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MEMORANDUM

DATE: May 5, 2021

To: Marcus Martinez, Associate Planner

FROM: Theresa Wallace, AICP, Principal

Matthew Wiswell, AICP, Planner

Subject: Hayward Retail Center Project Categorical Exemption

This memorandum supports the finding that the proposed Hayward Retail Center Project (proposed project) would be exempt from further review under California Environmental Quality Act (CEQA) Section 15301 (Existing Facilities), 15302 (Replacement or Reconstruction), and 15303 (New Construction or Conversion of Small Structures). One or more of these exemptions apply to one or more of the proposed project components, as further detailed below. The project site is made up of two parcels located at 26231 Mission Boulevard in the City of Hayward, Alameda County.

PROJECT DESCRIPTION

The following describes the proposed project, which includes the development of two new drive through restaurants, and interior and exterior renovations to, as well as partial demolition of a portion of the existing commercial building to demise it into space for nine commercial tenants. This section includes a description of the project location, the existing site conditions, the proposed project, and the anticipated project approvals and permits. The City of Hayward (City) is the CEQA Lead Agency for the proposed project.

Project Location and Existing Conditions

The project site is comprised of two parcels of approximately 10.4 and 0.3 acres in size, for a total of approximately 10.7 acres, located at 26231 Mission Boulevard (Assessor's Parcel Numbers [APN] 452-0020-009-01 and 452-0020-006-10). The larger of the two parcels (Parcel 1), which makes up the majority of the project site, is located in the northern portion of the project site and the smaller (Parcel 2) is located in the southern portion. The project site is developed with an approximately 94,500-square-foot commercial building that is currently vacant. Figure 1 shows the regional location of the project site. Figure 2 is an aerial photograph of the project site and the surrounding land uses.

Access to the project site is provided by a two-way driveway from Harder Road along the northern border, and two-way driveways from Mission Boulevard along the eastern boundary and at the southeast corner. The project site is bound by Harder Road and commercial uses to the north, Mission Boulevard to the east, commercial uses and single-family residential uses to the south, and Bay Area Rapid Transit (BART) tracks to the west. As shown in Figure 2, surrounding land uses within

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the vicinity of the project site generally consists of single- and multi-family residential and commercial uses.

As described above, the project site is currently developed with a 94,500-square-foot commercial building that is currently vacant. The remainder of the project site is developed with a surface parking lot containing approximately 529 parking spaces and ornamental landscaping in planters throughout the site and along the site boundaries containing approximately 111 trees. Both of the parcels on the project site are designated as Sustainable Mixed Use (SMU) in the City's General Plan, which allows for a maximum floor area ratio (FAR) of 2.0.¹ Parcel 1 is zoned South Hayward BART Form Based Code T-4 (S-T4 – Urban General Zone), and Parcel 2 is zoned South Hayward Form Based Code Civic Space (S-CS). The South Hayward BART Form-Based Code was subsequently updated in August 2020; however, the application for the proposed project was submitted prior to adoption of the update.²

Proposed Project

The proposed project would include interior alterations, exterior renovations, and partial demolition of the existing commercial building to demise it into space for up to nine commercial tenants and the construction of two new drive-through restaurants: In-N-Out and Raising Canes. A series of approvals would be required to allow development of the proposed project, including: 1) Site Plan Review; 2) Conditional Use Permits (CUPs); and 3) Warrants and Exceptions from zoning requirements. Additional projects details are provided below. A conceptual site plan is shown in Figure 3, and conceptual building elevations are shown in Figures 4 through 6.

Commercial Building

As shown in Figure 3, the interior of the existing approximately 94,500-square-foot commercial building would be renovated and demised into space for up to nine commercial tenants. In addition, approximately 7,567 square feet of the existing building would be demolished. The interior alterations would allow for three major tenants, with spaces of approximately 32,092, 23,042, and 21,000 square feet, and 6 minor tenants that would occupy a combined total of approximately 11,280 square feet. The three major tenants would include storefronts along the northern boundary of the existing commercial building, while the minor tenants would generally include storefronts along the eastern portion of the existing building with two storefronts at the northeast corner.

5/5/21 (Q:\HAY2001.01 26231 Mission Blvd\PRODUCTS\Hayward Retail Center Final CE_050521.docx)

¹ Hayward, City of. 2013. *Hayward General Plan*. Figure LU-1: Land Use Diagram. September.

Hayward, City of. 2020. Form-Based Code Update. Website: https://www.hayward-ca.gov/content/form-based-code-update (accessed January 2021).



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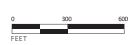


Hayward Retail Center Project

Project Site



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Hayward Retail Center Project
Aerial Photograph of Project Site and Surrounding Land Uses

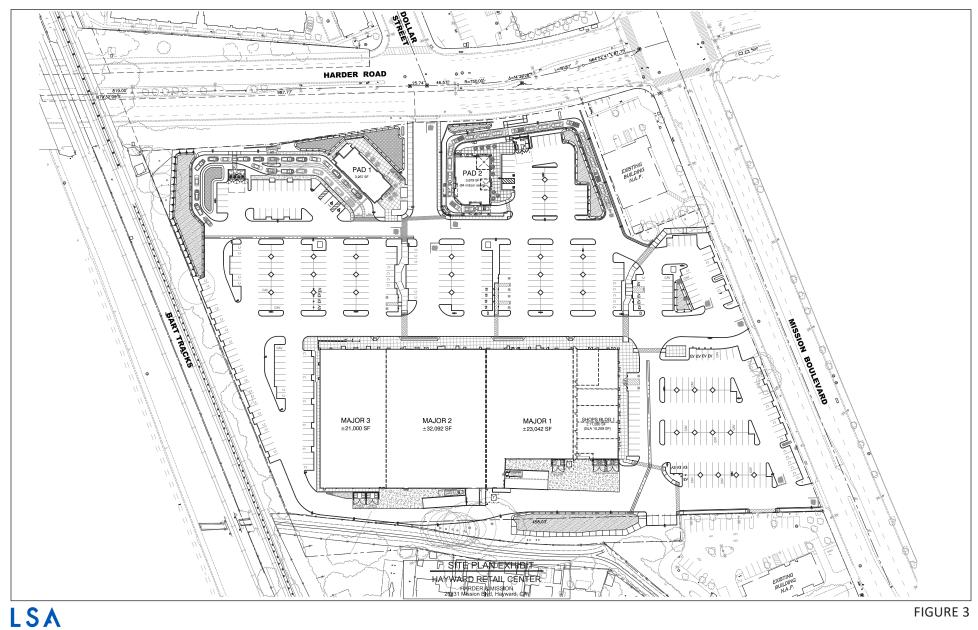
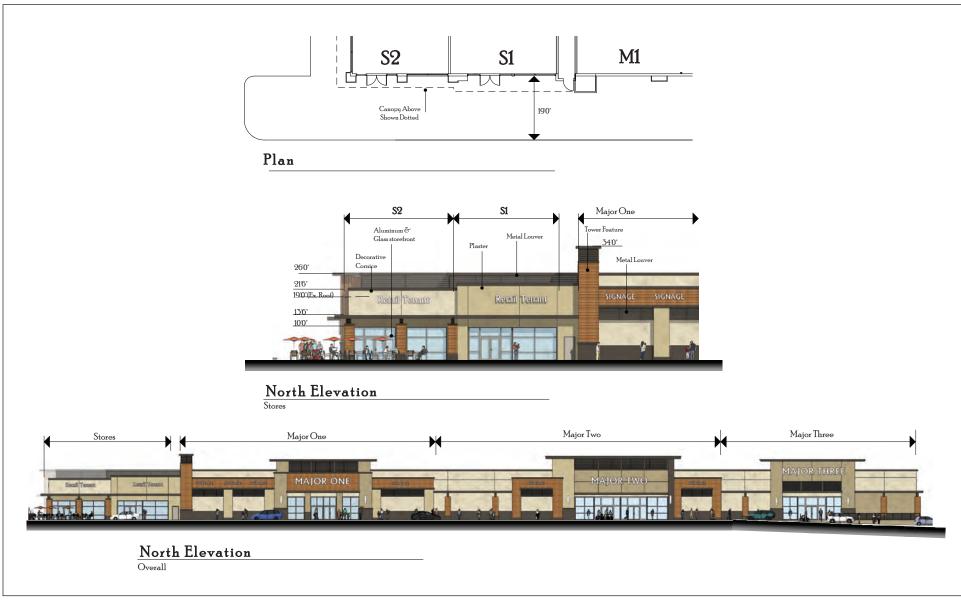


FIGURE 3



Hayward Retail Center Project Conceptual Site Plan



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FIGURE 4



Hayward Retail Center Project
Conceptual North Elevation - Retail Building







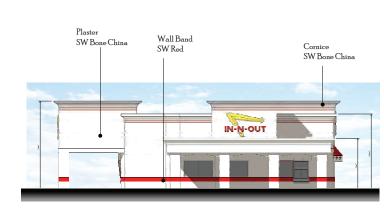


Pad 1

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FIGURE 5

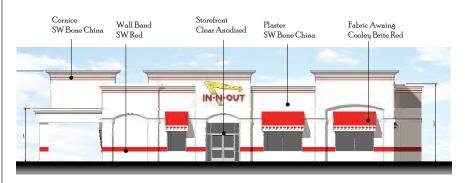
NOT TO SCALE



South Elevation



West Elevation



East Elevation



North Elevation

Pad 2

FIGURE 6

NOT TO SCALE

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Hayward Retail Center Project Conceptual Elevation - In-N-Out

Drive Through Restaurants

The Raising Canes restaurant would be located in the northwest corner of the project site and would be approximately 3,267 square feet in size. As shown in Figure 3, the drive through entrance would be located near the northwest corner of the project site and vehicles would travel along the northern border of the project site until exiting just south of the proposed building. The Raising Canes restaurant would be a maximum of approximately 19 feet, 10 inches in height.

The In-N-Out restaurant would be located near the northeast corner of the project site and would be approximately 3,879 square feet in size. As shown in Figure 3, the drive through entrance would be located along the eastern boundary of the project site and vehicles would travel along the eastern and norther borders of the project site until exiting just south of the proposed building. The In-N-Out restaurant would be a maximum of approximately 23 feet in height.

Site Improvements and Construction

The proposed project would also include modifications to the existing parking lot that would result in a total of 467 parking spaces throughout the project site. Each of the drive through restaurants would include a dedicated parking lot, consisting of 27 parking spaces (2 of which would be handicap accessible) for Raising Canes and 31 parking spaces (2 of which would be handicap accessible) for In-N-Out. Of the 467 parking spaces on the project site, a total of 30 would include infrastructure to provide electric vehicle charging. A total of 22 of these 30 spaces are currently proposed to provide vehicle charging.

The project site is currently served by utilities, including water, wastewater, stormwater, electricity. The proposed project would include connections to these existing utilities, including sanitary sewer lines along Harder Road and water mains along Mission Boulevard. The proposed project would also include bioretention areas throughout the site, including along the driveway from Harder Road, at the northwest corner of the site, and along the southern boundary of the site. A total of 74 trees would be removed from the project site, and 211 new trees would be planted.

To prepare the project site for construction and renovation activities the project site would be graded and trenched for utility installation. Approximately 12,000 net cubic yards of soil would be hauled to/exported from the project site to provide for new parking lot grades and paving sections. Pads 1 and 2 would be net fills for grading of bioretention areas. Excavation would occur at a maximum depth of approximately one to two feet on average for parking lot areas, and from two to eight feet for utility trenching. Construction of the proposed project is anticipated to begin six months after entitlements are approved, with completion expected within 10 months of the start of construction.

Required Project Approvals

The proposed project would require the following approvals from the City of Hayward:

- Site Plan Review;
- CUP to allow drive-through restaurant uses;

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Various Warrants and Exceptions from certain zoning requirements.

CATEGORICAL EXEMPTIONS

Section 21084 of the Public Resources Code requires the CEQA Guidelines to include a list of classes of projects which have been determined not to have a significant effect on the environment and which shall, therefore, be exempt from environmental review pursuant to CEQA. In response to that mandate, the Secretary for Natural Resources identified various classes of projects in the CEQA Guidelines that do not have a significant effect on the environment to be categorically exempt. The Categorical Exemptions that would be applicable to the proposed project are described below.

Class 1: Existing Facilities

Given LSA's understanding of the proposed project, the commercial building portion of the proposed project would qualify for a Class 1 exemption, described in Section 15301 of the CEQA Guidelines, as provided below. The drive through restaurant portion of the project does not qualify for this exemption given that this component of the project would consist of new construction.

15301. Existing Facilities. Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. The types of "existing facilities" itemized below are not intended to be all-inclusive of the types of projects which might fall within Class 1. The key consideration is whether the project involves negligible or no expansion of use.

As described above, the commercial building portion of the proposed project would consist of interior alterations, exterior renovations, and partial demolition of an existing building to demise it into nine separate spaces. The proposed project would continue to include commercial uses, but would not include an expansion of the commercial use as the total size of the building would remain the same. Therefore, the commercial building portion of the proposed project would comply with the requirements of the Class 1 exemption.

Class 2: Replacement or Reconstruction

Given LSA's understanding of the proposed project, the commercial building portion of the proposed project would also qualify for a Class 2 exemption, described in Section 15302 of the CEQA Guidelines, as provided below. The drive through restaurant portion of the project does not qualify for this exemption given that this component of the project would consist of new construction.

15302. Replacement or Reconstruction. Class 2 consists of replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced, including but not limited to:

a. Replacement or reconstruction of existing schools and hospitals to provide earthquake resistant structures which do not increase capacity more than 50 percent.

- b. Replacement of a commercial structure with a new structure of substantially the same size, purpose, and capacity.
- c. Replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity.
- d. Conversion of overhead electric utility distribution system facilities to underground including connection to existing overhead electric utility distribution lines where the surface is restored to the condition existing prior to the undergrounding.

As described above, the commercial building portion of the proposed project would consist of interior alterations, exterior renovations, and partial demolition of an existing building to demise it into nine separate spaces. The proposed project would not include an expansion of the existing commercial building footprint or increase in overall square footage, and the building would continue to include commercial uses. Therefore, the proposed commercial building would be substantially the same size, purpose, and capacity as the existing building, and the commercial building portion of the proposed project would comply with the requirements of subsection B of the Class 2 exemption.

Class 3: New Construction or Conversion of Small Structures

Given LSA's understanding of the proposed project, the drive through restaurant portion of the proposed project would qualify for a Class 3 exemption, described in Section 15303 of the CEQA Guidelines, as provided below. This exemption is not applicable to the commercial building component of the project, as further described below.

15303. New Construction or Conversion of Small Structures. Class 3 consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. The numbers of structures described in this section are the maximum allowable on any legal parcel. Examples of this exemption include, but are not limited to:

- a. One single-family residence, or a second dwelling unit in a residential zone. In urbanized areas, up to three single-family residences may be constructed or converted under this exemption.
- b. A duplex or similar multi-family residential structure, totaling no more than four dwelling units. In urbanized areas, this exemption applies to apartments, duplexes and similar structures designed for not more than six dwelling units.
- c. A store, motel, office, restaurant or similar structure not involving the use of significant amounts of hazardous substances, and not exceeding 2,500 square feet in floor area. In urbanized areas, the exemption also applies to up to four such commercial buildings not exceeding 10,000 square feet in floor area on sites zoned for such use if not involving the use of significant amounts of hazardous substances where all necessary public

services and facilities are available and the surrounding area is not environmentally sensitive.

- d. Water main, sewage, electrical, gas, and other utility extensions, including street improvements, of reasonable length to serve such construction.
- e. Accessory (appurtenant) structures including garages, carports, patios, swimming pools, and fences.
- f. An accessory steam sterilization unit for the treatment of medical waste at a facility occupied by a medical waste generator, provided that the unit is installed and operated in accordance with the Medical Waste Management Act (Section 117600, et seq., of the Health and Safety Code) and accepts no offsite waste.

The proposed project consists of interior and exterior alterations, and partial demolition of an existing commercial building and construction of two new restaurant buildings. Therefore, the requirements of subsection C apply for this exemption. However, the proposed improvements to the existing commercial building would not change the general use of or increase the size of the building; therefore, this component of the project is not subject to the specific requirements outlined in subsection C as no material conversion of this structure would occur.

As described above, the drive through restaurant portion of the proposed project would consist of the construction of two new restaurants that would total approximately 7,146 square feet in size, which meets the criteria of a new restaurant use of less than four buildings and less than 10,000 square feet in size. The project site is located in an urbanized area of the City of Hayward and is currently served by all necessary public services, including police and fire protection, as well as public facilities and utilities. There are no environmentally sensitive areas located within the area surrounding the project site, which is made up of single- and multi-family residential uses, commercial uses, and BART tracks. The drive through restaurants are allowed with a CUP within the S-T4 and S-T5 zoning districts and would not require the use of any hazardous materials outside of those required for routine cleaning and maintenance. Therefore, the proposed project would comply with the requirements of subsection C of the Class 3 exemption.

EXCEPTIONS

Section 15300.2 of the CEQA Guidelines identifies potential exceptions to a lead agency's use of a Categorical Exemption. These exceptions are listed below in italics, with a discussion after each exception explaining how it does not apply to the proposed project.

a. Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located – a project is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply in all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.



As previously described, the project site is currently developed and not located within any mapped areas of hazardous or critical concern.³ Therefore, this exception would not apply to the proposed project.

b. Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

As previously described, the proposed project would include renovations to an existing commercial building and two new drive through restaurants. Both of these uses are consistent with the General Plan land use designation and zoning districts for the project site. The proposed project is located within an urbanized area and would occur within a project site that is currently developed and has been previously disturbed. There are no foreseeable successive projects of the same type in the vicinity of the proposed project that would cause significant unavoidable impacts on the environment.

c. Significant Effect. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

As described previously, the proposed project would include interior and exterior renovations to an existing commercial building and two new drive through restaurants. The project site currently developed and located within an urbanized area.

