

Memorandum

Date: October 21, 2022
To: Rebecca Auld, Lamphier Gregory and Christy Usher, City of South San Francisco
From: Daniel Jacobson and Emily Chen, Fehr & Peers
Subject: **Oyster Point Hotel Transportation Assessment**

SF22-1215

This memorandum provides a transportation assessment for a proposed hotel located within the Oyster Point Specific Plan area in South San Francisco ("Project"). It includes an analysis of travel demand, site access and circulation, and vehicle miles traveled, as well as a comparison to the analysis provided in the Oyster Point Specific Plan EIR.

Key Findings

- The Project's hotel and restaurant uses are unlikely to materially increase vehicle miles traveled due to the Project's proximity to office/R&D uses and the San Francisco International Airport.
- The Project's size and trip generation is well within the estimated trip generation envelope of the Specific Plan Area and therefore consistent with the transportation analysis in the Specific Plan EIR.
- Access and circulation illustrated in the Project's conceptual site plan is consistent with the Oyster Point Specific Plan and would not create or exacerbate transportation safety impacts.
- Based on the above findings, there are no anticipated new impacts to transportation facilities that were not identified in the Oyster Point Specific Plan EIR.



Project Description

The Project is located on Marina Boulevard near the eastern terminus of Oyster Point Boulevard adjacent to the South San Francisco Ferry Terminal. The Project consists of up to 350 hotel rooms, a restaurant and bar, and meeting rooms covering about 261,000 square feet. A ballroom may be added in a future phase. Approximately 232 parking spaces would be provided (33 of which would be valet) along with a loading dock that accommodates two service trucks. The Project includes three driveways along Marina Boulevard and a public access trail along the eastern edge of the site connecting to the Bay Trail.

Project Setting

Land Use & Transportation Context

The Project is located within the Oyster Point Specific Plan area, an 81 acre redevelopment in South San Francisco approved in 2011. The Specific Plan includes the development of up to 2.3 million square feet of office/R&D space as well as new infrastructure, recreation and open space, and the proposed Project. The Specific Plan's Phase One buildings (660,000 square feet) were completed in early 2022, while remaining phases are underway. The Project is located along Marina Boulevard near the eastern terminus of Oyster Point Boulevard, which connects to US-101 and major arterials within South San Francisco. Gull Drive, Eccles Avenue, and Gateway Boulevard are the nearest north-south streets intersecting with Oyster Point Boulevard.

The South San Francisco Ferry Terminal is located adjacent to the project site, while the South San Francisco Caltrain station and South San Francisco BART Station are accessible via peak period shuttle services provided by the Peninsula Traffic Congestion Relief Alliance (Commute.org). While no SamTrans bus service currently serves the site, an extension of Route 130 along the Oyster Point Boulevard corridor is planned to occur in 2023. New pedestrian and bicycle facilities have been provided along Oyster Point Boulevard and Marina Boulevard adjacent to the Project site, including sidewalks, crosswalks, and Class II bike lanes. The Bay Trail covers the perimeter of the Specific Plan area and has frontage on the southern shoreline of the Project site.

Figure 1 illustrates the Project location in relation to nearby land uses and transportation facilities. Figure 2 illustrates the Oyster Point Specific Plan.



Figure 1: Project Location



Figure 2: Oyster Point Specific Plan





Specific Plan Design Guidelines

The Oyster Point Specific Plan seeks to promote alternative transportation modes to, from and within the site (Design Goal 3). To accomplish this, it includes the following applicable design guidelines related to the Project's site access and circulation:

General Guidelines

- *Provide convenient, efficient, and safe access to Oyster Point.*
- *Maintain and enhance access to adjacent parcels, the waterfront, and the Ferry Terminal.*
- *Encourage alternative transportation by emphasizing pedestrian, bicycle and transit in the roadway network design.*
- *Promote safe pedestrian and vehicular circulation by minimizing conflicts at intersections and changes in road width and direction.*

Service, Delivery and Emergency Access Guidelines

- *Service vehicles should be accommodated by the roadway network, with clearly delineated lane markings, signals, and wayfinding signage.*
- *Service, delivery and emergency vehicles should have access to both primary as well as secondary entrances to buildings and facilities.*
- *These secondary entrances should be limited specifically to service, delivery, and emergency access.*
- *Service vehicle driveways and loading areas should be screened and separated from public pedestrian walkways where possible.*
- *Secondary access for emergency vehicles will be provided when their access is restricted from using primary entrances.*

