** In 2019, shuttle Routes 25 and 31 operated by Golden Gate Transit served as feeder routes to the ferry. Route 31, connecting the San Rafael SMART station to LFT, suspended service after the Larkspur SMART station opened in late 2019, and Route 25 was discontinued in 2020 because of COVID-19 and has not returned because of lack of demand and sufficient parking capacity at LFT. Currently, regular bus transit routes serving the LFT directly include Golden Gate Transit Route 132 from San Anselmo to San Francisco. Marin Transit also operates three fixed bus routes connecting to the ferry—Routes 17, 29, and 228—which pick up/drop off just outside the Main Lot on Sir Francis Drake Boulevard.
- **SMART:** SMART's Larkspur Station opened in 2019 and is roughly 0.3 mile (straight line distance) from the ferry terminal; however, walking distance is approximately 0.6 mile, connected by the Cal Park Hill Pathway, a paved multi-use trail. The SMART system currently operates from the City of Larkspur to Windsor in Sonoma County. As of April 2026, trains operate on approximately 32-minute headways, improving schedule flexibility and enhancing connections to ferry departures throughout the day. SMART also provides weekend service. The SMART Connect Larkspur provides an alternative to the Central Marin Ferry Bicycle/Pedestrian Bridge, linking the SMART Larkspur Station with the Golden Gate LFT. This service is especially convenient for passengers who find the walk challenging. The provided service level offers flexibility in travel throughout the day and improves connections between the ferry terminal and regional facilities, such as the San Rafael Transit Center.

2.1.3.4 Non-Motorized Modes – Bicycle and Walking

The ferry terminal is served by sidewalks and pedestrian crossings at the major intersections near the ferry terminal, such as the Sir Francis Drake Boulevard/Larkspur Land Circle intersection. There is also a footbridge serving pedestrians and bicyclists over Sir Francis Drake Boulevard, connecting to the commercial land uses on Larkspur Landing Circle.

The Cal Park Hill Pathway, part of the Marin County North–South Greenway, offers another connection over Sir Francis Drake Boulevard and connects to the shared use paths serving the ferry terminal from the west. This crossing provides a good bicycle connection to the SMART station but does not attract pedestrians because of its indirect route.

2.1.3.5 Existing Transportation Demand Management

Thirty designated carpool parking spaces are available in the existing Main Lot.

2.2 Project Background and Objectives

Ferry service from the LFT has historically—before COVID-19 and work-from-home policies—been heavily used, with ferry ridership constrained by limits on ferry terminal capacity. Parking was frequently at capacity before 10 AM on weekdays, and there were limited alternatives for riders to access the site. Based on the ferry ridership forecast, developed with the Transportation Authority of Marin's transportation demand model, ferry ridership is projected to recover to 2019 levels (pre-pandemic) by approximately 2035 and continue to grow to 2050 and beyond. Ferry ridership is anticipated to recover to approximately 7,500 daily riders (3,750 riders in the southbound direction) by 2035, with forecast growth up to 17,600 daily riders (8,800 riders in the southbound direction to San Francisco) by 2050.

As ferry service is capped at 42 revenue crossings per day, an incremental increase in ferry service from the approved maximum 42 revenue crossings (baseline) up to 76 weekday crossings by 2050 would be needed to meet the ridership demand forecast. Additional per-weekday ferry crossings, including special events and maintenance and deadhead trips, could increase 6 to 16 weekday crossings in 2035 to 14 to 26 weekday crossings in 2050.

Forecast ferry ridership is further constrained by landside access limitations at the LFT. Increased accommodation of active transportation, transit services, and parking capacity will be necessary to accommodate 8,800 daily southbound ferry riders in 2050. With the Project, the District seeks to ensure that ferry service remains a reliable and competitive travel option for the greater Bay Area.

The purpose of the Project is to provide increased ferry service and landside access improvements to accommodate forecast future ridership demand and ensure that ferry service remains a reliable and competitive travel option that reduces vehicle miles traveled and greenhouse gases along the US 101 highway corridor in Marin and Sonoma Counties and for the greater Bay Area through 2050 and beyond.

The objectives of the Project are the following:

- Meet increasing demand for ferry service between the LFT and San Francisco in 2050 and beyond.
- Accommodate higher levels of ferry service beyond the historic cap of 42 average daily trips.
- Reduce traffic congestion within the US 101 highway corridor by providing an alternative and time competitive mode of travel to San Francisco that will reduce vehicle miles traveled and air emissions.
- Develop facilities at the LFT to accommodate future ferry riders arriving by car, carpool, bus, train, bicycle/scooter, foot and other modes, including building parking garages on the Main Lot and North Lot.