The introduction of two new drive through restaurants on the project site could increase vehicle miles traveled (VMT), the metric used to evaluate potential impacts related to transportation. The City's threshold of significance for retail projects is a net increase in total regional VMT. A VMT analysis was prepared for the proposed project, which is included as an attachment.⁴

As described in the VMT analysis, the City has developed screening criteria which can be used to identify when a project should be expected to cause a less-than-significant impact related to VMT. Local-serving retail projects that are 50,000 square feet total or less may be screened out of a detailed VMT study. Retail use that exceeds the local retail size criteria is reviewed by City staff on a base-by-case basis using local knowledge to determine if the retail is local-serving.

The existing commercial building is larger than 50,000 square feet, but would not include any expansion of uses or building size. Although the prospective tenants have not yet been identified, they would include smaller tenant spaces that range from approximately 1,800 square feet to 32,000 square feet in size. The site was recently occupied by Kmart and is already incorporated as retail in the City's most recent General Plan and associated model for both existing and cumulative planning years. The General Plan complies with State greenhouse gas reduction goals. Furthermore, given the above, the commercial use consists of a locally-serving retail use that would be replaced with a similar use and is not anticipated to increase regional VMT; therefore, per guidance from the

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Hayward, City of. 2014. Hayward General Plan. Hazards Element. July.

⁴ Kittelson & Associates. 2021.CEQA Transportation Analysis, Hayward Retail Center. March.

State of California Office of Planning and Research (OPR), transportation impacts can be presumed to be less than significant.⁵ As such, a more detailed analysis was not conducted, and the existing commercial part of the project is presumed to have a less-than-significant impact with the repurposing of the interior building space.

While the new drive through restaurants, individually and cumulatively, would be less than 50,000 square feet, it was determined that each are unique and may not represent typical local-serving retail. In-N-Out is well known for its loyal customer base, and the Raising Canes location would be the San Francisco Bay Area's first of an established chain with name recognition in California, Arizona, and Nevada. Thus, these tenants may have a broader trip attraction.

To assess the potential for increase in regional VMT related to the project, VMT under an existing conditions scenario (without the proposed project) and a plus-project scenario (existing conditions with the addition of the proposed project) was estimated using the City's General Plan model. The study area for model results includes the complete cities of Hayward and Union City to include a reasonable travel shed for expected travel to the sites. The model results include trips that start and end within the analysis region and trips that end within the analysis region but started outside of it. The model results are presented in Table 1.

Table 1: Total Daily VMT Results

Analysis Scenario	Total Daily VMT	Net Difference in Total Daily VMT
Existing Conditions	13,434,154	
Plus-Project	13,433,780	-374 (<1 percent)

Source: Kittelson & Associates. 2020.

As shown in Table 1, total daily VMT for the region would decrease by approximately 374, or less than 1 percent. While this represents a negligible change, it does indicate these land uses are likely shortening trips for many residents and customers compared to existing no-project conditions. The OPR technical advisory documents this effect by explaining that, "By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT." Therefore, the drive through restaurants would not be expected to increase regional VMT.

As with any construction project, the City would require the implementation of specific construction operation measures, which include, but are not limited to, adherence to construction hours, stormwater protection, and dust suppression. These specific measures, which apply to all construction projects throughout the City, would ensure that construction activities would not result in a significant effect on the environment due to unusual circumstances.

d. Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock

⁵ California, State of, Office of Planning and Research. 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*, pp. 16-17. December.



outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigated by an adopted negative declaration or certified EIR.

The closest State scenic highway is Interstate 580 (I-580) beginning at the San Leandro city limits, located approximately 5 miles north of the project site. Due to the distance, the project site would not be visible from I-580, and therefore would not significant damage a scenic resource within a State scenic highway.

e. Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

Government Code Section 65962.5 states that the California Department of Toxic Substances Control (DTSC) shall compile and maintain annually a list of hazardous waste facilities subject to corrective action as part of the Health and Safety Code; this list is commonly referred to as the Cortese List.

The project site is not listed as a cleanup site on the Regional Water Quality Control Board's GeoTracker database⁷ or the DTSC's Envirostor database.⁸

f. Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

CEQA defines a "historical resource" as a resource which meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register of Historical Resources (CRHR);
- Listed in a local register of historical resources;
- Identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code; or
- Determined to be a historical resource by a project's lead agency.

For a cultural resource to qualify for listing in the CRHR it must be significant under one or more of the following criteria:

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California Department of Transportation. 2021. Scenic Highways. Website: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (accessed January 2021).

California State Water Resources Control Board. 2021. GeoTracker. Website: https://geotracker.waterboards.ca.gov/ (accessed January 2021).

California Department of Toxic Substances Control. 2021. EnviroStor. Website: https://www.envirostor.dtsc.ca.gov/public/ (accessed January 2021).

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- Criterion 1: Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Criterion 2: Associated with the lives of persons important in our past;
- Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of
 construction, or represents the work of an important creative individual, or possesses high
 artistic values; or
- Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.

In addition to being significant under one or more of these criteria, a resource must retain enough of its historic character and appearance to be recognizable as an historical resource and be able to convey the reasons for its significance (CCR Title 14 Section 4852(c)). Generally, a cultural resources must be 50 years or older.

The proposed project would not include the removal of any buildings. The existing commercial building would be renovated, which would include alterations to the exterior façade. In addition, approximately 7,567 square feet of the exterior would be demolished. However, the existing commercial building does not meet any of the criteria listed above, as it was constructed in 1973 and has generally been occupied by large chain retailers since that time. Minor excavation for building footings and trenching for utilities would be undertaken as part of the proposed project, but these activities are not likely to affect buried cultural resources due to the previously disturbed nature of the project site.

CONCLUSION

As described above, the proposed project is eligible for a Class 1, 2, and 3 Categorical Exemption. Additionally, the exceptions to the use of Categorical Exemptions described in Section 15300.2 of the CEQA Guidelines are not applicable to the proposed project. Therefore, a Categorical Exemption is the appropriate terminal CEQA document for the proposed project.

Attachment: CEQA Transportation Analysis, Hayward Retail Center

ATTACHMENT CEQA TRANSPORTATION ANALYSIS

CEQA Transportation Analysis - Draft Final Report

Hayward Retail Center

Hayward, California

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Project No. 25541, City of Hayward Planning Application #202002474

March 2021



Kittelson & Associates, Inc. Oakland, California

EXECUTIVE SUMMARY

This report presents the findings, conclusions and CEQA transportation analysis conducted by Kittelson & Associates, Inc. (Kittelson) for the proposed Hayward Retail Center project (project) located in Hayward, California. The project is located at the former Kmart site at 26231 Mission Boulevard at the southwest corner of Mission Boulevard / Harder Road (assessor's parcel number 452-0020-009-01). The project would consist of:

- An approximately 3,267 square-foot drive-through restaurant
- An approximately 3,879 square-foot drive-through restaurant
- An approximately 88,000 square-foot commercial building, subdivided into nine tenants ranging from approximately 1,800 square feet to approximately 32,000 square feet

Vehicular access to the site would be provided by three existing driveways: two on Mission Boulevard and one on Harder Road at Dollar Street.

SUMMARY OF FINDINGS

The project components would not be expected to contribute additional VMT and would result in a **less-than-significant** impact under CEQA. No mitigation measures have been identified.



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Appendix 1: Traffic Counts

Appendix 2: Alameda CTC Development Review Complete Streets Checklist



1 METHODOLOGIES AND EXISTING CONDITIONS

The project is located at the former Kmart site at 26231 Mission Boulevard at the southwest corner of Mission Boulevard / Harder Road (assessor's parcel number 452-0020-009-01). The project would entail the development of two new drive-through restaurants and a remodel of an existing 94,500 square-foot commercial building (to be demised into nine commercial tenants).

The site is approximately 10.5 acres in size. Although the project site is currently zoned as MB-CC (Mission Boulevard – Corridor Center), the project application was submitted and deemed complete before the July 2020 adoption of the MB-CC zoning and is subject to the former South Hayward BART Form-Based Code Urban General (S-T4) and Urban Center (S-T5) zones. The project site and study area are illustrated in Figure 1.

This CEQA transportation impact analysis is subject to the regulations and standards currently in place (or in place when the project's Planning Application was deemed complete) in the City of Hayward. These standards are outlined in the *Hayward 2040 General Plan – Mobility Element* (2014) and the City's recently adopted VMT criteria, as summarized below.

The analysis methodology used in this report was submitted in a scoping memo and approved by City Transportation Staff prior to commencement of the study.

1.1 IMPACT CRITERIA AND ANALYSIS STANDARDS

Under Senate Bill (SB) 743, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, level of service (LOS) and other similar vehicle delay or capacity metrics may no longer serve as transportation impact metrics for California Environmental Quality Act (CEQA) impact analyses. The Governor's Office of Planning and Research (OPR) has updated the CEQA Guidelines and provided a final technical advisory in December 2018 which recommends vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts under CEQA. For land use and transportation projects, SB 743-compliant CEQA analysis became mandatory on July 1, 2020.

The City of Hayward has adopted VMT thresholds of significance and screening criteria, which are used in this study for impact analysis purposes.

https://opr.ca.gov/docs/20190122-743 Technical Advisory.pdf.



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¹ The Technical Advisory document is available online at



H.\25\25641 - Hayward Kmart Site Development EIR\gis\Figure 01 Study Area and Project Site_25541_v3.mxd - gcarsky - 6:06 PM 1/22/2021

1.1.1 VMT Impact Significance Criteria

The City's thresholds of significance by land use are shown in Table 1. The City has also adopted screening criteria, which can be used to quickly identify when a project should be expected to cause a less-than-significant impact related to VMT and would not require a detailed VMT analysis. These screening criteria are shown in Table 2.

Table 1: Thresholds of Significance for Residential and Employment Projects

Land Use	Threshold of Significance
Residential	15% below existing average VMT per capita for the City of Hayward
Employment - Office	15% below existing regional average VMT per employee
Employment - Industrial	Below existing regional average VMT per employee
Retail	Net increase in total regional VMT

Source: City of Hayward, 2020.

Table 2: Screening Criteria for CEQA Transportation Analysis for Development Projects

Screen Type	Screening Criteria
Small Infill Projects	 Single-family detached housing of 15 units or less Single-family attached or multi-family housing of 25 units or less Office of 10,000 square feet of gross floor area (GFA) or less
Local Serving Retail	50,000 square feet of total gross floor area or less
Local Serving Public Facilities	Local serving public facility (determined with staff input, depending on the land use)
Residential and Employment-Office Land Use Projects or Components	 Location: within a half mile of a major transit stop1 or in an area with low (below the threshold) VMT per capita/employee and in an area with planned growth. Density/FAR: Minimum gross floor area ratio (FAR) of 0.75 as applicable for employment projects Minimum of 35 units per acre as applicable for residential projects If located in an area where zoning calls for lower than 0.75 FAR or fewer than 35 units per acre, the maximum FAR or units per acre density allowed must be used Parking: No more than the minimum number of parking spaces required; in cases where no minimum is required and a maximum is identified, no more than the maximum number of parking spaces Does not replace affordable residential units (including naturally occurring affordable residential units) with a smaller number of moderate- or high-income residential units Consistent with local plans for development priorities
Restricted Affordable Residential Projects or Components	 Affordability: 100% deed-restricted affordable housing (exception for the manager's unit(s)); affordability must extend for a minimum of 55 years for rental homes or 45 years for for-sale homes. Affordability for this purpose is restricted to households making 80% or less of the area's median income. Location: within an area with below average VMT per capita Parking: no more than the minimum number of parking spaces required; in cases where no minimum is required and a maximum is identified, no more than the maximum number of parking spaces

Source: City of Hayward, 2020.



1.2 METHODOLOGIES AND EXISTING TRAFFIC VOLUMES

1.2.1 Automobile Traffic Volumes

Because of the timing of this project and this analysis, any observed traffic volumes would be severely affected by the COVID-19 pandemic, which has influenced traffic volumes and resulted in lower than typical conditions as experienced before the pandemic or would be expected after the pandemic. One approach to arrive at representative traffic volumes would be to obtain counts at some locations in present conditions and compare to common study locations available in previous counts as shown in Table 3. The comparison could establish a percentage basis to adjust observed volumes to pre/post-pandemic levels.

However, the former Kmart on the project site closed in early 2020, making such an adjustment imprecise because all counts prior to 2020 would reflect a baseline condition with the Kmart operational. An adjustment would therefore account for both pandemic changes and the Kmart closure. Any 2020 counts that include the project's access points currently would show negligible or no site activity and could not be properly adjusted on a percentage basis. The result would be adjusted volumes in aggregate but with misleading adjustments related to site access. Therefore, traffic volumes available from previous counts were identified and used for the analysis. Table 3 identifies multimodal traffic counts available that were conducted as part of previous studies:

- Harder Elementary School Expansion (2016), located at 495 Wyeth Road,
- Hayward Mission Crossings (2017), located at 25501 Mission Boulevard, on the northwest corner of Mission Boulevard and Torrano Avenue,
- One Subaru (2019), located at 25000 Mission Boulevard, on the southeast corner of Mission Boulevard and Carlos Bee Boulevard, and,
- Meta Housing (2019), located at 29497-29553 Mission Boulevard, on the west side of Mission Boulevard north of Industrial Parkway.



Table 3: Study Intersections

		Traffic	Counts Available by Date							
#	Intersection	Control	June 2, 2016	September 8, 2016	April 10, 2019					
1	Mission Boulevard & Carlos Bee Boulevard / Orchard Avenue	Signal		Х	х					
2	Mission Boulevard & Berry Avenue	TWSC		Х	Х					
3	Mission Boulevard & Torrano Avenue (North)	TWSC		Х	х					
4	Mission Boulevard & Torrano Avenue (South)	TWSC		Х	Х					
5	Mission Boulevard & Tennyson Road	Signal		Х	Х					
6	Mission Boulevard & Harder Road	Signal	Х	Х	х					
7	Harder Road & Dollar Street	TWSC		Х						
8	Harder Road & Jane Avenue	Signal	Х							
9	Harder Road & Soto Road	Signal	Х							

Note: TWSC signifies a two-way stop-controlled intersection.

Source: June 2, 2016 counts Harder Elementary School Expansion Study; September 8, 2016 counts Hayward Mission Crossings study; April 10, 2019 counts, One Subaru study (Mission Boulevard / Harder Road) and Meta Housing Study (Mission Boulevard / Tennyson Road)

Therefore, Kittelson compiled historical traffic counts from recent studies for a number of years and arrived at analysis volumes using the following methodology:

- Compare total entering vehicles at the Mission/Harder intersection across all three count dates
 presented in Table 3. The level of growth reflected between the average of the 2016 counts
 and the 2019 counts can be applied to the 2016 counts at intersections #7 and #8 to "bring
 them forward" to 2019 conditions by adjusting them to reflect traffic growth over the three
 years.
- 2. Use the most recently available counts for each intersection, with adjustments from Step 1 to bring them forward to 2020 levels.
- 3. Apply a 1 percent growth factor to all volumes to adjust them to a 2020 analysis year.

The adjusted volumes could then be used in relation to project trip generation. The intent is to develop consistent volumes that are not affected by COVID-19 and to avoid double-counting of project trips when conducting project analysis.

- 4. Estimate the traffic volumes related to the former Kmart site based on the Institute of Transportation Engineers (ITE) Trip Generation Manual.
- 5. Use the estimated former Kmart volumes to apply a credit against trip generation (discussed in next section).

Step 1: Determine Growth Factor between 2016 and 2019

The results of the comparison among Mission Boulevard / Harder Road counts are provided in Table 4. The 2019 counts were 5.6 percent higher in the a.m. peak hour compared to the average of 2016 counts and 15.2 percent higher in the p.m. peak hour. These percentages were applied to grow the volumes at intersections #6, #7, and #8.

Table 4: Mission Boulevard / Harder Road Intersection Volumes

Count		NB			SB			EB			WB		Total Eutovina	PCT Difference (2019 compared to 2016		
Date	L	T	R	٦	Т	R	L	Т	R	L	Т	R	Total Entering	Average)		
Weekday AM Peak Hour																
6/2/2016	226	885	141	41	1,521	141	231	282	307	100	98	35	4,008	-		
9/8/2016	261	1,160	73	15	1,740	141	269	102	362	162	101	17	4,403	-		
4/10/2019	231	1,003	168	46	1,552	153	276	346	352	172	110	33	4,442	237 (5.6%)		
							Weel	kday PN	/I Peak	Hour						
6/2/2016	279	1,144	106	49	1,068	190	246	187	290	221	254	66	4,100	-		
9/8/2016	263	1,504	137	52	1,167	198	324	140	343	107	119	32	4,386	-		
4/10/2019	325	1,600	226	53	1,115	205	275	183	320	223	287	76	4,888	645 (15.2%)		

Source: June 2, 2016 counts Harder Elementary School Expansion Study; September 8, 2016 counts Hayward Mission Crossings study; April 10, 2019 counts, One Subaru study (Mission Boulevard / Harder Road) and Meta Housing Study (Mission Boulevard / Tennyson Road)

Step 2 and 3: Adjust Volumes to 2020 Analysis Volumes

The most recent counts were all adjusted to analysis year 2020 levels to account for background growth from 2016 and from 2019. The final analysis volumes are presented for each peak hour in Table 5 and Table 6.