Parking Access Guidelines

- *Parking access should be clearly delineated by lane markings, signals, and wayfinding signage.*
- *Access to and from the parking garages should be located at intersections or from a dedicated right turn lane.*
- *Adequate queuing space should be provided at parking garage entrances.*

Bicycle Circulation Guidelines

- *Bicycle access and parking should be clearly delineated by lane markings and wayfinding signage.*



Streetscapes and Sidewalks Guidelines

- *Sidewalks should support an interconnected and public development.*
- *Width of sidewalks should be appropriate to*
- *accommodate an active development.*
- *Sidewalks should be inset from roadways with a landscape buffer where possible to promote pedestrian friendly circulation.*

Guidelines to Support the TDM Program

- *The site should include dedicated passenger drop- off and shuttle stop areas.*
- *Pedestrian connections should be provided to connect the buildings and site adjacent sidewalks, Bay Trail and shuttle stops.*
- *Bicycle lanes, routes and/or paths should be provided to allow bicycle accessibility to all buildings at the site.*
- *The parking areas should provide preferred parking for carpool, vanpool, low-emitting and fuel-efficient vehicles, and electric plug-in vehicles.*
- *Parking should be provided for motorcycle and scooters.*
- *Long-term (Class I) and Short-Term (Class II) bicycle parking should be provided at or adjacent to all buildings.*
- *Shower and changing facilities should be provided in or easily accessible from all buildings.*
- *Transportation and Commute Information Kiosks should be provided at all buildings.*
- *In addition to the physical measures described above, the TDM program will include programmatic measures such as informational resources, transit programs, and commuter amenities.*

Project Travel Demand

Project Trip Generation

Vehicle trip estimates for the Project (Table 1) were developed by applying national trip generation rates presented in the Institute of Transportation Engineers (ITE) Trip Generation Manual 11th Edition to the proposed land uses. Due to the continued disruptions in travel behavior associated with the COVID-19 pandemic, ITE rates were used in lieu of conducting new vehicle counts at comparable local sites. ITE Land Use 310 (Hotel) is defined as a place of lodging and supporting facilities such as a full-service restaurant, bar, meeting rooms, ballrooms, and convention facilities, which most closely matches the facilities included in the proposed Project. ITE includes a reasonably large sample size of 28 studies for AM peak hour trip generation data and 31 studies for PM peak hour trip generation data. Daily trip generation data includes a more limited sample size of seven studies and may have a higher margin of error.



ITE rates are typically derived from suburban settings that lack a mix of land uses within walking distance; consequently, Fehr & Peers used the trip generation methodology known as MXD+ to calibrate the trip generation estimates to local conditions and the proximity to adjacent office/research & development (R&D) uses. The MXD+ method is based on a weighted average of the U.S. Environmental Protection Agency's MXD Model and the National Cooperative Highway Research Program's Report 684 methodology. Additional reductions associated with the proposed transportation demand management program were not included due to limited data available for comparable hotel sites

As illustrated in Table 1, the project is projected to generate approximately 2,751 vehicle trips on an average weekday with about 135 occurring in the AM peak hour and about 204 in the PM peak hour. These trip generation estimates do not account for the proposed transportation demand management program, which would further reduce the number of private vehicle trips to the project.

The Project considers adding a ballroom in a future phase. Since ITE rates are based upon hotels that typically include ballrooms, the trip generation estimates in Table 1 include travel demand associated with the future ballroom. Consequently, Table 1 may present an overestimate of travel demand without the ballroom.

Table 1. Oyster Point Hotel Trip Generation

Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Hotel ¹	350 rooms	2,797	90	71	161	106	101	207
Internal Trip Reductions ²	-	(46)	(8)	(2)	(26)	(1)	(2)	(3)
Net New Project trips	-	2,751	82	69	135	105	99	204

Notes:

¹Based on ITE 11th Edition (Land Use #310 – Hotel, average rate)

²Based on MXD+ trip generation methodology which accounts for Internal trip reductions account for trips made between land uses within the Specific Plan area.