2.3 Two Build Alternatives

The Project proposes to increase ferry service; improve the pickup/drop-off area to provide designated areas for fixed-route transit loading and unloading, TNCs, and drop off; upgrade bicycle storage facilities; improve pedestrian connections; and use a phased approach to construct new parking garages on the Main and North Lots. The common design features that are the same for the Build Alternatives, such as increased ferry service and North Lot parking garage, are discussed in Section 2.3.1.

There are two Build Alternatives being considered in this Draft Environmental Impact Report. Alternatives 1 and 2 occupy the same footprint (Figure 2-2) and are essentially the same with the exception of (1) Alternative 2 includes additional transportation demand management (TDM) measures that fully address projected ridership demand with one less parking level in the Main Lot, and (2) Main Lot parking garage height (Alternative 1 is a five-level garage, and Alternative 2 is a four-level garage). The Project's

Build Alternatives are discussed in Section 2.3.2, Alternative 1, and Section 2.3.3, Alternative 2. Construction of the Build Alternatives would occur in phases, with Phase I consisting of TDM and transit improvements along with a parking garage on the North Lot, and Phase II including further TDM and transit improvements and a parking garage on the Main Lot. Construction of parking garages is contingent on funding availability and future demand, which is discussed in greater detail in Section 2.3.4.

2.3.1 Common Design Features – Alternatives 1 and 2

The following describes the common design features that are included within Alternatives 1 and 2.

2.3.1.1 Increased Ferry Service

In 2035, the unconstrained ferry ridership is forecast to be approximately 3,800 riders in the southbound direction (7,500 daily trips), and no additional service trips would be required.

In 2050, the unconstrained ferry ridership is forecast to be approximately 8,800 riders in the southbound direction (17,600 daily trips). This will require incrementally increasing the regular ferry service trips up to 76 revenue trips by 2050. Table 2-1 provides total anticipated trips, including typical daily crossings and large event special service for 2035 and 2050. With the maximum level of 76 trips in 2050, ferry operations will include up to four departures/arrivals per hour in the AM peak hours, which can be accommodated by existing facilities at Berths 1 and 2 at the LFT. Ferry operations will continue in accordance with existing practices and in compliance with all applicable rules and regulations to ensure safe, reliable service.