Table 5: Adjusted Existing 2020 Weekday AM Peak Hour Counts

		Count		NB			SB			ЕВ			WB		Total
	Intersection	Date	L	Т	R	L	Т	R	L	Т	R	L	T	R	Entering
1	Mission Blvd &	4/10/2019	57	1,166	179	417	1,503	158	193	267	68	357	434	273	5,072
1	Carlos Bee Blvd	Final	58	1,178	181	422	1,519	160	195	270	69	361	439	276	5,128
2	Mission Blvd &	4/10/2019	32	1,289	3	38	1,836	52	52	3	34	21	1	5	3,366
2	Berry Ave	Final	33	1,302	4	39	1,855	53	53	4	35	22	2	6	3,408
	Mission Blvd &	4/10/2019	0	1,343	0	0	1,753	120	0	0	21	0	0	0	3,237
3	Torrano Ave: North Leg	Final	0	1,357	0	0	1,771	122	0	0	22	0	0	0	3,272
	Mission Blvd &	4/10/2019	10	1,296	15	36	1,737	1	0	0	0	8	0	29	3,132
4	Torrano Ave: South Leg	Final	11	1,309	16	37	1,755	2	0	0	0	9	0	30	3,169
5	Mission Blvd &	4/10/2019	196	1,287	0	8	1,657	239	329	3	248	7	5	1	3,980
5	Tennyson Rd	Final	198	1,300	0	9	1,674	242	333	4	251	8	6	2	4,027
6	Mission Blvd &	4/10/2019	231	1,003	168	46	1,552	153	276	346	352	172	110	33	4,442
ь	Harder Rd	Final	234	1,014	170	47	1,568	155	279	350	356	174	112	34	4,493
7	Harder Rd &	9/8/2016	37	5	14	22	10	169	55	760	65	14	513	12	1,676
/	Dollar St	Final	40	6	15	24	11	181	59	811	70	15	548	13	1,793
8	Harder Rd &	6/2/2016	25	46	48	164	18	317	197	712	4	18	357	137	2,043
٥	Jane Ave	Final	27	49	51	175	19	338	210	760	4	19	623 ¹	146	2,179
9	Harder Rd &	6/2/2016	109	36	23	127	28	556	243	841	67	13	707	86	2,836
9	Soto Rd	Final	116	38	25	135	30	593	259	897	71	14	754	92	3,025

¹Note: The resulting low volume of through movements from the COVID adjustments was further adjusted to rebalance counts at adjacent intersections.

Source: June 2, 2016 counts Harder Elementary School Expansion Study; September 8, 2016 counts Hayward Mission Crossings study; April 10, 2019 counts, One Subaru study (Mission Boulevard / Harder Road) and Meta Housing Study (Mission Boulevard / Tennyson Road)

Table 6: Adjusted Existing 2020 Weekday PM Peak Hour Counts

	lutava atiava	Count		NB			SB			ЕВ			WB		Total
	Intersection	Date	L	Т	R	٦	Т	R	L	Т	R	L	Т	R	Entering
4	Mission Blvd &	4/10/2019	77	1,617	328	358	1,272	161	111	303	44	172	258	327	5,028
1	Carlos Bee Blvd	Final	78	1,634	332	362	1,285	163	113	307	45	174	261	331	5,085
2	Mission Blvd &	4/10/2019	49	1,944	5	60	1,404	39	30	2	20	15	1	6	3,575
2	Berry Ave	Final	50	1,964	6	61	1,419	40	31	3	21	16	2	7	3,620
2	Mission Blvd &	4/10/2019	0	1,972	0	0	1,403	52	0	0	36	0	0	0	3,463
3	Torrano Ave: North Leg	Final	0	1,992	0	0	1,418	53	0	0	37	0	0	0	3,500
	Mission Blvd &	4/10/2019	18	1,912	36	75	1,361	3	1	0	8	6	0	20	3,440
4	Torrano Ave: South Leg	Final	19	1,932	37	76	1,375	4	2	0	9	7	0	21	3,482
5	Mission Blvd &	4/10/2019	380	1,695	1	32	1,198	328	352	4	248	9	17	2	4,272
J	Tennyson Rd	Final	384	1,712	2	33	1,210	332	356	5	251	10	18	3	4,322
6	Mission Blvd &	4/10/2019	325	1,600	226	53	1,115	205	275	183	320	223	287	76	4,888
0	Harder Rd	Final	329	1,616	229	54	1,127	208	278	185	324	226	290	77	4,943
7	Harder Rd &	9/8/2016	64	9	24	30	2	112	66	745	51	23	540	17	1,683
,	Dollar St	Final	75	11	28	35	3	131	77	867	60	27	629	20	1,963
8	Harder Rd &	6/2/2016	18	16	25	97	31	204	299	603	21	53	665	183	2,215
0	Jane Ave	Final	21	19	29	113	36	237	348	702	24	62	774	213	2,577
9	Harder Rd &	6/2/2016	110	64	14	89	52	295	376	995	129	22	678	151	3,205
9	Soto Rd	Final	128	74	16	104	61	343	437	1,158	150	26	789	176	3,729

Source: June 2, 2016 counts Harder Elementary School Expansion Study; September 8, 2016 counts Hayward Mission Crossings study; April 10, 2019 counts, One Subaru study (Mission Boulevard / Harder Road) and Meta Housing Study (Mission Boulevard / Tennyson Road)

Step 4: Estimate Traffic Volumes Associated with Former Kmart

The former Kmart trips were estimated using data provided by ITE land use code 815 (free-standing discount store), as shown in Table 7. The project was estimated to generate 5,020 weekday daily vehicle trips.

Table 7: Former Kmart Trip Generation Estimate

Table 7: Former Kmart Trip Generation Estimate												
		Trip	Generation Rat	es								
Land Use	ITE	Rate	Weekday Daily	Wee	kday AM Hour	Peak	Weekday PM Peak Hour					
	Code		Daily	In	Out	Total	In	Out	Total			
Free-Standing Discount Store	815	per KSF	53.12	69%	31%	1.17	50%	50%	4.83			
Trip Generation Estimates												
Land Use	ITE	Size (KSF)	Weekday Daily	Wee	kday AM Hour	Peak	Weekday PM Peak Hour					
	Code			In	Out	Total	In	Out	Total			
Free-Standing Discount Store			5,020	77	34	111	228	228	456			
50% reduction in Existing Use Trip Estimate	815	94.5	2,510	-38	-17	-55	-114	-114	-228			
Pass-by Reduction (17% in PM) – Applied to 50% Trip Estimate		54.5	-	n/a	n/a	n/a	-19	-20	-39			
NET PROJECT	TRIPS TO B	E APPLIED	2,510	39	17	56	95	94	189			

Note: KSF = thousand square feet.

Source: Kittelson & Associates, Inc., 2021; ITE Trip Generation Handbook, 10th Ed.

A comparison of the estimated former Kmart trip numbers to the adjusted 2016 traffic counts at the Harder Road / Dollar Street intersection provides a reasonableness check for both estimates. (The south leg of the Harder Road / Dollar Street intersection is one of three driveways for the project and former Kmart site—the other two are along Mission Boulevard—and would be expected to account for a majority of the site's in and out traffic.) The adjusted 2020 volumes at the intersection (as presented in Table 5 and Table 6) show 157 in the AM peak hour (96 in, 61 out) and 204 trips in the PM peak hour (90 in, 114 out). In the PM peak hour, these numbers are within reason for what the ITE estimates provide, given that they account for a portion of project traffic. Given the Kmart site would have been more active during the PM peak hour, the AM peak hour trip patterns seem relatively high compared to ITE estimates; it is assumed that some drivers may have been using the site as a cut-through for eastbound right turn movements.

To avoid overstating the level of travel activity at the former Kmart in the adjusted 2016 and 2019 counts, it was determined that a 50 percent trip credit would be applied to project trip generation for analysis.

In addition, a pass-by reduction was applied to the 50 percent reduction to capture visitors that would normally be passing by the site on an adjacent roadway and would instead make an intermediate stop at the project site. Based on data available in the ITE Trip Generation Handbook, a 17 percent pass-by reduction was applied in the PM peak hour. Due to relatively low AM retail activity, pass-by data are not available for the relevant land use code for the AM peak hour, and no reduction was applied. The total credit associated with the former Kmart site is shown in the last row of Table 7: 2,510 daily trips



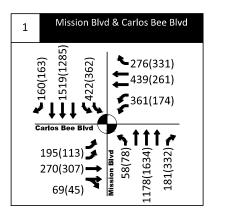
credited, 56 a.m. peak hour trips credited (39 in, 17 out), and 189 p.m. peak hour trips credited (95 in, 94 out).

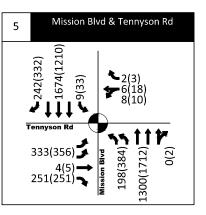
Step 5: Use the estimated former Kmart volumes to apply a credit against trip generation

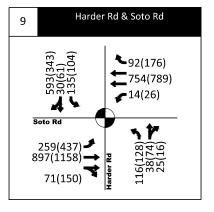
This step is presented and discussed in Section 3.1.

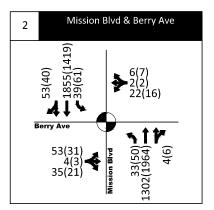


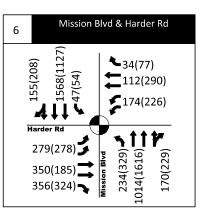


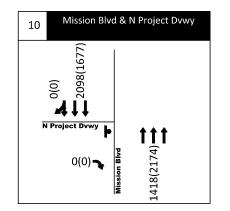


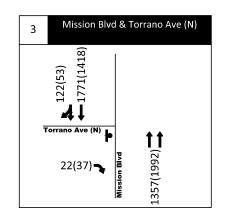


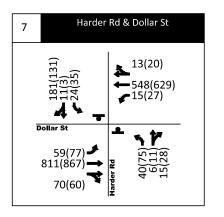


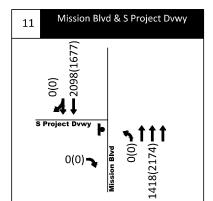


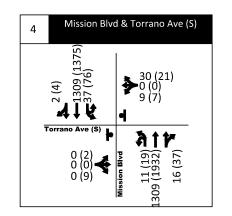


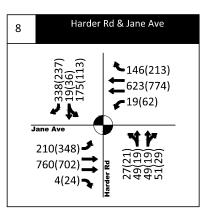




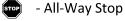








AM(PM) - Traffic Volume



- Stop Sign

- Traffic Signal



1.2.2 Pedestrian and Bicycle Volumes

As mentioned in section 1.2.1 above, no new traffic counts were conducted as a part of this project due to the effects of the COVID-19 pandemic. Therefore, multimodal traffic volumes available from previous counts were identified and used for the analysis. Growth factors were developed to adjust vehicular volumes to 2020 baseline. However, no sufficient information was available to identify necessary growth factors for adjusting historic pedestrian and bicycle volumes. Therefore, historic pedestrian and bicycle volumes were used without adjustments as a part of this analysis. Table 8 and Table 9 present the pedestrian and bicycle volume data used for the weekday AM and weekday PM peak hours, respectively.

Table 8: Pedestrian and Bicycle Volumes (Weekday AM Peak Hour)

#	Intersection			Crossi ection I			orthbou Bicycles			uthbou Bicycles		E	Westbound Bicycles				
		N	s	E	w	L	Т	R	L	Т	R	L	Т	R	L	т	R
1	Mission Boulevard & Carlos Bee Boulevard / Orchard Avenue	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0
2	Mission Boulevard & Berry Avenue	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0
3	Mission Boulevard & Torrano Avenue N	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
4	Mission Boulevard & Torrano Avenue S	22	2	1 0	1 4	0	1	0	0	0	0	0	0	0	0	1	0
5	Mission Boulevard & Tennyson Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Mission Boulevard & Harder Road	0	1	0	0	1	0	0	1	0	1	1	1	0	1	0	0
7	Harder Road & Dollar Street	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
8	Harder Road & Jane Avenue	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
9	Harder Road & Soto Road	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0

Data Source: Quality Counts and Metro Traffic Data historic manual turning movement counts (June 2016, September 2016, April 2019)

Table 9: Pedestrian and Bicycle Volumes (Weekday PM Peak Hour)

#	Intersection		destrian y interse		_		Northbound Bicycles			Southbound Bicycles			stbour Bicycles		Westbound Bicycles		
		N	S	E	w	L	Т	R	L	Т	R	L	Т	R	L	Т	R
1	Mission Boulevard & Carlos Bee Boulevard / Orchard Avenue	3	5	9	10	0	1	0	0	1	0	0	0	0	0	0	0
2	Mission Boulevard & Berry Avenue	2	0	2	3	0	0	0	0	2	0	0	0	0	0	1	0
3	Mission Boulevard & Torrano Avenue N	4	0	0	8	0	0	0	0	4	0	0	8	0	0	0	
4	Mission Boulevard & Torrano Avenue S	4	0	0	8	0	1	0	0	1	0	0	7	0	0	5	0
5	Mission Boulevard & Tennyson Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Mission Boulevard & Harder Road	0	9	1 6	0	0	1	0	0	0	0	0	0	0	0	1	0
7	Harder Road & Dollar Street	4	9	0	1	1	0	0	0	0	0	1	1	0	0	0	0
8	Harder Road & Jane Avenue	0	7	1	5	0	0	0	0	0	1	0	0	0	0	1	0
9	Harder Road & Soto Road	21	0	4	0	0	0	0	0	0	0	1	2	0	0	0	0

Data Source: Quality Counts and Metro Traffic Data historic manual turning movement counts (June 2016, September 2016, April 2019)

2 VMT IMPACT ANALYSIS

The project site is located at 26231 Mission Boulevard at the southwest corner of Mission Boulevard and Harder Road. The proposed site plan is shown in Figure 3. The project would consist of three elements:

- An approximately 3,267 square-foot new drive-through restaurant
- An approximately 3,879 square-foot new drive-through restaurant
- An approximately 88,000 square-foot existing commercial building, to be remodeled and demised into nine tenant spaces ranging from approximately 1,800 square feet to approximately 32,100 square feet

Vehicular access to the site would be provided by three existing driveways: two on Mission Boulevard and one on Harder Road at Dollar Street. The proposed site plan is shown in Figure 3.

This section discusses the results of the VMT analysis using the City's SB 743-consistent VMT thresholds of significance and screening criteria.





Figure 3

Project Site Plan Hayward, California

2.1 EQUIVALENT LAND USE AND APPLICABLE THRESHOLDS AND SCREENING CRITERIA

The City of Hayward has developed VMT thresholds of significance and screening criteria that cover residential, office employment, industrial employment, and retail projects. The City's thresholds of significance by land use are shown in Table 1. Given that the project is retail, the project is evaluated based on the associated relative change in total regional VMT.

Table 10: Thresholds of Significance for Residential and Employment Projects

Land Use	Threshold of Significance
Residential	15% below existing average VMT per capita for the City of Hayward
Employment - Office	15% below existing regional average VMT per employee
Employment - Industrial	Below existing regional average VMT per employee
Retail	Net increase in total regional VMT

Source: City of Hayward, 2020

Bold signifies the appropriate significant impact threshold for this project.

2.2 VMT SCREENING

Before any VMT analysis is undertaken, the project must undergo screening using the City's screening criteria to determine if it can be expected to cause a less-than-significant impact without conducting a detailed VMT study. Table 11 shows the City's screening criteria as they relate to the project.

Table 11: Project VMT Screening

Screen Type	Finding
Small Infill Projects	This criterion does not apply to the project.
Local Serving Retail	See discussion below.
Local Serving Public Facilities	This criterion does not apply to the project.
Residential and Employment-Office Land Use Projects or Components	This criterion does not apply to the project.
Restricted Affordable Residential Projects or Components	This criterion does not apply to the project.

Local serving retail projects that are 50,000 square feet total or smaller may not require detailed VMT study. Retail that exceeds the local retail size criteria will be reviewed on a case-by-case basis using local knowledge by City staff to determine if the retail is local-serving.

This retail project exceeds 50,000 square feet and requires VMT analysis as detailed below.



2.3 VMT ANALYSIS

This project includes two primary components:

- 1. A remodel of an existing 94,500 square-foot commercial building (former Kmart site) to be repurposed into use by 9 commercial tenants.
- 2. Two new drive-through restaurants

Each component is discussed below.

1. Remodel of Commercial Building

The remodel and repurposing of the former Kmart building is above 50,000 square feet but is a redevelopment of an existing retail building that is to be partitioned into 9 separate commercial tenants.² Although the prospective tenants have not yet been identified, they would include smaller tenant spaces that range from approximately 1,800 square feet to 32,100 square feet in size. The site was recently occupied (by Kmart) and is already incorporated as retail in the City's most recent *Hayward 2040 General Plan* and associated model for both existing and cumulative planning years.³ The General Plan complies with state greenhouse gas reduction goals. Therefore, no more detailed analysis was conducted, and the existing commercial part of the project is presumed to have a **less-than-significant** impact with the repurposing.

2. Drive-Through Restaurants

In consultation with the City, it was determined that the drive-through elements are unique and may not represent typical local serving retail despite their smaller size (less than 50,000 sf) due to prospective tenants potentially being "first-to-market" in Hayward. "First-to-market" tenants may have broader trip attraction than typical local serving retail for an initial period of time. As such, to ensure accuracy of the analysis and adopting a conservative approach, a draft VMT assessment was conducted.

To assess the potential for increase in VMT related to the project, Kittelson used the City of Hayward General Plan model to assess the project with two land use scenarios: existing conditions (without the drive-through uses), and a "plus project" scenario (existing conditions with the addition of the two drive-through uses) to assess the net change in daily VMT.

The study area for model results includes the complete cities of Hayward and Union City to include a reasonable travel shed for expected travel to the sites. The model results include the following trips:

Daily trips that start and end within the analysis region

³ The Hayward 2040 General Plan is available online at https://www.hayward2040generalplan.com/.



Page 19 Oakland, California

² Pages 16-17 of the OPR Technical Advisory discusses retail and redevelopment projects.