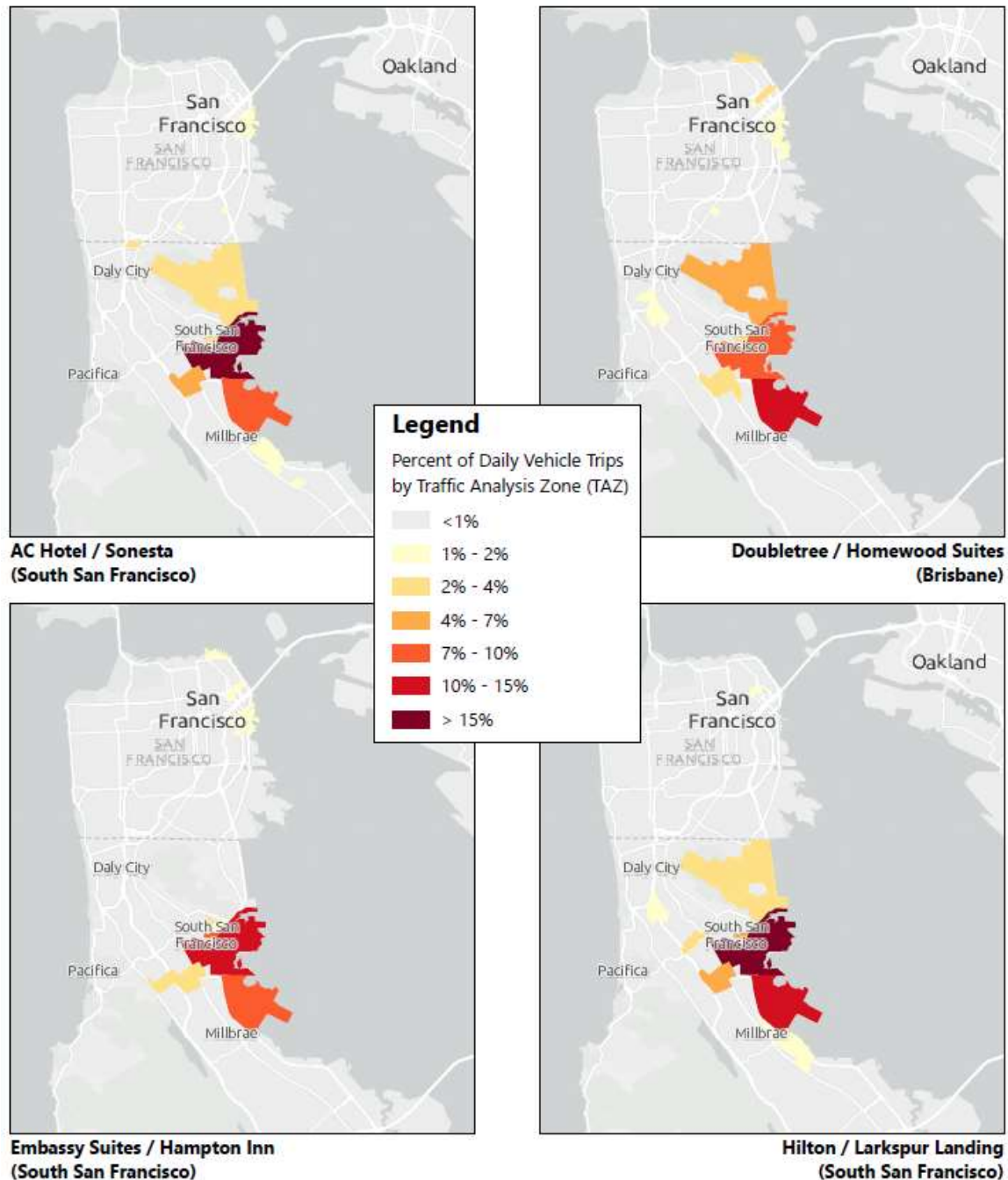
Trip Distribution and Assignment

About half of Project vehicle travel is expected to occur within South San Francisco, Brisbane, San Bruno, and the San Francisco International Airport. Figure 3 illustrates daily vehicle trip distribution between traffic analysis zones (TAZs) for nearby clusters of hotels in South San Francisco and Brisbane based on StreetLight data, which tracks anonymized movement using cell phone location-based services data. Each site shares similar characteristics as business-oriented hotels that illustrates comparable travel behavior, offering some combination of meeting rooms, ballrooms, and restaurant/bar facilities, although most of these sites are generally older and smaller hotels. Based on this analysis, the Project's vehicle trip distribution is expected to be most



heavily concentrated within the East of 101 Area (15 to 20 percent of trips), to/from the San Francisco International Airport (10 to 15 percent), and elsewhere in South San Francisco, Brisbane, or San Bruno (10 to 15 percent). The remaining 50 to 60 percent of trips would mostly be distributed across San Francisco and San Mateo counties.