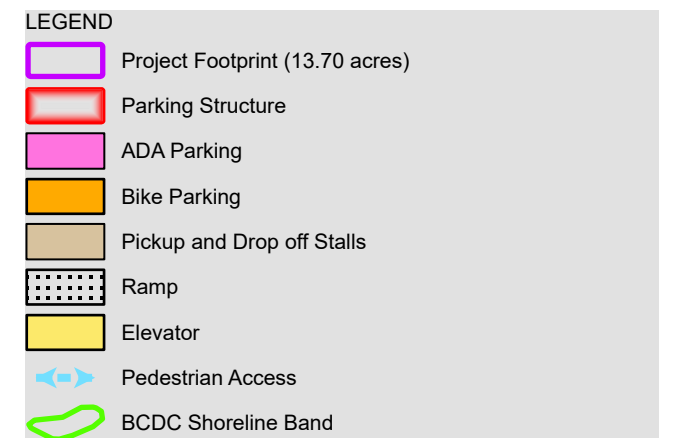
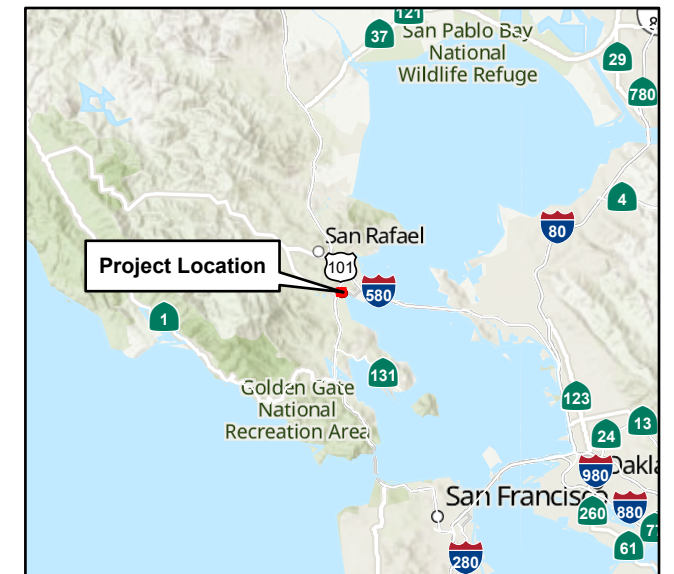
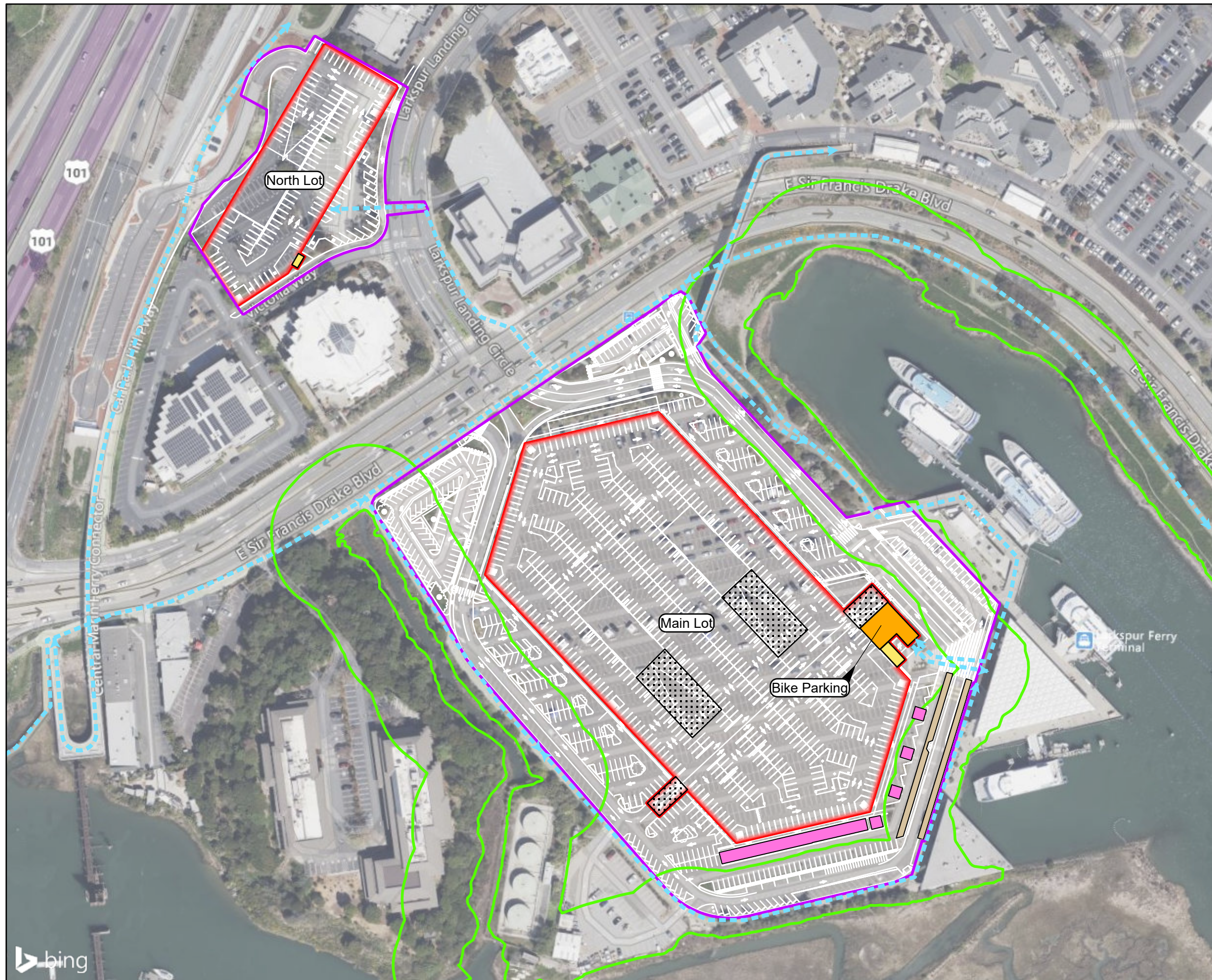
Table 2-1. Forecast Ferry Ridership and Trips

Trip Type	CEQA Baseline (Approved Trips)	Alternatives 1 and 2 (2035)	Alternatives 1 and 2 (2050)
85th Percentile Daily Ridership	N/A	7,500	17,600
Forecast Regular Revenue	42	42	76
Special Event Service	2	0 to 4	0 to 4
Deadhead—Larkspur, Sausalito, Tiburon	10	6 to 10	14 to 20
Maintenance	2	0 to 2	0 to 2
Total Daily Crossings—Typical Weekday	56	48 to 58	90 to 102
Large Event Special Service	18	0 to 18	0 to 18
Total Daily Crossings—with Large Event Special Service	74	48 to 76	90 to 120

CEQA = California Environmental Quality Act

N/A = not applicable

Actual service would depend on demand and be subject to the District's standard operating practices.