Daily trips that end within the analysis region but started outside of it

Table 12: Total Daily VMT Results

Analysis Scenario	Total Daily VMT	Net Difference in Total Daily VMT (%)
No-Project	13,434,154	-
Plus Project	13,433,780	-374 (<1%)

The VMT results, presented in Table 12, show a slight net decrease in daily VMT of 374, or less than 1 percent. While this represents a negligible change, it does indicate these land uses are likely shortening trips for many residents and customers compared to existing no-project conditions. The OPR technical advisory documents this effect by explaining that, "By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT." Therefore, the drive-through uses would not be expected to increase regional VMT and would have a **less-than-significant** impact under CEQA.

Given that both project components would have a less-than-significant VMT impact, the project is presumed to have a **less-than-significant** VMT impact with respect under CEQA. As such, no TDM mitigations have been identified.

3 PROJECT TRIP GENERATION AND DISTRIBUTION

This section provides the vehicle trip generation and distribution estimates for the proposed project.

3.1 TRIP GENERATION

Project trip generation was estimated for the following time periods:

- Weekday daily
- Weekday a.m. peak hour
- Weekday p.m. peak hour

Trips were estimated using data provided by ITE and shown in Table 13. As with the former Kmart trip generation, a pass-by reduction was applied to the trip generation estimates. A pass-by reduction captures visitors that would normally be passing by the site on an adjacent roadway and would instead make an intermediate stop at the project site. The pass-by reductions were applied based on data from the ITE Trip Generation Handbook.

- For the fast-food uses, AM peak hour and PM peak hour pass-by reductions of 49 percent and 50 percent were applied, respectively.
- For the shopping center use, a PM peak hour pass-by reduction of 34 percent was applied.

The resulting net-new project trip generation estimate is given in Table 14.

Table 13: Project Trip Generation Rates

			Trip Gen	eration Ra	ates				
Land Use	ITE	Rate	Weekday	Weeko	lay AM Pea	k Hour	Week	day PM Pea	k Hour
Lana OSC	Code	Nate	Daily	In	Out	Total	In	Out	Total
Shopping Center	820	per KSF	37.75	62%	38%	0.94	48%	52%	3.81
Fast Food w/ Drive- through	934	per KSF	470.95	51%	49%	40.19	52%	48%	32.67

Source: Kittelson & Associates, Inc., 2021; Institute of Transportation Engineers, 2017.

Notes: KSF signifies thousand square feet.



Table 14: Project Net-New Trip Generation Estimate

Land Use	Size	Weekday	Wee	kday AN Hour	1 Peak	Wee	kday PM Hour	l Peak
	(KSF)	Daily	In	Out	Total	In	Out	Total
		Existing Use	S					
Free-Standing Discount Store (ITE Code 815)		5,020	77	34	111	228	228	456
50% Reduction in Existing Use Trip Estimate	94.5	-2,510	-38	-17	-55	-114	-114	-228
Pass-by Reduction (17% in PM)		n/a	n/a	n/a	n/a	-19	-20	-39
Net Existing Use Project Trips		2,510	39	17	56	95	94	189
		Proposed Us	es					
Shopping Center (ITE Code 820)	0.0	3,322	51	32	83	161	174	335
Pass-By Reduction (34% in PM)	88	n/a	n/a	n/a	n/a	-55	-59	-114
Fast Food w/ Drive-through (ITE Code 934)		3,367	146	141	287	122	112	234
Pass-By Reduction (49% in AM;	7.15	n/a	-72	-72	-144	-61	-56	-117
50% in PM)		.,, .						
50% in PM) Net Proposed Use Project Trips		6,689	125	101	226	167	171	338
Net Proposed Use Project Trips) Difference	-				167	171	338

Source: Kittelson & Associates, Inc., 2021; Institute of Transportation Engineers, 2017.

Notes: KSF signifies thousand square feet.

As shown in Table 14, with trip credits accounted for, the project is expected to generate a net total of 4,179 weekday daily vehicle trips, 170 weekday AM peak hour vehicle trips and 149 weekday PM peak hour vehicle trips. Discussion of the applicable trip credits is provided in Section 1.2.1.

3.2 TRIP DISTRIBUTION AND ASSIGNMENT

Project trip distribution was developed using the Hayward version of the Alameda CTC Countywide Model. The model is maintained by Alameda CTC and allows for forecast of land developments countywide. The model is periodically updated to be consistent with the most recent land use and socioeconomic database of the Association of Bay Area Governments and assumptions of the Metropolitan Transportation Commission's regional travel demand model. The project trip distribution is based on the model's distribution of trips in and out of the traffic analysis zone (TAZ) representing the project site, as well as adjustments to reflect local travel patterns and circulation conditions. Project trip distribution and study intersections are shown in Figure 4.

The trip distribution for the project is as follows:



- 23% to/from the north via Mission Boulevard (north of Carlos Bee Boulevard)
- 21% to/from the south via Mission (south of Harder Road)
- 2% to/from the east via Carlos Bee Boulevard
- 4% to/from the west via Orchard Avenue
- 6% to/from the east via Harder Road
- 29% to/from the west via Harder Road (west of Soto Road)
- 8% to/from the south via Whitman Street and Jane Avenue
- 4% to/from the north via Soto Road
- 2% to/from the north via Dollar Street
- 1% to/from the south via local streets

All trip distribution destinations total up to 100%.

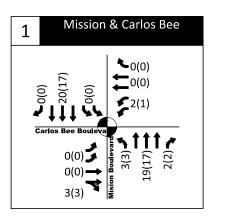
Figure 5 presents the weekday AM and PM project-only turning movements that were derived from the trip generation and trip distribution discussed in this section. These project-only volumes are used in the Existing Plus Project and Cumulative 2040 Plus Project analyses.

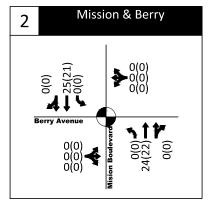


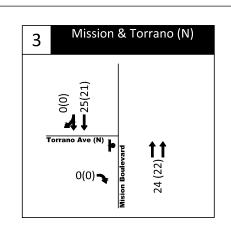


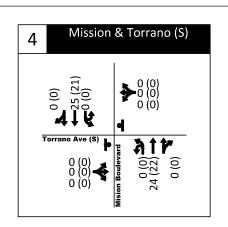
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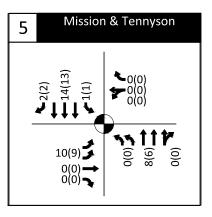


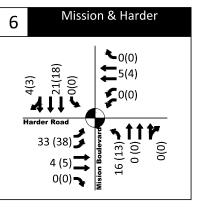


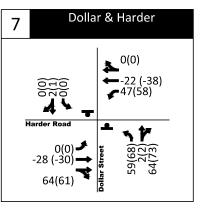


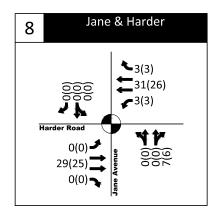


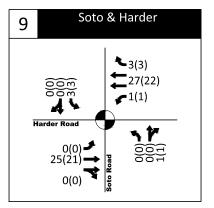


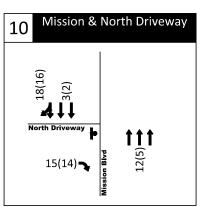


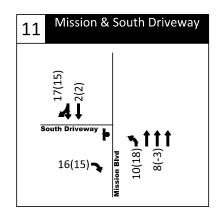




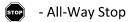








AM(PM) - Traffic Volume



- Stop Sign



4 INTERSECTION TRAFFIC VOLUME FORECASTS

This chapter provides the traffic volume forecasts at intersections in the study area for the Existing Plus Project, Cumulative 2040, and Cumulative 2040 Plus Project conditions.

4.1 EXISTING PLUS PROJECT TRAFFIC VOLUMES

The automobile turning movement counts for the Existing Plus Project scenario were developed from the sum of the Existing Conditions turning movement counts and the project-only turning movements described above (and displayed in Figure 5). Figure 6 presents the Existing Plus Project turning movements.

4.2 CUMULATIVE 2040 TRAFFIC VOLUMES

The model includes future development throughout the region. The 2035 forecasts are consistent with regional totals for growth projected by ABAG in their Projections 2009 report. Cumulative No-Project volumes were extracted from the travel model and adjusted based on the incremental or difference method described in NCHRP 255⁴ methods, consistent with the methodology used for the Hayward General Plan and other citywide Specific Plans. The method compares future year model volumes to existing year model volumes to identify the growth increment, and then adds this increment to the existing counts, thus smoothing out any model validation error compared to existing counts. When new roadway facilities are introduced, in some cases traffic growth would be allowed to reduce below existing count levels for some turn movements. In this case, there are no significant new roadway facilities in the immediate study area, so the incremental adjustment method did not produce negative traffic growth. To be consistent with the ABAG growth projections at 2040 levels and to align with the timing of the Hayward General Plan buildout, Kittelson extrapolated the 2035 turning movement volumes to 2040 by projecting the same growth out for five additional years.

Therefore, the traffic forecasts reflect traffic from growth in Hayward as well as traffic from future developments in the region that may use the local roadways.

The automobile turning movement counts for the Cumulative 2040 scenario are displayed in Figure 7.

4.3 CUMULATIVE 2040 PLUS PROJECT TRAFFIC VOLUMES

Cumulative Plus Project scenario were developed from the sum of the Cumulative 2040 No Project volumes and the project Only turning movements. The Cumulative 2040 No Project volumes are

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Oakland, California

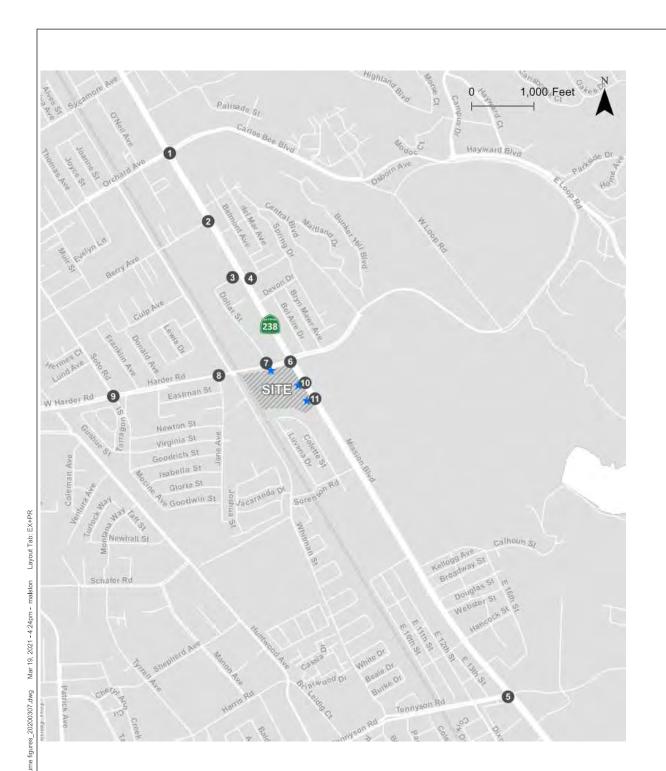
⁴ Highway Traffic Data for Urbanized Area Project Planning and Design, Transportation Research Board, 1992.

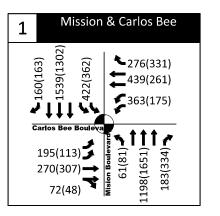
Project #25541 Intersection Traffic Volume Forecasts

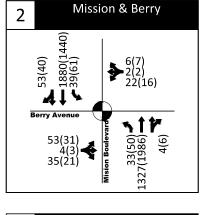
presented in Figure 7. Project-only volume development is described in Section 3, and the volumes are shown in Figure 5.

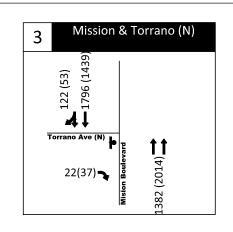
Cumulative 2040 Plus Project volumes are shown in Figure 8.

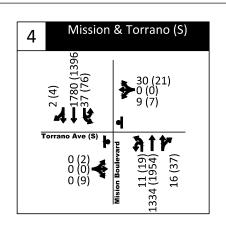


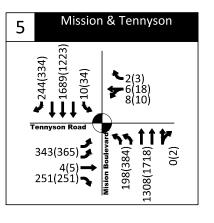


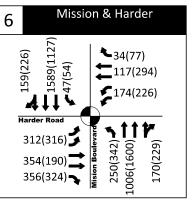


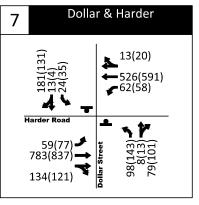


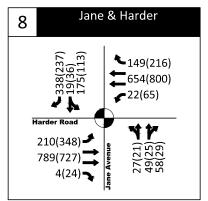


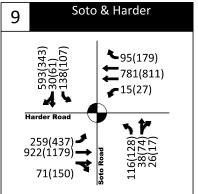


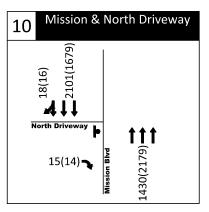


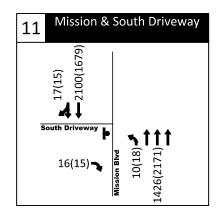










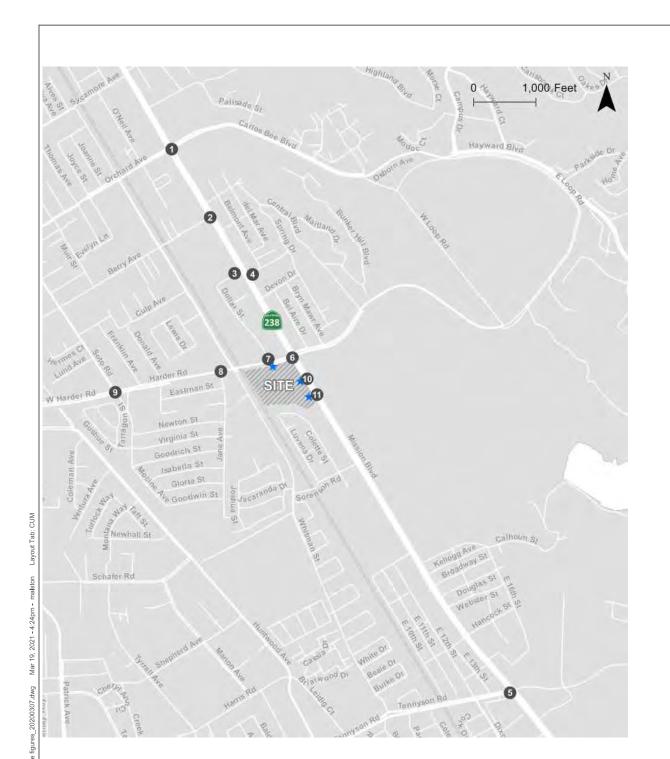


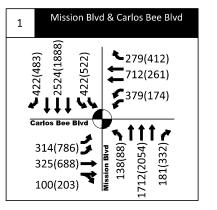
AM(PM) - Traffic Volume

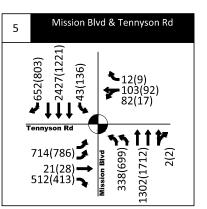
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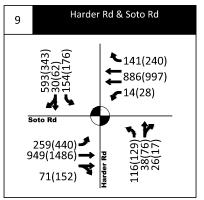
- Stop Sign

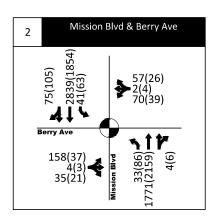


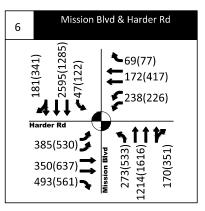


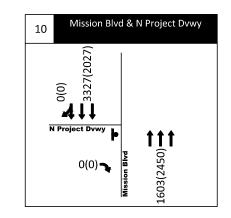


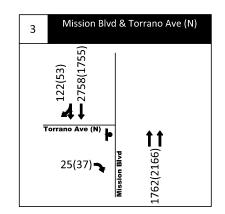


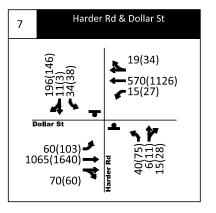


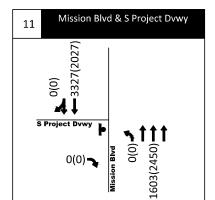


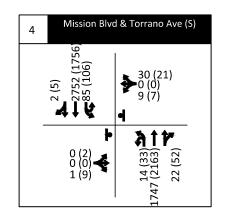


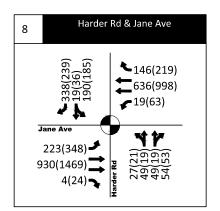




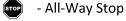






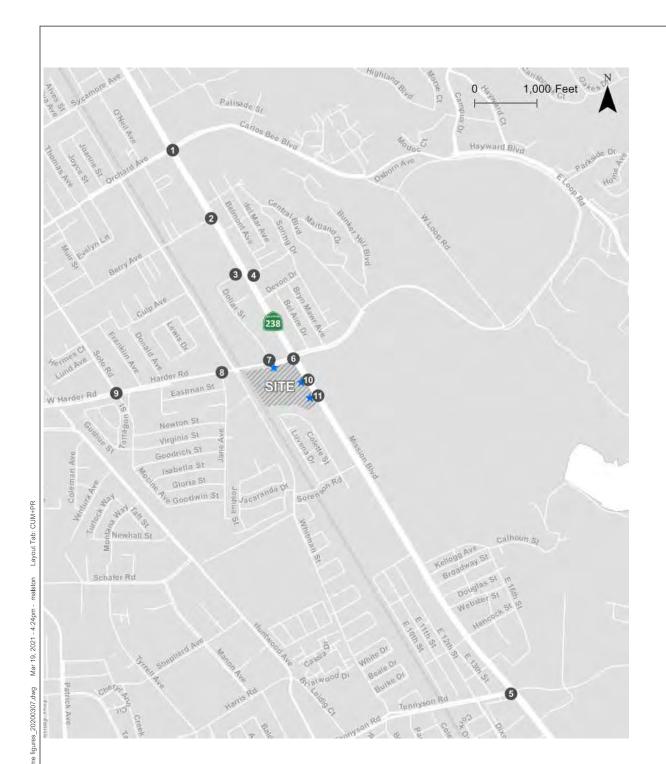


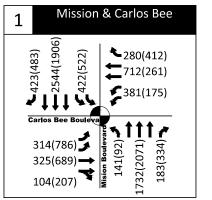
AM(PM) - Traffic Volume

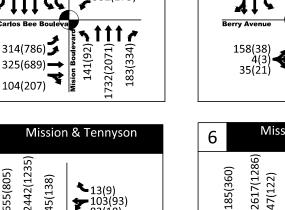


- Stop Sign

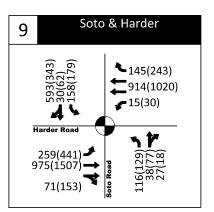




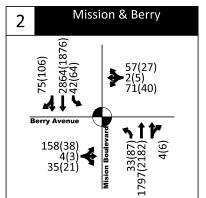


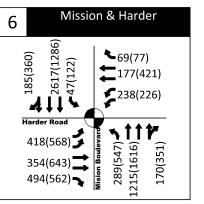


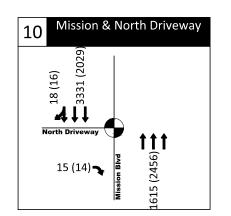
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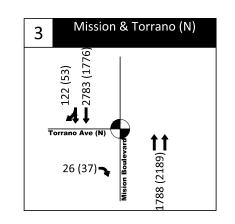