Figure 3: Vehicle Trip Distribution for Nearby Hotels in South San Francisco and Brisbane





Vehicle trips would be concentrated along Oyster Point Boulevard to access US-101. Upon reaching US-101, about 50 percent of trips are likely to travel to the south, 40 percent to the north, and 10 percent continuing along Sister Cities Boulevard. Trips occurring fully within the East of 101 Area are likely to use Gull Drive, Eccles Avenue, and Gateway Boulevard.

Vehicle Miles Traveled

The Project is a business-oriented hotel primarily serving nearby office/R&D uses and San Francisco International Airport. Unlike nearby office/R&D land uses in the East of 101 Area that typically generate vehicle miles, the Project would exhibit characteristics of a local-serving land use rather than a regional destination. In its *Technical Advisory on Evaluating Transportation Impacts in CEQA*, the State of California's Office of Planning and Research notes that "local-serving retail development tends to shorten trips and reduce VMT."¹ Hotels in the East of 101 Area appear to exhibit similar travel behavior as local-serving retail: as illustrated in Figure 3, vehicle trip lengths for four nearby hotel clusters in South San Francisco and Brisbane tend to be short and focused around nearby office/R&D uses and the San Francisco International Airport. As shown in Table 2, the average vehicle trip length for nearby hotels is about four miles, compared with an average trip length of about 13 miles for other land uses in the East of 101 Area.

Table 2. Trip Length Comparison

East of 101 Area Land Use	Average Trip Length
Hotels	3.6-3.9 Miles
Office/R&D and Other Land Uses	12.9 miles

Source: StreetLight data and C/CAG Model

Hotels in the vicinity primarily serve nearby office/R&D uses and the San Francisco International Airport, as opposed to generating new tourism-oriented or resort-oriented travel. Assuming a similar travel pattern for the proposed Project as those existing in the vicinity, the Project would not materially increase vehicle miles traveled and may help shorten trips for hotel guests that would otherwise stay at hotels farther away. Although the City of South San Francisco does not have a threshold of significance for VMT associated with hotel uses, the Project may be presumed to have a less than significant impact to VMT based on the City's screening criteria for local serving land uses that do not result in a net increase in VMT.

¹ *Technical Advisory on Evaluating Transportation Impacts in CEQA*, State of California Office of Planning & Research, 2018 https://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf



Specific Plan & City Policy Consistency

Trip Generation

The Specific Plan EIR document published in 2011 estimated that the Specific Plan buildout would result in 17,684 daily trips, of which 1,873 would occur during the AM peak hour and 2,127 would occur during the PM peak hour (a net change of about 12,716 daily vehicle trips, 1,402 AM peak hour trips, and 1,621 PM peak hour trips. As shown in Table 3, the Oyster Point Hotel is expected to generate in total about 2,751 daily trips, including about 135 AM peak hour trips and 204 PM peak hour trips. Although the Specific Plan EIR did not break down trip generation by land use, the Oyster Point Hotel size is consistent with the Specific Plan, is therefore expected to generate a comparable number of trips as the hotel identified in the Specific Plan EIR. Moreover, its trip generation is well within the estimated trip generation envelope of the Specific Plan. The Specific Plan and Project trip generation are summarized in Table 3.

Table 3. Trip Generation Comparison

Scenario	Daily	AM Peak Hour	PM Peak Hour
Oyster Point Specific Plan (2011)	17,684	1,873	2,127
Oyster Point Hotel Project	2,751	135	204

Sources: Oyster Point Specific Plan, 2011 and Fehr & Peers, 2022

Figure 4: Annotated Project Site Plan





Access & Circulation

Access and circulation illustrated in the Project's conceptual site plan is consistent with the Oyster Point Specific Plan. The site plan (Figure 4) includes driveways connecting to Marina Boulevard, pedestrian connections to the street's sidewalk, and a Bay Trail connection on its eastern edge as identified in the Specific Plan.