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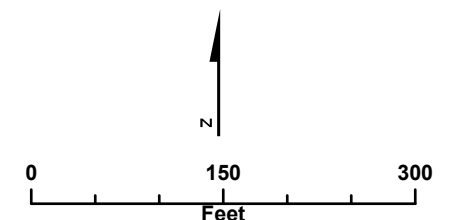


Figure 2-2
Project Footprint
 Larkspur Ferry Service and Parking Expansion
 Golden Gate Bridge Highway and Transportation District
 Marin County, California

It should also be noted that by 2035, the District fleet would be composed of all new Liwa-class vessels. These vessels are jet powered and have Tier 4 engines, resulting in reduced emissions and higher fuel efficiency. The Liwa vessels are handicap-accessible, carry 50 more passengers (500 passengers total), and have space for 75 bicycles.

2.3.1.2 North Lot Parking Garage

Phase I of Alternatives 1 and 2 would construct a six-level parking garage on the North Lot. The concrete garage would include approximately 260,000 square feet of parking for 850 stalls (145 surface/level 1 stalls and 705 garage stalls). The garage would include two elevators to comply with the Americans with Disabilities Act (ADA).

2.3.1.3 Project Footprint

The permanent footprints and temporary construction areas are the same for Alternatives 1 and 2.

2.3.1.4 Additional Common Design Features

Both Build Alternatives would also include the following components:

- Secure bicycle parking for up to 350 bicycles at the Main Lot
- Electric vehicle charging in accordance with the California Green Building Standards Code (Title 24, Part 11)
- New pedestrian crossing on Larkspur Landing Circle to enhance pedestrian movements from the North Lot to the ferry terminal
- Connection to existing drainage facilities and utilities
- Installation of solar canopies shades across approximately 75% of the upper levels of both garages, resulting in an estimated annual clean energy output of 5,700,000 kilowatt-hours per year for electric vehicle charging to help offset grid demand
- Uniform distribution of interior and exterior lights for the Main and North Lots that are provided through the following principles (actual spacing and total number of fixtures can vary based on many factors; typically, fewer are preferred, but it requires more advanced fixtures and will be developed in final design):
 - Minimum surface lighting level is 1 foot-candle, and there is a 5-foot-candle minimum at interaction areas. The maximum surface lighting level will be defined in the final design (as low as acceptable) to avoid glare.
 - All new exterior fixtures will be NightSky-compliant (each shining down only), preventing glare.
 - Interior fixtures are placed such that the cutoffs do not let a significant amount of light protrude outside the building envelope, preventing glare. Because they are ceiling mount, they shine downward by nature.
 - Fixtures will be light-emitting diode (LED) with minimum Color Rendering Index of 90 and automated (daylight and occupancy dimming).
 - Vehicle headlights in the garage are permanently blocked by solid crash-walls and do not shine outwards from the upper levels, preventing glare.

2.3.2 Alternative 1: Increased Ferry Service and New Parking Garages

2.3.2.1 Main Lot Garage

Alternative 1 would construct a five-level parking garage with secured bicycle parking on the Main Lot. The Main Lot garage's first level would be elevated to accommodate near-term forecast sea-level rise (Year 2100 Projection). First-level elevations would be increased approximately 1 to 5 feet above the existing grade. Generally, areas close to the marsh would be elevated 5 feet, while areas closer to Sir Francis Drake Boulevard would be elevated 1 foot based on difference between projected sea-level rise and existing grade. The concrete garage would include approximately 1,200,000 square feet of parking for 3,998 stalls (401 surface lot stalls and 3,597 garage stalls). The garage would include an elevator and connect to existing onsite utilities. All major construction would occur outside of the San Francisco Bay Conservation and Development Commission's shoreline band. Anticipated work within the shoreline band would be limited primarily to restriping the remaining surface lot to accommodate the new circulation and remaining surface parking within the lot, landscape improvements and drainage tie-ins as applicable.

2.3.2.2 Access and Connectivity with Proposed Landside Changes

While the share of ferry passengers who drive and park at the terminal is projected to decline from approximately 73% in 2024 to 65% in 2050, overall parking demand is still expected to increase (Table 2-2). This is because of substantial increases in forecast ferry ridership, which is connected to regional growth projections for the same period. As a result, additional parking capacity would be needed to accommodate future passenger demand, and ferry ridership under this alternative is not expected to be constrained by the amount of parking available.