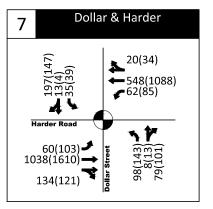
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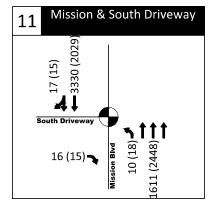


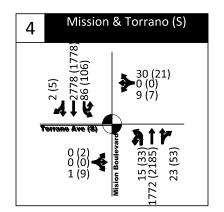


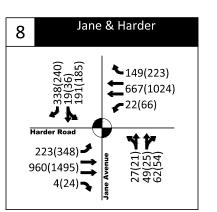












AM(PM) - Traffic Volume

- All-Way Stop

- Stop Sign



5 TRANSIT, PEDESTRIAN, AND BICYCLE ASSESSMENT

This section discusses potential effects on transit, pedestrians, and bicyclists. To supplement this analysis, the Alameda County Transportation Commission (ACTC) Development Review Complete Streets Checklist was completed and is included as Appendix 2.

5.1 TRANSIT ASSESSMENT

The project is not expected to degrade local access to bus stops along Mission Boulevard, which can be accessed via the local sidewalk network and existing facilities such as ADA curb ramps and continental crosswalks along Mission Boulevard. Therefore, implementation of the project would not conflict with plans, programs, and policies regarding transit facilities or decrease the performance and safety of such facilities.

The project's *Local Transportation Assessment* (LTA) evaluated vehicle operations at study intersection that serve local transit. Findings related to operations and delay are not a CEQA evaluation topic and are discussed in the LTA.

5.2 PEDESTRIAN ASSESSMENT

The study area features sidewalks, crosswalks, and curb ramps that are in good condition. Marked crosswalks (including continental crosswalks) and curb ramps with tactile warning devices are generally provided at arterial intersections. Residential street intersections tend to have unmarked crossings with ADA ramps.

As the project site plan shows (see Figure 3 on page 17), the project provides sidewalks and crossings for interior pedestrian access to the larger building or to the two smaller drive-through buildings from either access point. Pedestrians in the study area may also be affected due to an increase in vehicular trips to and from the site. Pedestrians traveling along Harder Road or Mission Boulevard may experience increased conflicts with vehicles entering or exiting the project site. Pedestrians will access the project site via either Harder Road access or the northern access driveway along Mission Boulevard.

Potential treatments at the project driveways can reduce the presence of these conflicts or reduce should be considered to increase pedestrian safety, as part of design review and conditions of approval. Treatments could include:

- Provide clear sight triangles at project driveways (i.e., free of landscaping and signage) and continue to disallow parking on the south side of Harder Road and the west side of Mission Street.
- Provide curb extensions for entering or exiting vehicles if possible, or design curb radii to manage vehicle turning speeds.



The LTA identified recommends a traffic signal be installed at the Harder Road / Dollar Street intersection. Accompanying signal installation, it provides the following recommendations related to pedestrian access and safety:

- Install KEEP CLEAR pavement markings in the Harder/Dollar intersection.
- Install high-visibility continental or ladder-style crosswalks and provide pedestrian phases across all four legs of the Harder/Dollar intersection. Dollar Street currently has a marked east-west crosswalk on the north leg. Include pushbutton actuation for pedestrians and APS.
- Include a four-second leading pedestrian interval for all four pedestrian crossing phases at the signal, which would give pedestrians a head start crossing in the intersection.

The 2020 Hayward Bicycle and Pedestrian Master Plan identified the full extent of Harder Road as a prioritized improvement corridor. The improvements above would address the project's frontage along the corridor.

Two other intersections along Harder Road are study intersections at which the project would add trips: Harder Road & Jane Road (#8) and Harder Road & Soto Road (#9). It is recommended that existing marked crosswalks at these intersections be restriped as high-visibility (continental) crosswalks, consistent with recommended strategies identified in the BPMP. Separate from this project, the City may consider similarly restriping existing marked crosswalks at Harder Road & Donald Avenue/Eastman Court (existing side-street crossings).

5.3 BICYCLE ASSESSMENT

The project site plan (Figure 3 on page 17) includes an enclosure for bicycle parking. California Green Building Code (CALGreen) requirements for developers include provision of bicycle parking for 5% of the vehicular parking spaces added on a site. The project site plan proposes to provide 467 vehicle parking stalls, so 5% of vehicular parking would be a minimum of 24 bike parking stalls.

People accessing the site by bicycle would be able to access the site via Class II bicycle lanes on Harder Road. To enter the site along Harder Road traveling westbound, people biking would need to merge across two through vehicle lanes into a left-turn pocket. The LTA recommended installing a traffic signal at Harder Road & Dollar Street and also made the following recommendations regarding the eventual design of the signal:

- To improve accessibility and provide left-turns for bicyclists, stripe two-stage turn boxes for both
 eastbound and westbound left turns if feasible. Pages 25-26 of Appendix D of the BPMP include
 details and guidance for designing and installing the treatment.
- Install an advanced stop bar ("bike box") on the eastbound approach to Harder/Dollar for bicyclists to position themselves in front of (and to the left of) drivers turning right at Dollar Street or Harder Road. The bike box would improve comfort and safety for people biking. Details and design guidance are provided on pages 23-24 of Appendix D to the BPMP.



 Provide green "crossbike" markings to continue the bicycle lane and clearly delineate space for people biking through the intersection along Harder Road eastbound and westbound. Pages 27-28 of Appendix D to the BPMP include details and design guidance. Appendix D of the 2020 Hayward Bicycle and Pedestrian Master Plan includes considerations for either treatment.

There are no existing bicycle facilities along Mission Boulevard. The site design does not degrade bicycle accessibility, but the Harder Road & Dollar Street access is more amenable to people biking than the Mission Boulevard driveways given the bicycle facilities.

The City's BPMP includes recommendations for the following bicycle facilities, both of which front the project site:

- Class IV separated bike lanes on Mission Boulevard throughout the study area
- Class IV separated bike lanes on Harder Road throughout the study area

The project should coordinate with the City to funding for future Class IV separated bike lanes along Harder Road and Mission Boulevard along the project frontages or in-lieu funding for similar bicycle improvements in the project vicinity.



6 SUMMARY OF FINDINGS

As detailed in Section 2, the project would not be expected to contribute additional VMT and would result in a less-than-significant impact under CEQA. No mitigation measures have been identified.

The separate LTA conducted for this project provided a series of recommendations to be implemented as part of the project. Those findings are referenced throughout this report but are not summarized here so as not to conflate them with CEQA-related findings and recommendations.

The following recommendations are provided in this report as they relate to pedestrian and bicyclist conditions, to promote consistency with existing plans:

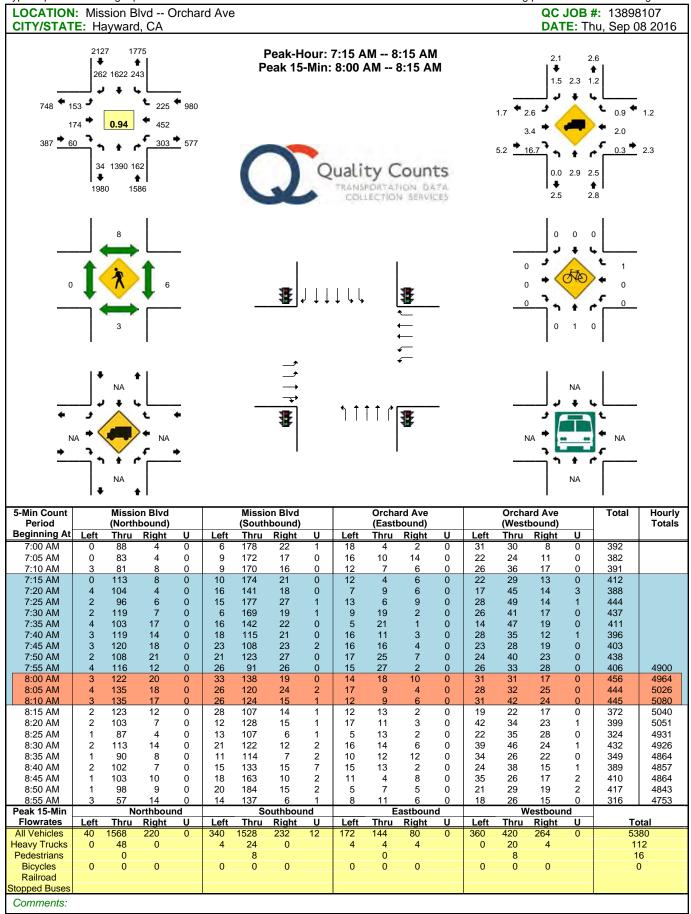
- The project should coordinate with the City to provide funding for future Class IV separated bike lanes along Harder Road and Mission Boulevard along the project frontages or in-lieu funding for similar bicycle improvements in the project vicinity.
- The project sponsor should coordinate with the City restripe existing marked crosswalks at Harder Road & Jane Road (#8) and Harder Road & Soto Road (#9) as high-visibility (continental) crosswalks.
- The project should coordinate with the City of Hayward to determine the number and location of short-term and long-term bicycle parking spaces to be provided.