Service, Delivery and Emergency Access

The Project would provide two onsite loading spaces for commercial deliveries and service vehicles. The Project would primarily be served by small- to mid-sized box trucks, laundry trucks, and garbage trucks (all typically 16 to 32 feet). Truck activity is expected to be spread throughout the day depending on particular functions: for example, garbage trucks typically arrive early morning, while laundry trucks typically arrive mid-morning (in coordination with housekeeping services). Service and delivery vehicles would use a screened in loading dock in the middle of the site. Trucks would enter via the easternmost driveway and conduct a three-point turn within the parking lot to back into the loading dock. The site plan remains conceptual at the time of this analysis, but it can be reasonably inferred that the proposed layout can accommodate such trucks provided that truck turning templates are used to inform the design process.

Larger tractor-trailer vehicles are expected for restaurant delivery. These deliveries would primarily occur overnight. Tractor-trailer trucks would back in from Marina Boulevard to access the loading dock. Since the site is located on a relatively low volume street and these deliveries would occur outside of peak hours, large truck deliveries would not pose conflicts with other modes. Truck drivers may benefit from approaching the site from the westbound direction (via looping around the Marina turnaround) to avoid reversing into their blind side when approaching the lot.

The City of South San Francisco requires five loading spaces for a 261,000 square foot commercial land use. Based on the anticipated loading activity and distribution throughout the day, city requirements likely exceed anticipated demand, and comparable hotels in the East of 101 Area typically include one to two loading spaces. The proposed loading supply is expected to be sufficient provided that hotel management staggers loading activities throughout the day.

Emergency vehicles would have access to all building entrances and facilities as well as the Bay Trail connection along the east side of the Project.

The Project is therefore consistent with the Specific Plan's guidelines for efficient service, delivery, and emergency vehicle access.

Parking Access

Access for the proposed 232 parking spaces would be provided via three driveways along Marina Boulevard. Each driveway would serve hotel, restaurant, and meeting room uses, with the



westernmost driveway expected to serve as the primary entrance. Since these driveways are located along the eastern edge of Marina Boulevard, they are likely to account for a majority of vehicle traffic along the street and are unlikely to pose conflicts with the limited through traffic that occurs. An analysis of the project's parking supply is provided in the accompanying Parking Management Plan.

Figure 5: Parking Layout



Bicycle Access

Bicyclists would access the site via the Project's driveways. Bicycle parking would be provided per City code and delineated with signage. The Project would provide 35 bicycle parking spaces, which is consistent with City code. The Project is consistent with the Specific Plan's guidelines to incorporate bicycle travel into projects.

Pedestrian Access

The Project would align with the new sidewalk and trail infrastructure in the Specific Plan Area. Pedestrians would access the Project via a pathway to the lobby. Pedestrians would access the South San Francisco Ferry Terminal, Commute.org shuttles, and planned SamTrans service by crossing Marina Boulevard and walking approximately 300 feet to the east to reach the ferry terminal entrance and bus/shuttle stop. The Project is consistent with the Specific Plan's guidelines to support an interconnected and pedestrian-friendly development.



TDM-Supportive Site Plan Features

The Project would be subject to the City's TDM Ordinance requirements and would incorporate site plan elements consistent with these requirements as described above, including a passenger loading area, direct pedestrian connections to sidewalks and transit facilities, access to bike lanes and trails, and bike parking. The Project is consistent with the Specific Plan's guidelines to encourage alternative forms of transportation. A TDM Checklist is provided as an attachment.

EIR Transportation Impacts

The Oyster Point Specific Plan EIR identifies several significant impacts to transportation facilities, including intersection delay, freeway delay, and offramp queues. Based on the analysis above, the Project's effects would be consistent with this analysis. Since the certification of the EIR, the State of California has adopted new CEQA guidelines that that vehicle level of service (LOS) and similar measures related to auto delay shall not be used as the sole basis for determining the significance of transportation impacts. The Project would contribute toward Transportation Impact Fees to address multimodal transportation needs around the Specific Plan Area.