Table 2-2. Mode Share Forecast for Alternative 1 in 2035 and 2050 and Associated Ferry Ridership Forecast

Mode of Arrival	2018	2024	2035	2050
Drive and Park	79.4%	73.0%	69.5%	65.0%
Drop off/TNC	6.3%	6.5%	6.5%	6.5%
Bike/Scooter	7.5%	9.0%	9.8%	11.0%
SMART	N/A	8.0%	8.5%	9.5%
Bus	4.7%	1.0%	3.0%	5.0%
Walk	2.3%	2.5%	2.7%	3.0%
Total	100%	100%	100%	100%
Ridership	6,350	3,500	7,500	17,600
Parking Demand	N/A	N/A	2,200	4,700
Parking Supply	2,023	2,023	2,658	4,848

Drop off/TNCs

Curb space in front of the ferry terminal is currently intended for pickup/drop-off by private vehicles and TNCs. In Alternative 1, some of the existing parking stalls on the Main Lot circulation road would be

reconfigured to provide additional spaces for pickup/drop-off, District-reserved parking, and motorcycle parking.

The proposed reconfiguration would result in the following:

- 95 feet of bus stop space
- 24 spaces for pickup/drop-off
- 120 feet of curb space allocated for reserved parking (District use)
- 100 feet of curb space allocated for motorcycle parking

Transit

The ferry terminal will continue to be served by transit. In 2035, bus service is assumed to consist of fixed-route transit services provided by Marin Transit and one fixed-route peak-only feeder shuttle—the Wave, which the District (Golden Gate Transit) will begin operating in 2030—during the peaks to match the ferry schedule. The same transit improvements are assumed for 2050.

Non-Motorized Modes

Alternative 1 would include the proposed development of additional onsite facilities to encourage mode shift from drive and park to transit and active transportation modes (bicycle and pedestrian), as described in Section 2.3.1.4.

2.3.2.3 Transportation Demand Management

Standard TDM measures would be pursued strategically to encourage mode shift to active transportation and transit. In addition to common design features in Section 2.3.1.4, potential TDM measures for Alternative 1 may include the following:

- Increased preferred parking spaces for carpool/vanpool for the ground floor of the Main Lot parking garage
- Increased parking fees commensurate with inflation and to account for some costs for construction of the parking garage

2.3.2.4 Utilities

New utility service is not anticipated. The Main Lot garage would connect to existing landside utility services.

2.3.3 Alternative 2: Increased Ferry Services, New Parking Garages, and Enhanced Transportation Demand Management

The following describes Alternative 2.

2.3.3.1 Main Lot Garage

Alternative 2 would construct a four-level parking garage with secure bicycle parking on the Main Lot after Phase I construction of the North Lot garage. The Main Lot garage's first level would be elevated to accommodate near-term forecast sea-level rise (Year 2100 Projection). First-level elevations would be increased approximately 1 to 5 feet above the existing grade. Generally, areas close to the marsh would be elevated 5 feet, while areas closer to Sir Francis Drake Boulevard would be elevated 1 foot based on

difference between projected sea-level rise and existing grade. The concrete garage would include approximately 960,000 square feet of parking for 3,258 stalls (401 surface lot stalls and 2,857 garage stalls). The garage would include an elevator and connection into existing onsite utilities. All major construction would occur outside of the Bay Conservation and Development Commission's shoreline band. Anticipated work within the shoreline band would be limited primarily to restriping the remaining surface lot to accommodate the new circulation pattern and configuration of surface parking within the lot, landscape improvements, and drainage tie-ins, as applicable.

2.3.3.2 Access and Connectivity with Proposed Landside Changes

The mode share of drive and park associated with Alternative 2 is projected to decrease between 2024 and 2050 from 73% to 56% in response to the proposed enhanced TDM measures and the new parking garages. Enhanced TDM measures described in Section 2.3.2 would improve transfers between modes, develop facilities, or provide incentives to encourage mode shift from private vehicle to other modes, including bus, SMART, bicycle, walking, carpool/vanpool. Therefore, while the demand for the number of parking spaces increases with forecast ferry ridership, when the TDM measures are combined with the new four-level garage, Alternative 2 is able to accommodate forecast increased ferry ridership up to 2050 any beyond (Table 2-3).