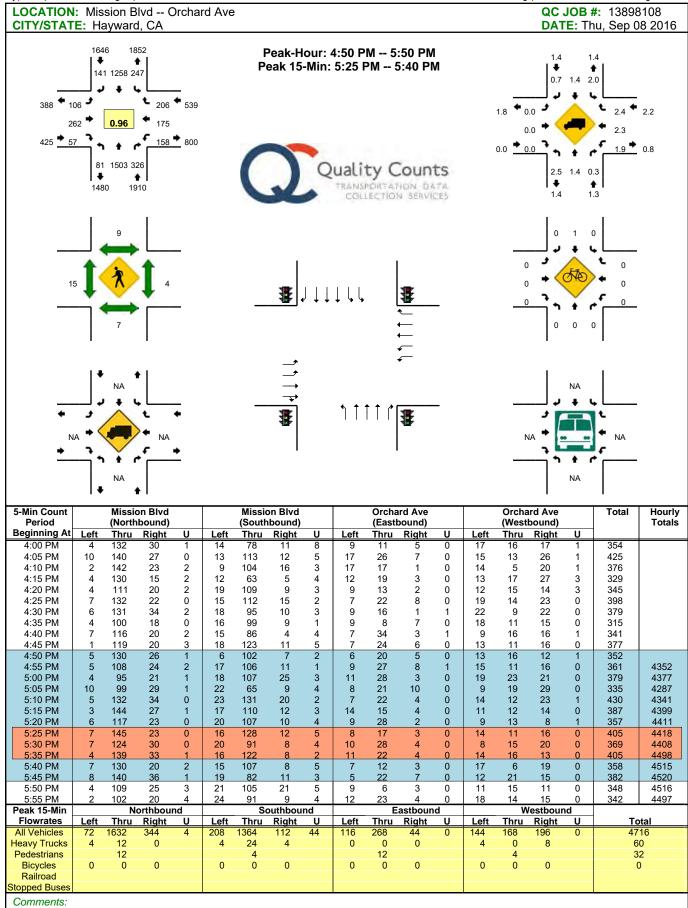


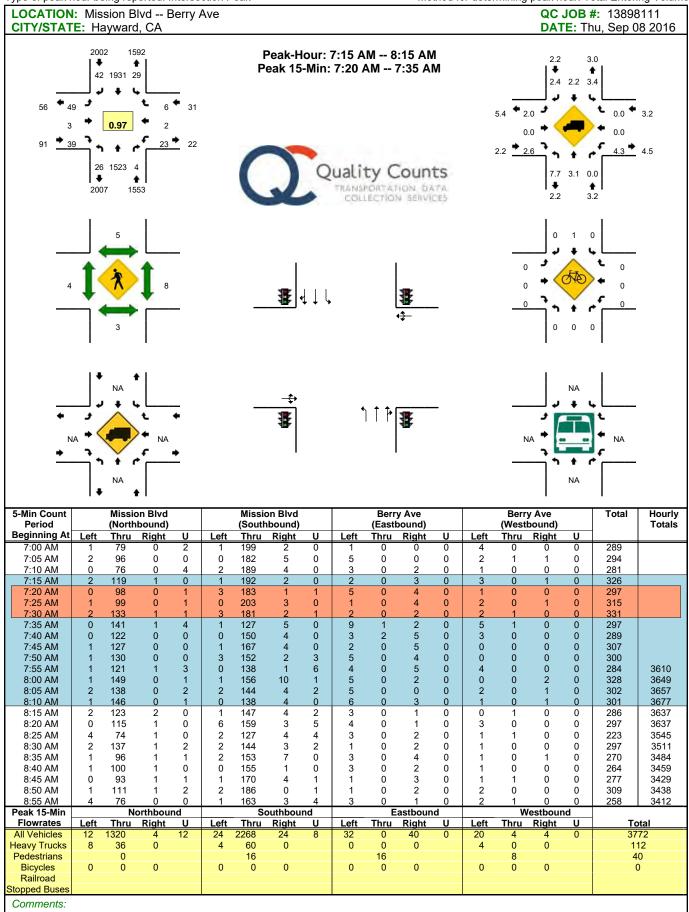
Project #25541 Appendices

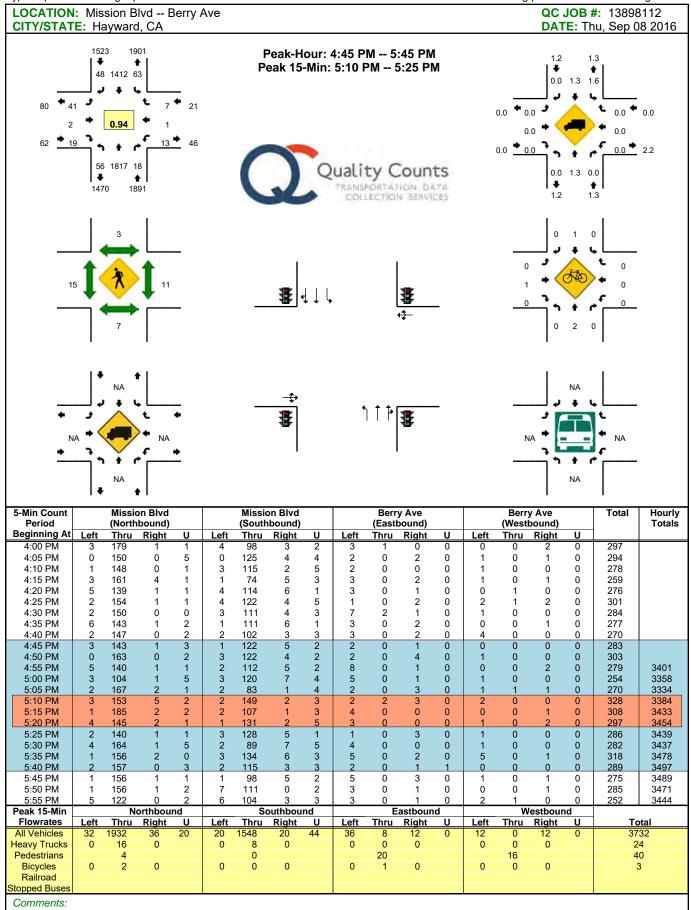
Appendix 1 Traffic Counts

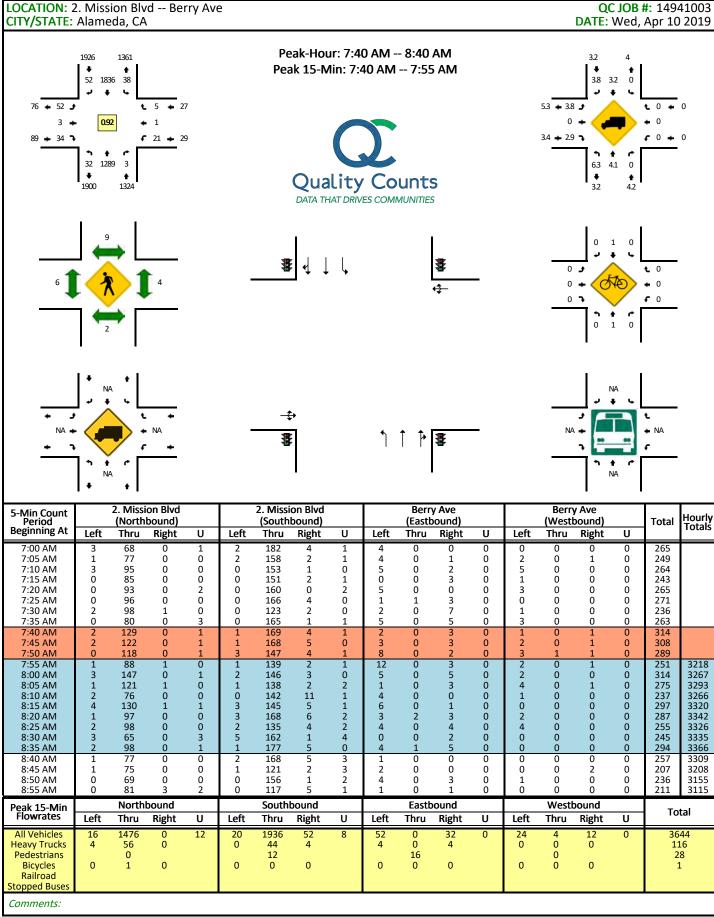


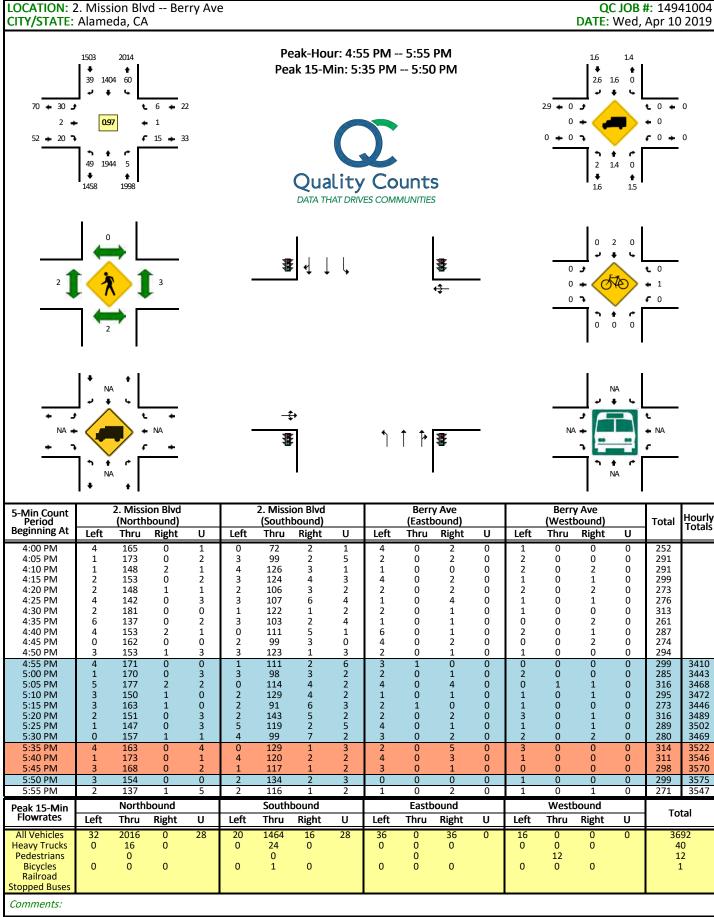


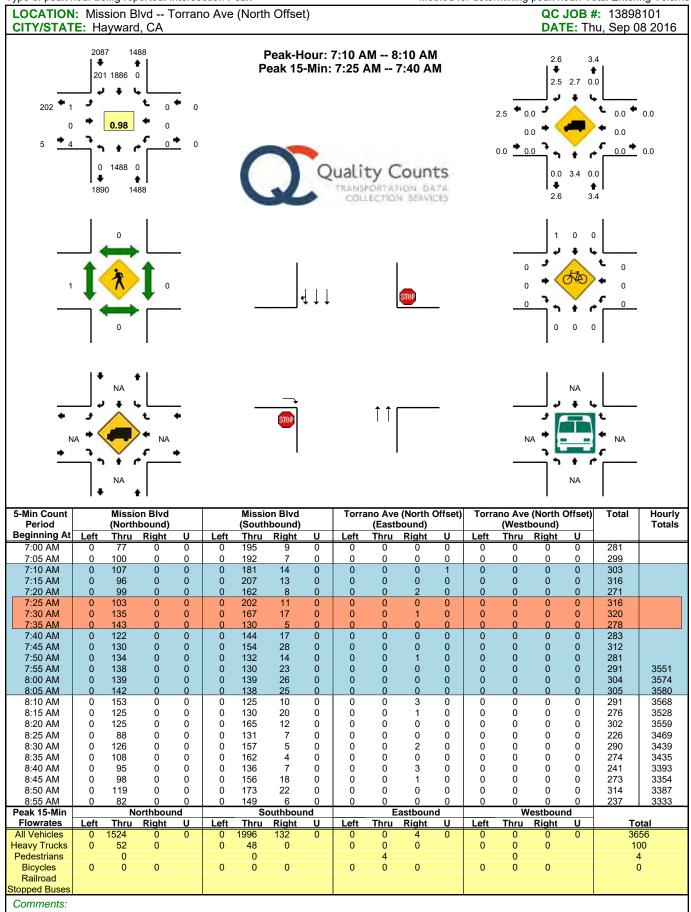


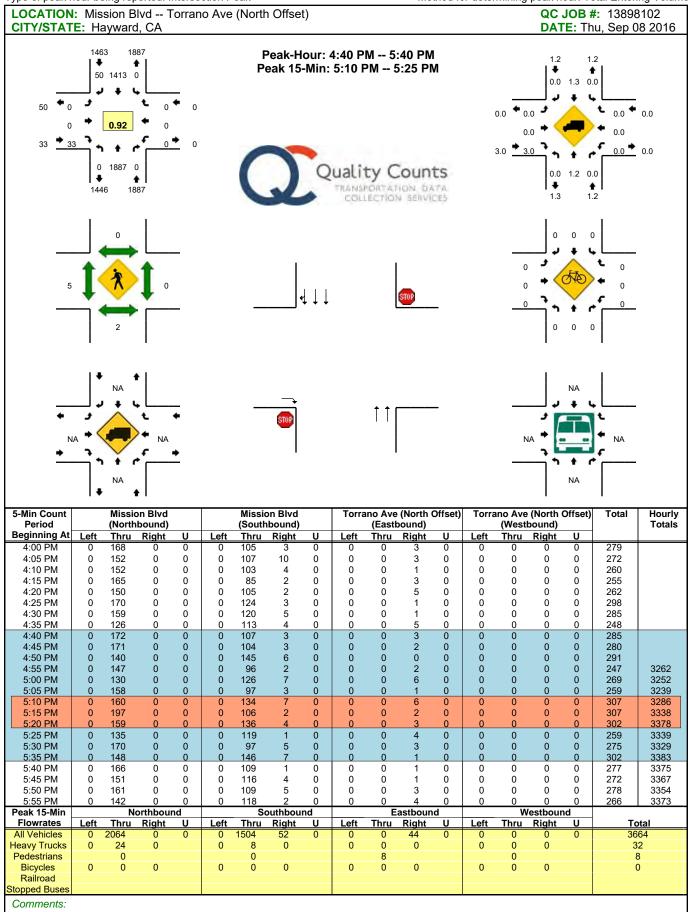


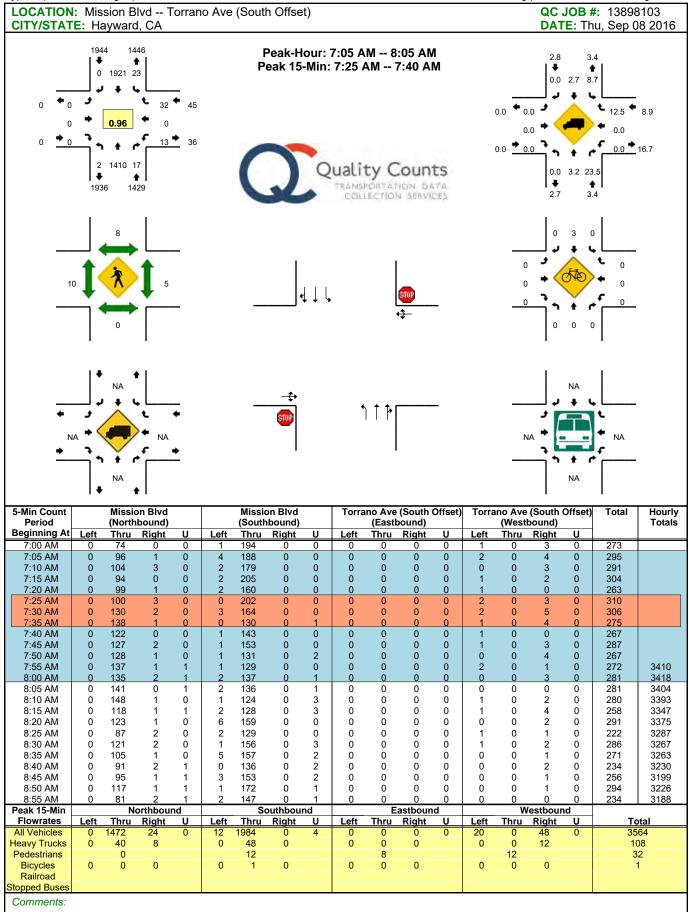


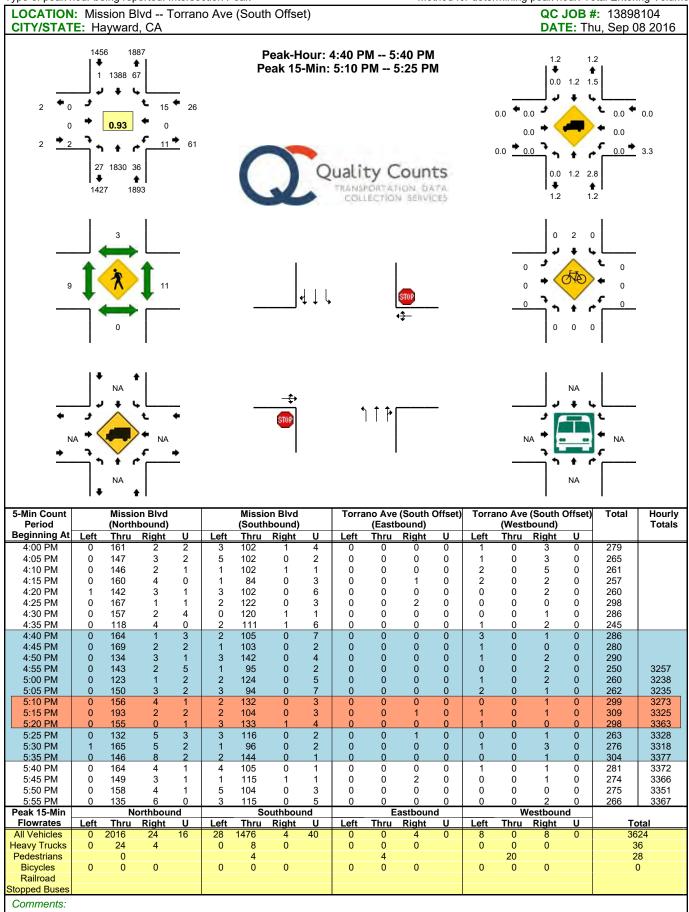














		14941005																							
		1	Aission Blvd					Torrano Ave	9			1	Mission Blv	d			Hayw	ard Mitsubis	hi Dwy				Torrano Av	ģ.	
		:	Southbound					Westbound					Northbound	i			N	ortheastbou	nd				Eastbound		
		Right to						Left to						Left to		Right to	Right to	Left to	Left to		Right to				
		Mitsubishi						Mitsubishi						Mitsubishi		Mission	Torrano	Mission	Torrano		Mitsubishi				
Start Time	Right	Dwv	Thru	Left	U-Tum	Right	Thru	Dwv	Left	U-Turn	Right	Thru	Left	Dwv	U-Turn	Blvd	Ave	Blvd	Ave	U-Turn	Dwv	Right	Thru	Left	U-Turn
7:00 AM	11	0	186	0	0	2	0	0	0	0	0	77		0	0	0	0	0	0	0	1	0	0	- (0
7:05 AM	8	0	148	2	0	2	0	0	1	0	1	85	C	0	0	0	0	0	0	0	0	1	0		1 0
7:10 AM	7	0	150	0	1	1	0	0	0	0	2	80	C	0	0	0	0	0	0	0	0	0	0) 0
7:15 AM		0	150	4	. 0	4	0	0	0	0	1	87	C	0	0	0	0	0	0	0	0	0	0	() 0
7:20 AM			172	0	0	3	0	0	1	0	2	89	0	0	0	0	0	0	0	0	0	0	0	(0
7:25 AM			151	3	1	1	0	0	0	0	2	89	C	0	0	0	0	0	0	0	0	0	0		1 1
7:30 AM			122	0	0	2	0	0	0	0	2	107	C	0	0	0	0	0	0	0	0	2	0		1 0
7:35 AM			163	2	0	2	U	0	0	0	0	102	C	0	1	0	0	0	0	0	0	1	0		1 1
7:40 AM		0	178	0	0	5	0	0	0	0	0	92		Ü	1	0	0	0	0	0		0	0		1 0
7:45 AM			157	0	0	4	0	0	0	0	2	131	C	0	1	0	0	0	0	0	O O	0	1		٥ (د
7:50 AM			142	4	1	3	0	0	1	0	0	119	C	0	0	0	0	0	0	0	0	0	0	(J 3
7:55 AM			121	2	1	2	0	0	1	0	1	125		0	2	0	0	0	0	0	0	1	0		J 0
8:00 AM			148	1	0	5	0	0	0	0	2	108		0	0	0	0	0	0	0	0	0	0		1 0
8:05 AM			127	2	0	2	0	0	3	0	2	114	C	0	0	0	0	0	0	0	0	0	0		1 0
8:10 AM		0	134	0	0	1	0	0	1	0	0	81	C	0	1	0	0	0	0	0	0	0	0		J 1
8:15 AM		0	130	1	1	3	0	0	1	0	3	127	C	0	1	0	0	0	0	0	0	0	1	1	1 0
8:20 AM		0	170	4	0	0	0	0	1	0	1	86	C	0	3	0	0	0	0	0	0	0	0) 0
8:25 AM		0	140	0	2	0	0	0	0	0	2	104	C	0	0	0	0	0	0	0	0	1	0	2	2 0
8:30 AM		0	137	4	- 0	0	0	0	1	0	3	78	C	0	0	0	0	0	0	0	0	0	0	1	1 1
8:35 AM		0	181	6	1	1	0	0	0	0	0	86	C	0	0	0	0	0	0	0	0	1	0		1 0
8:40 AM		0	164	4	0	0	0	0	3	0	1	76	C	0	0	0	0	0	0	0	0	0	0		J 1
8:45 AM		0	118	2	0	4	0	0	1	0	3	72	C	0	0	0	0	0	0	0	0	1	1	2	2 0
8:50 AM		0	151	0	2	0	0	0	1	0	2	70	C	0	0	0	0	0	0	0	0	0	0) 0
8:55 AM		3	111	5	U	1	0	0	2	0	0	79		0	2	0	0	0	0	0	0	0	0	2	2 1
Total	194	3	3551	46	10	48	0	0	18	0	32	2264	0	0	12	0	0	0	0	0	2	8	3	16	<i>i</i> 9

Peak Hour: 7:30 AM - 8:30 AM Peak 15: 7:40 AM - 7:55 AM PHF: 0.9259681



Location: 3. Mission Blvd & Torrano Ave

Date: 10/4/2019 Site Code: 1/9/1005

S	ite Code:	14941005	i																						
			Mission Blvd					Torrano Ave					Mission Blv					ard Mitsubis					Torrano Ave		
			Southbound					Westbound					Northbound					lortheastbou					Eastbound		
		Right to						Left to						Left to		Right to	Right to	Left to	Left to		Right to				
		Mitsubishi						Mitsubishi						Mitsubishi		Mission	Torrano	Mission	Torrano		Mitsubishi				
Start Time	Right	Dwy	Thru	Left	U-Turn	Right	Thru	Dwy	Left	U-Turn	Right	Thru	Left	Dwy	U-Turn	Blvd	Ave	Blvd	Ave	U-Turn	Dwy	Right	Thru	Left	U-Turn
7:00 AM	9	0	180	0	0	2	0	0	0	0	0	76	0	0	0	0	0	0	0	0	1	0	0	0	. 0
7:05 AM	8	0	143	2	0	2	0	0	1	0	1	80	0	0	0	0	0	0	0	0	0	1	0	1	0
7:10 AM	7	0	147	0	1	1	0	0	0	0	2	78	0	0	0	0	0	0	0	0	0	0	0	0	. 0
7:15 AM	5	0	142	3	0	4	0	0	0	0	1	83	0	0	0	0	0	0	0	0	0	0	0	0	. 0
7:20 AM	5	0	169	0	0	3	0	0	1	0	2	85	0	0	0	0	0	0	0	0	0	0	0	0	. 0
7:25 AM	5	0	147	3	1	1	0	0	0	0	2	86	0	0	0	0	0	0	0	0	0	0	0	1	1
7:30 AM	8	0	117	0	0	2	0	0	0	0	2	101		0	0	0	0	0	0	0	0	2	0	1	0
7:35 AM	12	0	156	2	0	2	0	0	0	0	0	97		0	1	0	0	0	0	0	0	1	0	1	1
7:40 AM	7	0	172	0	0	5	0	0	0	0	0	90	,	0	1	0	0	0	0	0	1	0	0	1	0
7:45 AM	8	0	155	0	0	4	0	0	0	0	1	124		0	1	0	0	0	0	0	0	0	1	0	0
7:50 AM	15		141	3		3	0	0	1	0	0	114		0	0	0	0	0	0	0	0	0	0	0	3
7:55 AM	16		113	2	1	2	0	0	1	0	1	121		0	2	0	0	0	0	0	0	1	0	0	0
8:00 AM	12		141	1	0	5	0	0	0	0	2	101		0	0	0	0	0	0	0	0	0	0	1	0
8:05 AM	16	0	122	1	0	2	0	0	3	0	2	108		0	0	0	0	0	0	0	0	0	0	1	0
8:10 AM	5	0	131	0	0	1	0	0	1	0	0	79		0		0	0	0	0	0	0	0	0	0	1
8:15 AM	7	0	128	1	1	3	0	0	1	0	3	120		0	1	0	0	0	0	0	0	0	1	1	0
8:20 AM	4	0	165	4	0	0	0	0	1	0	1	82		0	3	0	0	0	0	0	0	0	0	0	0
8:25 AM	7	0	136	U	2	0	0	0	0	0	2	100	0	0	0	0	0	0	0	0	0	0	0	2	0
8:30 AM		0	129	4	0	0	U	0	1	0	3	70	0	0	0	0	0	U	0	0	0	0	0		1
8:35 AM	4	0	176	6	1	1	U	0	0	0	0	83	0	0	0	0	0	0	0	0	0	1	0		0
8:40 AM	11	0	160 112	2	0	0	0	0	3	0	1	76 65	0	0	0	0	0	0	0		0	0	0	0	1
8:45 AM 8:50 AM	4	0	112	2	0	4	0	0	1	0	3		0	0	0	0	0	U	0		0	1	1	<u> </u>	<u> </u>
	b 1	0	147	4	2	0	0	0	1	0	2	66	0	0	0	0	0	0	0	0	0	0	0	0	1 0
8:55 AM Total	189	3	3436	42	10	48	0	0	18	0	31	2164	0	0	12	0	0	0	0	0	0	7	0	16	1 1
ıotai	189	3	3436	42	10	48		U	18	0	31	2164	0	U	12	0	0	0	0	1 0	2	/	3	16	9