Table 2-3. Mode Share Forecast for Alternative 2 in 2035 and 2050 and Associated Ferry Ridership Forecast

Mode of Arrival	2018	2024	2035	2050
Drive and Park	79.4%	73.0%	68.8%	56.0%
Drop off/TNC	6.3%	6.5%	6.5%	7.0%
Bike/Scooter	7.5%	9.0%	10.0%	13.0%
SMART	N/A	8.0%	8.5%	10.0%
Bus	4.7%	1.0%	3.5%	11.0%
Walk	2.3%	2.5%	2.7%	3.0%
Total	100%	100%	100%	100%
Ridership	6,350	3,500	7,500	17,600
Parking Demand	N/A	N/A	2,200	3,850
Parking Supply	2,023	2,023	2,658	4,108

Drop Off/TNCs

Curb space is included in front of the ferry terminal and is used for pickup/drop-off by private vehicles or TNCs. Some of the existing parking stalls on the Main Lot circulation road would be reconfigured to provide additional spaces for pickup/drop-off, District-reserved parking, and motorcycle parking and would be further explored during preliminary design.

The proposed reconfiguration would result in the following:

- 195 feet of bus stop space
- 26 spaces for pickup/drop \-off
- 120 feet of curb space allocated for reserved parking
- 100 feet of curb space allocated for motorcycle parking

Transit

Alternative 2 is proposed to include the following enhancements to transit service:

- In 2035, bus service is assumed to consist of fixed-route transit services provided by Marin Transit.
- In 2035, extend the one fixed-route peak-only feeder shuttle—the Wave, which the District (Golden Gate Transit) will begin operating in 2030—from peak-only to all-day service
- In 2050, add up to two additional fixed-route, neighborhood-based services matching the ferry schedule (all day). These routes would connect the local communities, such as Larkspur, Greenbrae, and San Rafael, to the ferry terminal.

Non-Motorized Modes

Alternative 2 also includes a proposed bicycle hub with repair services in the Main Lot garage, alongside secure bicycle parking, to further encourage mode shift away from drive and park, in addition to measures as described in Section 2.3.1.4.

2.3.3.3 Transportation Demand Management

Alternative 2 would include enhanced TDM measures in addition to those noted for Alternative 1 (Section 2.3.2.3) and common design features (Section 2.3.1.4) to encourage mode shift to active transportation and transit. Examples of potential TDM measures that may be included are as follows:

- A bike hub, including bicycle repair services to accompany bicycle parking
- Pending ferry ridership demands, increased parking fees commensurate with inflation and to account for some costs for construction of the garages, and some costs for feeder shuttle operations; more spaces for preferential carpool parking on the ground floor of the Main Lot parking garage
- More spaces for preferential carpool parking on the ground floor of the Main Lot parking garage
- Active participation in the regional carpool matching program (currently known Marin Commutes)

2.3.3.4 Utilities

New utility service is not anticipated. The Main Lot garage would connect to existing landside utility services.

2.3.4 Phased Construction of North Lot and Main Lot Parking Garages

A preliminary list of activities necessary before each construction phase includes development of a funding plan (if federal funding is identified, National Environmental Policy Act clearance will also be required), final design, permitting, and bidding.

The Build Alternatives would be constructed in two phases. Phase I is construction of the North Lot garage, and Phase II is construction of the Main Lot garage. No other improvements are required at the LFT to accommodate the increase in ferry service discussed in Section 2.3.3.1. The Build Alternatives would require similar construction phases, activities, and construction footprints. The primary difference is the construction schedule for Alternative 2 Phase II, which would be slightly shorter in duration and require less concrete because of one less parking level on the Main Lot garage.

Ultimately, construction timing for the North and Main Lot garages is anticipated to be up to the District's discretion, pending funding availability and actual ridership demand at the time to balance parking availability with the increase ridership and ferry operations (up to a maximum of 76 revenue trips per day) in 2050 and beyond. It is anticipated that construction of the North Lot garage would require up to 18 months and would start in 2033; and construction of the Main Lot garage is anticipated to require up to 36 months and could begin as early as 2037. If funding is available and it is warranted by future ridership, both garages could open as early as 2040.