5	Site Code:	1494100	5																			
			Mission Blv	d				Torrano Ave)			Mission Blvo				ard Mitsubis				Torrano Ave		
			Southbound	t				Westbound				Northbound				ortheastbou	nd			Eastbound		
		Right to						Left to					Left to	Right to	Right to	Left to	Left to	Right to				
		Mitsubishi						Mitsubishi					Mitsubishi	Mission	Torrano	Mission	Torrano	Mitsubishi			1	
Start Time		Dwy	Thru	Left		Right	Thru	Dwy	Left	Right	Thru	Left	Dwy	Blvd	Ave	Blvd	Ave	Dwy	Right	Thru	Left	
7:00 AM		0	6	0)	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	j
7:05 AM		0	5	0)	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	j
7:10 AM		0	3	0)	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	j
7:15 AM		0	8	1		0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	j
7:20 AM		0 0 3 0 0 0 0						0	0	4	0	0	0	0	0	0	0	0	0	0	j	
7:25 AM		0	4	4 0 0 0 0						0	3	0	0	0	0	0	0	0	0	0	0	1
7:30 AM		0	5	0)	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	<u>/ </u>
7:35 AM		0	7	0)	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	<u>/ </u>
7:40 AM		0	6	0)	0	0	0	0	0	2	0	U	0	0	0	0	0	0	0	0	,
7:45 AM		0	2	0)	0	0	0	0	1	7	0	U	0	U	0	0	0	0	0	0	,
7:50 AM		0	1	1		0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	/
7:55 AM		0	8	0)	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	<u>/ </u>
8:00 AM		0	7	0)	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	<u>/ </u>
8:05 AM		0	5	1		0	U	0	0	0	6	0	0	0	0	0	0	0	0	0	U	<u> </u>
8:10 AM		0	3	0		0	U	0	0	0	2	0	0	0	0	0	0	0	0	0	U	<u> </u>
8:15 AM		0	2	0		0	U	0	0	0	7	0	0	0	0	0	0	0	0	0	0	<u> </u>
8:20 AM		0	5	0		0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	<u> </u>
8:25 AM		0	4	0		0	0	0	0	0	4	0	0	0	0	0	0	0	1	0	0	<u> </u>
8:30 AM		0	8	0)	0	U	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1
8:35 AM		0	5	0)	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1
8:40 AM		0	4	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM		0	6	0)	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	4
8:50 AM		0	4	0		0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
8:55 AM		0	4	1		0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	4
Total	5	0	115	4	l .	0	0	0	0	1	100	0	0	0	0	0	0	0	1	0	0	<u>/ </u>



S	Site Code:	14941005																							
			Mission Blvo					Torrano Ave					Mission Blv					ard Mitsubis					Torrano Av		
			Southbound	1				Westbound					Northbound					lortheastbou					Eastbound	l	
		Right to						Left to						Left to		Right to	Right to	Left to	Left to		Right to				
		Mitsubishi						Mitsubishi						Mitsubishi		Mission	Torrano	Mission	Torrano		Mitsubishi				4
Start Time	Right	Dwy	Thru	Left	Peds	Right	Thru	Dwy	Left	Peds	Right	Thru	Left	Dwy	Peds	Blvd	Ave	Blvd	Ave	Peds	Dwy	Right	Thru	Left	Peds
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	V	0	0	C	C	. 0	0
7:10 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	V	1	0	C	C	,	0
7:15 AM	0	0	1	0	0	0	0	0	0	4	- 0	0	0	0	0	0	0	0	0	0	0	C	C	. 0	0
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	U	0	0	C	C	,	0
7:25 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ü	1	0	C	C	,	0
7:30 AM		0 0 1 0 0 0 0						0	0	0	0	0	0	0	0	0	0	V	0	0	0	0	,	0	
7:35 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	V	1	0	0	0	,	0
7:40 AM		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	V	0	0	0	0	, ,	0
7:45 AM		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	V	2	2 0	0	0	, ,	0
7:50 AM		0	0	0	1	0	0	0	0	0	0	0	0	0	0	U	0	0	U	4	1 0	C	0	, ,	0
7:55 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	V	0	0	0	0	0	. 0
8:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ü	0	0	0	0	0	1
8:05 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	V	0	0	0	0	, ,	. 0
8:10 AM		0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	V	4	1 0	0	0	, ,	. 0
8:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	V	0	0	0	0	,	. 0
8:20 AM		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	V	0	0	C	0	, ,	0
8:25 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	V	1	0	C	0	, ,	0
8:30 AM		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	V	3	0	0	0	, ,	0
8:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	·	0	0	0	0	, ,	1
8:40 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	U	1	0	0	0	, ,	0
8:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
8:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	V	0	0	0	0	,	0
Total	2	0	2	0	9	0	0	0	1	7	0	1	0	0	0	0	0	0	0	20	0	0	0	0	2



S	ite Code:	14941006	i																						
			Mission Blvd					Torrano Ave	•				lission Blv					ard Mitsubis					Torrano Ave		
			Southbound					Westbound				1	Northbound					ortheastbou					Eastbound		
		Right to						Left to						Left to		Right to	Right to	Left to	Left to		Right to				
		Mitsubishi						Mitsubishi						Mitsubishi		Mission	Torrano	Mission	Torrano		Mitsubishi				
Start Time	Right	Dwy	Thru	Left	U-Tum	Right	Thru	Dwy	Left	U-Turn	Right	Thru	Left	Dwy	U-Turn	Blvd	Ave	Blvd	Ave	U-Turn	Dwy	Right	Thru	Left	U-Turn
4:00 PM	7	0	80	0	0	1	C	0	1	0	1	173	0	0	2	1	0	1	0	0	0	0	0	2	2 0
4:05 PM	1	0	95	1	0	C	C	0	0	0	5	163	0	0	0	(0	0	0	0	0	1	0		0 (
4:10 PM	3	0	124	4	3	. 2	C	0	0	0	1	148	0	0	1	(0	1	0	0	0	0	0	1	1 0
4:15 PM	5	0	116	1	4	2	C	0	1	0	2	145	0	0	3	(·	0	0	0		0	0	1	1 0
4:20 PM	5	0	112	0	1	1	C	0	0	0	2	159	0	0	1	(U	0	0	0	,	1	0	2	2 0
4:25 PM	3	3 0 99 5 5 1 100 4			1	1	C	0	1	0	1	147	0	0	1	(·	0	0	0	·	0	1	(0 ر
4:30 PM	5	1		4	1	3	C	0	0	0	2	158	0	0	2		·	0	0	0	·	3	0	4	١ 0
4:35 PM	5	5 0 108 3			3	4	C	0	0	0	3	146	0	0	0	(· · · · ·	0	0	0	,	1	1	2	4 0
4:40 PM	2	0	105	2		1	C	0	1	0	3	141	0	0	4	. (·	0	0	0	·	2	0	1	1 0
4:45 PM	4	0	95	3		1	C	0	0	Ū	0	162	0	0	2		0	0	0	0	0	3	0	4	١ 0
4:50 PM		0	118	3		1	C	0	0	0	4	155	0	0	0	1	0	0	0	0	0	3	0	3	š 0
4:55 PM		0	112	0		2		0	0	0	0	163	0	0	3	(U	0	0	0	0	0	0	3	5 O
5:00 PM		0	100	3		2	C	0	0	0	1	172	0	0	3	(U	0	0	0	0	3	2	2	4 0
5:05 PM		0	105	5		3	C	0	1	0	1	160	0	0	0	(0	0	0	0	0	1	0	1	1 0
5:10 PM		0	123	0	1	2		0	2	0	4	147	0	0	2	1	0	0	0	0	0	1	0	4	i 0
5:15 PM	3	0	100	1	2	2		0	1	0	5	167	0	0	2	1	0	0	0	0	0	1	0	2	4 0
5:20 PM	7	1	122	5		C	0	0	0	0	1	143	0	0	0	(0	1	0	0	0	0	0	(0 (
5:25 PM		0	114	2		3	C	0	0		5	153	0	1	0	1	0	0	0	0	0	0	0	1	1 0
5:30 PM		0	99	3	_	1	C	0	0	U	4	150	0	0	2	(U	0	0	0	0	1	0	2	2 0
5:35 PM		0	122	3		1	C	0	0	0	3	165	0	0	2	(0	0	0	0	0	0	0	(0
5:40 PM		2		5	0	2	0	0	1	0	3	171	0	0	2	. 4	0	0	0	0	0	0	0	1	0
5:45 PM	4	0	118	4	2	1	0	0	1	0	5	166	0	0	1	(0	0	0	0	0	1	0	4	. 0
5:50 PM	6	0	112	3	1	C	U C	0	0	0	2	147	0	1	0	1 1	0	0	0	0	'	1	0	2	2 0
5:55 PM	7	0	110	1	1	1	0	0	1	0	3	130	0	0	1	1	0	0	0	0		0	0	3	٥ د
Total	105	4	2606	61	36	37	0	0	11	0	61	3731	0	2	34	11	0	3	0	0	2	23	4	45	0 اد

Peak Hour: 4:50 PM - 5:50 PM Peak 15: 5:35 PM - 5:50 PM PHF: 0.948913



S	ite Code:	14941006																							
			Mission Blvd					Torrano Ave	:				lission Blv					ard Mitsubis					Torrano Ave		
			Southbound					Westbound				1	Northbound					lortheastbou					Eastbound		
		Right to						Left to						Left to		Right to	Right to	Left to	Left to		Right to				
		Mitsubishi						Mitsubishi						Mitsubishi		Mission	Torrano	Mission	Torrano		Mitsubishi				
Start Time	Right	Dwy	Thru	Left	U-Turn	Right	Thru	Dwy	Left	U-Turn	Right	Thru	Left	Dwy	U-Turn	Blvd	Ave	Blvd	Ave	U-Turn	Dwy	Right	Thru	Left	U-Turn
4:00 PM	7	0	76	0	0	1	0	0	1	0	1	172	0	0	2	1	0	1	0	0	0	C	0	2	2 0
4:05 PM	1	0	91	1	0	0	0	0	0	0	5	159	0	0	0	0	0	0	0	0	0	1	0	0	0
4:10 PM	3	0	118	4	3	2	0	0	0	0	1	144	0	0	1	0	0	1	0	0	0	C	0	1	. 0
4:15 PM	5	0	112	1	4	1	0	0	1	0	2	142	0	0	3	0	0	0	0	0	1	C	0	1	. 0
4:20 PM	5	0	109	0	1	1	0	0	0	0	2	152	0	0	1	0	0	U	0	0	0	1	0	2	. 0
4:25 PM	3	0	95	5	1	1	0	0	1	0	1	147	0	0	1	0	0	0	0	0	0	C	1	0	0
4:30 PM	5	1	100	4	1	3	0	0	0	0	2	152	0	0	2	0	0	0	0	0	0	3	0	4	. 0
4:35 PM	5	0	107	3	3	4	0	0	0	0	3	143	0	0	0	0	0	0	0	0	0	1	1	2	. 0
4:40 PM	2	0	101	2	1	0	0	0	0	0	3	139	0	0	4	0	0	V	0	0	0	2	0	1	0
4:45 PM	3	0	92	3	4	1	0	0	0	0	0	160	0	0	2	0	0	0	0	0	0	3	0	4	. 0
4:50 PM	3	0	116	2	0	1	0	0	0	0	4	155	0	0	0	1	0	0	0	0	0	3	0	3	0
4:55 PM	2	0	111	0	2	2	0	0	0	0	0	157	0	0	3	0	0	0	0	0	0	C	0	3	0
5:00 PM	5	0	96	3	0	2	0	0	0	0	1	171	0	0	3	0	0	0	0	0	0	2	2	2	. 0
5:05 PM	4	0	104	5	2	3	0	0	1	0	1	159	0	0	0	0	0	0	0	0	0	1	0	1	0
5:10 PM	4	0	122	0	1	2	0	0	2	0	4	144	0	0	2	1	0	0	0	0	0	1	0	4	. 0
5:15 PM	3	0	99	1	2	2	0	0	1	0	5	165	0	0	2	1	0	0	0	0	0	1	0	2	. 0
5:20 PM	7	1	120	5	2	0	0	0	0	0	1	140	0	0	0	0	0	1	0	0	0	C	0	0	0
5:25 PM	9	0	112	2	2	3	0	0	0	0	5	153	0	1	0	1	0	0	0	0	0	C	0	1	0
5:30 PM	2	0	95		2	1	0	0	0	0	4	148	0	0	2	0	0	0	0	0	0	1	0	2	. 0
5:35 PM	1	0	121	3	1	1	0	0	0	0	3	163	0	0	2	0	0	0	0	0	0	C	0	0	0
5:40 PM	7	2	114	5	0	2	0	0	1	0	3	170	0	0	2	4	0	0	0	0	0	0	0	1	0
5:45 PM	4	0	116	4	2	1	0	0	1	0	5	164	0	0	1	0	0	0	0	0	0	1	0	4	0
5:50 PM	6	0	112	2	1	0	0	0	0	0	2	144	0	1	0	1	0	0	0	0	1	1	0	2	. 0
5:55 PM	7	0	110	1	1	1	0	0	1	0	3	129	0	0	1	1	0	0	0	0	0		0	3	4 0
Total	103	4	2549	59	36	35	0	0	10	0	61	3672	0	2	34	11	0	3	. 0	0) 2	22	4	45	ار (۱



Location: 3. Mission Blvd & Torrano Ave

Date: 10/4/2019 Site Code: 14941006

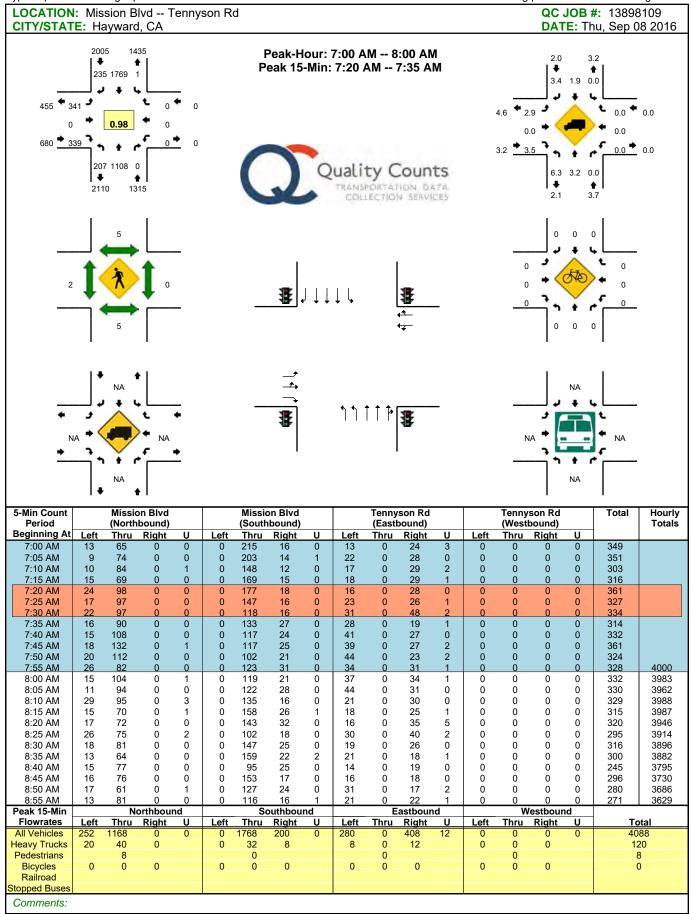
Torrano Ave Mission Blvd Hayward Mitsubishi Dwy Torrano Ave Mission Blvd Westbound Left to Mitsubishi Southbound Northbound Northeastbound Eastbound Left to Mitsubishi Right to Mission Right to Mitsubishi Right to Mitsubishi Right to Left to Torrano Mission Torrano \$\frac{4:00 \text{ PM}}{4:05 \text{ PM}}\$
\$\frac{4:10 \text{ PM}}{4:15 \text{ PM}}\$
\$\frac{4:20 \text{ PM}}{4:25 \text{ PM}}\$
\$\frac{4:25 \text{ PM}}{4:35 \text{ PM}}\$ Thru Dwy Dwy Right Dwy Thru Left Right Left Right Left Dwy Blvd Right Blvd Ave 4:40 PM 4:45 PM 4:50 PM 5:00 PM 5:00 PM 5:10 PM 5:10 PM 5:20 PM 5:25 PM 5:30 PM 5:35 PM 5:35 PM 5:35 PM 5:40 PM 5:45 PM