The construction period would include mobilization, demolition, utility work, structural work, structural finishing and inspections, and closeout. Each Build Alternative will include a Traffic Management Plan (TMP) and a Traffic Control Plans (TCP) that would include applicable measures that the contractor will be required to comply and approved by the City to address circulation for transit, bicycles, pedestrians, construction vehicles, emergency vehicles, and private vehicles for the duration of construction of the Project. The TMP/TCPs are designed to safely guide vehicles, cyclists, and pedestrians around the work zone; protect construction crews; keep traffic moving smoothly; minimize and prevent accidents; and lessen the impacts of construction traffic on daily local routines. The TMP and TCPs would be developed in tandem. The TMP would focus on means to reduce traveler delays and enhance traveler, pedestrian, and cyclist safety during Project construction. TCPs would identify the approach for managing traffic during construction to maximize efficiency and safety. This plan would follow the guidance contained in the California Manual on Uniform Traffic Control Devices on temporary closures of vehicle lanes, bicycle lanes, and sidewalks and appropriate detours for these facilities. Key elements in the TMP include the following:

- Public information/public awareness campaign
- Motorist information strategies
- Incident management
- Construction strategies
- Demand management
- Alternate route Strategies

Figure 2-3 shows the parking demand and supply during construction to 2050 and beyond. Because of requirements to close the Main and North Lots to parking during construction, this will result in an anticipated parking shortfall of 140 to 240 parking spaces during construction of the North Lot and an anticipated shortfall of 1,530 to 1,700 spaces during construction of the Main Lot. The District could offer parking at the District depot on Andersen Drive, complemented with a shuttle service connecting the depot to the ferry terminal. The District could also work with offsite businesses with excess parking to provide alternatives for parking and access to the LFT. Currently, additional offsite parking spaces are adjacent to the site at the movie theater and commercial/retail businesses and at the Marin Country Mart on Larkspur Landing Circle. Further coordination with property owners/management would be needed for use of these parking spaces during construction. Potential measures to address temporary parking shortfalls during construction would be evaluated and implemented by the District, as appropriate, before construction.

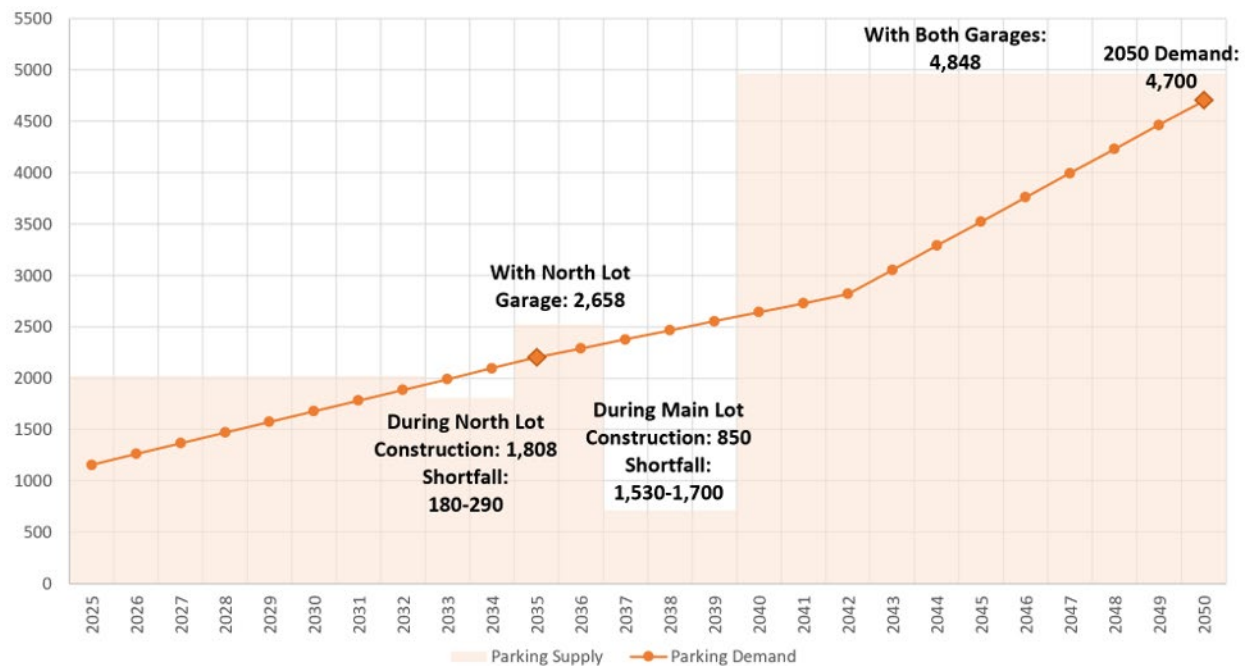


Figure 2-3. Construction Schedule and Parking Supply

Note: Actual construction schedule pending Board approval, funding availability and future demand.

Major activity phases, stages, and activities are discussed as follows:

- Phase I North Lot:
 - Stage 1, Site Preparation: Primary activities would include:
 - Mobilizing contractor
 - Installing construction fencing
 - Demolishing approximately 37,000 square feet of asphalt across the 1.02-acre North Lot
 - Removing curbs and islands
 - Clearing and grubbing
 - Addressing utility conflicts
 - Installing water quality best management practices
 - Establishing staging areas and jobsite office while maintaining access to the SMART station
 - Stage 2, Excavation: Approximately 3,700 cubic yards of rock would be excavated and hauled offsite in preparation for construction of slab-on-grad mat foundation.
 - Stage 3, Foundation: Approximately 7,400 cubic yards of base would be imported and compacted in preparation for the foundation. The mat foundation would be constructed.
 - Stage 4, Super Structure: The six-level, 260,000-square-foot parking garage with 850 parking stalls (145 surface/level 1 stall, and 705 garage stalls) would be constructed. The garage would include two elevators for ADA accessibility.
 - Stage 5, Parking Lot Improvements: The surface parking area surrounding the garage would be reestablished. This would include:

- Regrading and compaction
- Vehicle transition ramps
- Pedestrian ADA ramps and walkways
- Stormwater drainage, curb, gutter, and sidewalk reconstruction
- Asphalt paving
- Lighting, signage, and parking control devices
- Stage 6, Mechanical, Electrical, and Plumbing and Architectural and Finishes: This would include:
 - Electrical and lighting installation
 - Fire/life safety systems
 - Elevator installation and commissioning
 - Signage and striping
 - Landscaping and site improvements
 - Architectural finishes
 - Solar shades
- Phase II Main Lot:
 - Stage 1, Site Preparation: Primary activities would include:
 - Mobilizing contractor
 - Installing construction fencing
 - Demolishing approximately 240,000 square feet of asphalt, including lighting pedestals and bollards within the 5.5-acre Main Lot footprint
 - Addressing utility conflicts
 - Installing water quality best management practices
 - Establishing staging areas and jobsite office while maintaining access along the perimeter for passenger dropoffs via private vehicles and buses to the LFT.
 - Stage 2, Excavation: Approximately 7.5 feet of liquefiable material (67,000 cubic yards) within the Main Lot garage would be excavated and hauled offsite. Approximately 67,000 cubic yards of engineered backfill material would be imported and compacted.
 - Stage 3, Foundation: Approximately 19,000 cubic yards of engineered base would be imported and compacted to make final grade at approximately 11.4 feet above mean sea level in preparation for the foundation. Two options are being considered: (1) H-pile foundation and (2) auger cast pile foundation. Details related to these options are provided as follows:
 - H-Pile Foundation: Approximately 19,000 cubic yards of engineered base would be imported and compacted to make final grade at approximately 11.4 feet above mean sea level in preparation for the foundation. Includes driving 2,151 90 foot-long 18x204 steel H-piles; constructing pile caps, grade beams, and perimeter foundation walls; and installing under-slab utilities.
 - Auger Cast Pile Foundation: Approximately 19,000 cubic yards of engineered base would be imported and compacted to make final grade at approximately 11.4 feet above mean sea level

in preparation for the foundation. Includes drilling and installing 950 36-inch-by-90-foot-long concrete auger cast piles and hauling out of approximately 27,000 cubic yards of drilling spoils, along with constructing pile caps, grade beams, and perimeter foundation walls and installing under-slab utilities.

- Stage 4, Super Structure: Parking garage on top of the pile foundation would be constructed. The super structure would consist of either:
 - Alternative 1: A five-level, approximately 1,200,000-square-foot concrete parking garage containing approximately 3,597 stalls
 - Alternative 2: A four-level, approximately 960,000-square-foot concrete parking garage containing approximately 2,857 stalls
- Stage 5, Parking Lot Improvements: The surface parking area surrounding the garage would be reestablished. This would include:
 - Regrading and compaction
 - Vehicle transition ramps
 - Pedestrian ADA ramps and walkways
 - Stormwater drainage, curb, gutter, and sidewalk reconstruction
 - Asphalt paving
 - Lighting, signage, and parking control devices
 - Final paving, striping, and site work, such as Asphalt Concrete paving, striping, and signage and landscaping
- Stage 6, Mechanical, Electrical, and Plumbing and Architectural and Finishes: This would include:
 - Electrical and lighting installation
 - Fire/Life safety systems
 - Elevator installation and commissioning
 - Signage and striping
 - Landscaping and site improvements
 - Architectural finishes
 - Solar shades