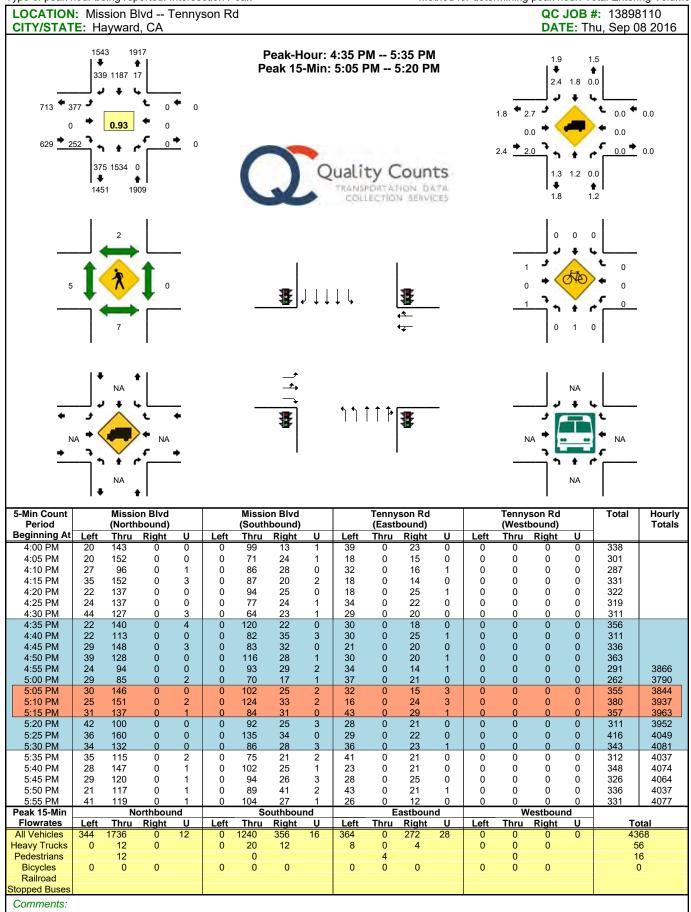


Location: 3. Mission Blvd & Torrano Ave

Date: 10/4/2019 Site Code: 14941006

Mission Blvd Hayward Mitsubishi Dwy Torrano Ave Mission Blvd Torrano Ave Westbound Left to Mitsubishi Southbound Northbound Northeastbound Eastbound Right to Mission Right to Mitsubish Right to Mitsubishi Left to Mitsubishi Right to Left to Torrano Mission Torrano \$\text{Start Time}\$
4:00 PM
4:05 PM
4:10 PM
4:15 PM
4:20 PM
4:25 PM
4:30 PM
4:35 PM
4:35 PM Dwy Peds Dwy Thru Right Dwy Thru Peds Right Left Right Left Dwy Blvd Peds Right Peds Blvd 4:40 PM 4:45 PM 4:50 PM 4:55 PM 5:00 PM 5:05 PM 5:10 PM 5:15 PM 5:20 PM 5:25 PM 5:30 PM 5:35 PM 5:35 PM 5:36 PM 5:36 PM 5:37 PM 5:38 PM 5:38 PM 5:39 PM





LOCATION: I CITY/STATE:	Missio		Tenny													JOB		37705
444	_	.89	1 + 1 5 7 + 1				eak-Hou ak 15-M	lity	Co	7:55 unt:	S AM			45 4 39 0 41 4 44	, c. <u>.</u> e (£ 0 + + 0 • 0 +	
5	A A A A A A A A A A A A A A A A A A A	+ j	8		-	4	」 、、	1	↓ ↓		*	_		0	7 7 1	• • <u>[</u>	€ 0 ← 0	
NA →			NA +		-	1		1	↑ ↑	↑ ↑	#	_		NA	+ \ + \ - \ - \ - \ - \ - \ - \ - \ - \		€ ◆ NA •	
5-Min Count Period Beginning At	Left		on Blvd bound) Right	U	Left		on Blvd bound) Right	U	Left		son Rd ound) Right	U	Left		son Rd bound) Right	U	Total	Hourly Totals
7:00 AM 7:05 AM 7:10 AM 7:11 AM 7:120 AM 7:25 AM 7:30 AM 7:35 AM 7:40 AM 7:55 AM 8:00 AM 8:05 AM 8:10 AM 8:15 AM 8:20 AM 8:25 AM 8:30 AM 8:35 AM 8:40 AM 8:35 AM 8:40 AM 8:40 AM 8:55 AM	10 6 18 11 16 12 12 12 8 14 14 18 25 17 25 24 20 11 18 17 13 10 11 13 8	47 73 37 86 86 82 77 102 94 117 75 94 63 65 53 77 64 43 53	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 0 0 0 1 0 0 0 0 0 1 3 1 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 1 0 2 1 1 0 0 0 0 0 1 1 1 1 1 0 0 0 0	159 214 122 1704 153 94 145 172 136 122 129 172 132 132 128 132 127 128 135 127 120 125 135 125 115 114 South	24 11 15 12 11 19 28 17 24 32 35 27 18 19 14 24 20 23	1 0 3 1 1 0 1 0 1 0 1 3 0 0 1 1 3 0 0 1 1 0 0 1 0 1	24 20 15 16 21 27 29 32 23 38 28 25 41 28 22 21 27 13 16 21 27 29 21 21 21 21 21 21 21 21 21 21 21 21 21	0 1 0 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0	19 17 28 19 18 18 21 22 17 19 29 21 16 29 21 19 29 21 19 19 19 19 19 19 19 19 19 19 19 19 19	0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 1 0 0 1 1 0 0 0 1 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 1 1 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		275 358 240 316 258 303 247 317 351 379 345 309 363 344 294 291 253 301 248 279 249 257 229 233	3698 3786 3792 3826 3891 3796 3797 3757 3655 3533 3417 3341
Flowrates	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		tal
All Vehicles Heavy Trucks Pedestrians Bicycles Railroad Stopped Buses	184 16 0	1472 28 8 1	0 0 0	0	0 0	1720 32 8 1	256 8 0	8	372 12 0	8 0 8 0	260 16 0	0	12 0 0	4 0 12 0	4 0 0	0	1:	300 12 36 2
Comments:																		



310 N. Irwin Street - Suite 20 Hanford, CA 93230

800-975-6938 Phone/Fax www.metrotrafficdata.com

Turning Movement Report

Prepared For:

Kittelson & Associates, Inc. 155 Grand Avenue, Suite 900 Oakland, CA 94612

 LOCATION
 Mission Blvd @ Harder Rd
 LATITUDE
 37.651118°

 COUNTY
 Alameda
 LONGITUDE
 -122.067056°

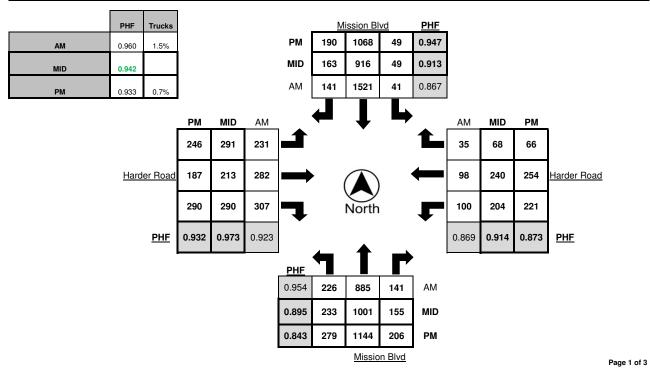
 COLLECTION DATE
 Thursday, June 02, 2016
 WEATHER
 Sunny and Clear

		North	bound			South	bound			Eastb	ound			Westl	oound	
Time	Left	Thru	Right	Trucks												
7:00 AM - 7:15 AM	20	200	18	7	7	408	31	9	39	14	33	1	20	19	8	1
7:15 AM - 7:30 AM	28	213	13	8	1	395	36	8	59	24	44	4	23	13	2	1
7:30 AM - 7:45 AM	35	221	34	4	8	450	33	10	54	62	60	1	30	26	5	1
7:45 AM - 8:00 AM	54	225	44	6	13	386	33	5	53	92	77	1	25	31	11	1
8:00 AM - 8:15 AM	72	219	37	2	11	351	37	9	67	69	86	3	27	22	9	2
8:15 AM - 8:30 AM	65	220	26	6	9	334	38	9	57	59	84	1	18	19	10	0
8:30 AM - 8:45 AM	61	243	35	3	10	385	47	12	45	48	51	1	16	5	5	2
8:45 AM - 9:00 AM	43	189	30	7	10	375	41	10	38	61	69	2	21	20	6	1
TOTAL	378	1730	237	43	69	3084	296	72	412	429	504	14	180	155	56	9

		North	bound			South	bound			Easth	oound			West	bound	
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
2:00 PM - 2:15 PM	37	227	32	2	14	172	39	11	41	65	56	1	54	84	22	2
2:15 PM - 2:30 PM	47	267	31	6	7	212	43	12	60	34	71	3	41	55	25	2
2:30 PM - 2:45 PM	55	257	26	10	8	188	34	6	66	31	72	2	45	52	16	1
2:45 PM - 3:00 PM	64	364	36	13	5	194	23	4	61	28	67	2	44	54	11	1
3:00 PM - 3:15 PM	55	232	26	4	7	223	39	7	70	45	89	3	40	52	12	1
3:15 PM - 3:30 PM	61	253	31	5	13	246	50	6	83	44	76	1	53	55	21	1
3:30 PM - 3:45 PM	61	242	40	4	12	222	42	8	74	58	68	1	59	69	12	4
3:45 PM - 4:00 PM	56	274	58	1	17	225	32	6	64	66	57	1	52	64	23	1
TOTAL	436	2116	280	45	83	1682	302	60	519	371	556	14	388	485	142	13
2:15 PM - 3:15 PM	221	1120	119	33	27	817	139	29	257	138	299	10	170	213	64	5
	Ē.															

Trucks				2%												
Time	Left	Thru	Right	Trucks												
4:00 PM - 4:15 PM	46	262	50	6	8	254	37	10	73	43	67	1	58	56	25	1
4:15 PM - 4:30 PM	61	271	34	12	8	239	51	6	62	44	66	1	52	51	22	2
4:30 PM - 4:45 PM	54	312	46	7	10	244	39	4	68	53	80	4	40	51	14	1
4:45 PM - 5:00 PM	66	314	58	4	8	247	45	7	81	34	79	1	46	44	13	1
5:00 PM - 5:15 PM	66	320	37	6	10	274	46	3	68	35	72	2	55	56	20	0
5:15 PM - 5:30 PM	63	236	30	3	14	283	48	5	62	59	73	1	73	63	19	0
5:30 PM - 5:45 PM	65	280	49	0	10	266	44	1	54	41	72	0	44	52	15	0
5:45 PM - 6:00 PM	85	308	90	7	15	245	52	0	62	52	73	0	49	83	12	0
TOTAL	506	2303	394	45	83	2052	362	36	530	361	582	10	417	456	140	5

		North	bound			South	bound			Eastk	ound			Westl	bound	
PEAK HOUR	Left	Thru	Right	Trucks												
7:30 AM - 8:30 AM	226	885	141	18	41	1521	141	33	231	282	307	6	100	98	35	4
3:00 PM - 4:00 PM	233	1001	155	14	49	916	163	27	291	213	290	6	204	240	68	7
5:00 PM - 6:00 PM	279	1144	206	16	49	1068	190	9	246	187	290	3	221	254	66	0





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Turning Movement Report

Prepared For:

Kittelson & Associates, Inc. 155 Grand Avenue, Suite 900 Oakland, CA 94612

 LOCATION
 Mission Blvd @ Harder Rd
 LATITUDE
 37.651118°

 COUNTY
 Alameda
 LONGITUDE
 -122.067056°

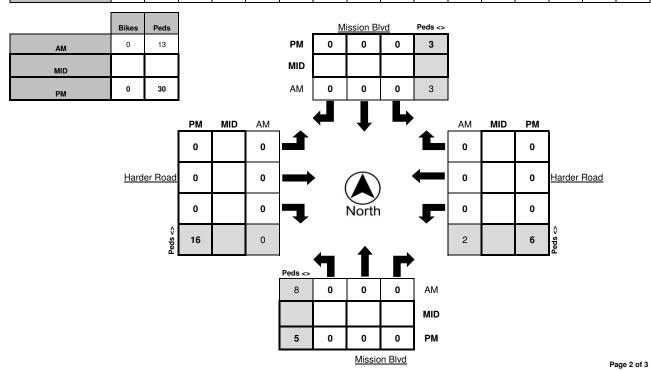
 COLLECTION DATE
 Thursday, June 02, 2016
 WEATHER
 Sunny and Clear

	Nort	hbound B	Bikes	N.Leg	Sout	thbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	stbound B	ikes	W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	1	0	0	0	5	0	0	0	1	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	6	0	0	0	1	0	0	0	1
8:30 AM - 8:45 AM	0	0	0	1	0	0	0	6	0	0	0	2	0	0	0	2
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0
TOTAL	0	0	0	6	0	0	0	22	0	0	0	6	0	0	0	4

	Nort	hbound E	Bikes	N.Leg	Sout	thbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	tbound B	ikes	W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	5
2:15 PM - 2:30 PM	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	5
2:30 PM - 2:45 PM	0	0	0	5	0	0	0	5	0	0	0	4	0	0	0	4
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0	2
3:00 PM - 3:15 PM	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0	1
3:15 PM - 3:30 PM	0	0	0	6	0	1	0	3	0	0	0	1	0	0	0	7
3:30 PM - 3:45 PM	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	2
3:45 PM - 4:00 PM	0	0	0	2	0	1	0	3	0	0	0	4	0	0	0	1
TOTAL	0	0	0	32	0	3	0	16	0	0	0	16	0	0	0	27
2:15 PM - 3:15 PM	0	0	0	15	0	0	0	10	0	0	0	10	0	0	0	12

	Nort	hbound B	likes	N.Leg	Sout	thbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	tbound B	ikes	W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	2
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM - 5:00 PM	0	0	0	3	0	0	0	3	0	0	0	2	0	0	0	9
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	3	0	0	0	5	0	0	0	6	0	0	0	16

_	Nort	thbound E	Bikes	N.Leg	Sou	thbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	stbound B	ikes	W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:30 AM - 8:30 AM	0	0	0	3	0	0	0	8	0	0	0	2	0	0	0	0
5:00 PM - 6:00 PM	0	0	0	3	0	0	0	5	0	0	0	6	0	0	0	16





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800-975-6938 Phone/Fax www.metrotrafficdata.com

Turning Movement Report

Prepared For:

Kittelson & Associates, Inc. 155 Grand Avenue, Suite 900 Oakland, CA 94612

 LOCATION
 Mission Blvd @ Harder Rd

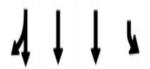
 COUNTY
 Alameda

 COLLECTION DATE
 Thursday, June 02, 2016

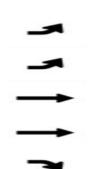
 CYCLE TIME
 140 Seconds

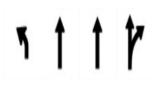
N/S STREET	Mission Blvd
E/W STREET	Harder Road
WEATHER	Sunny and Clear
CONTROL TYPE	Signal

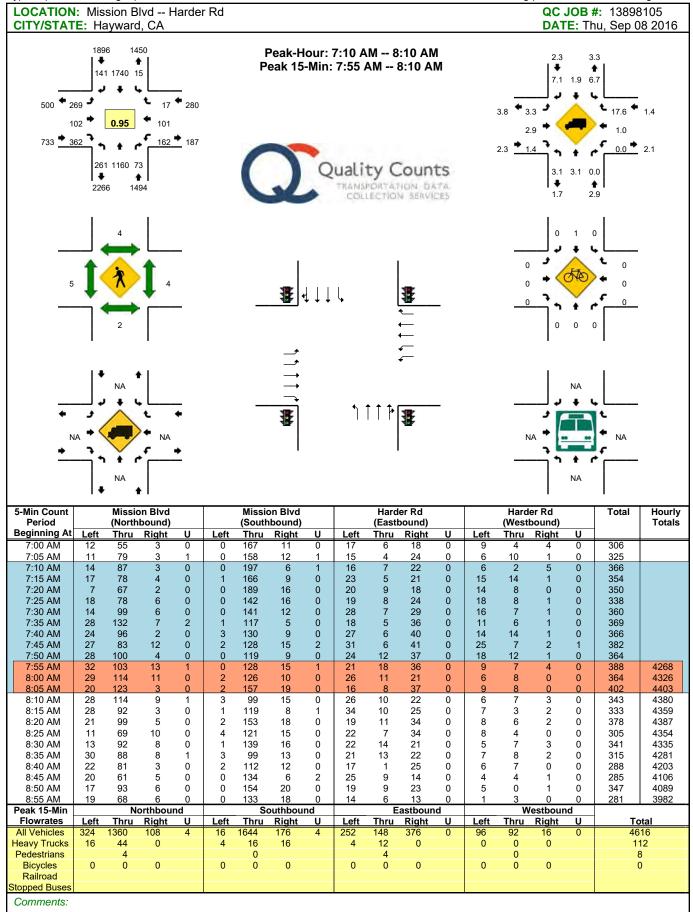
COMMENTS All approaches have protected left turns.

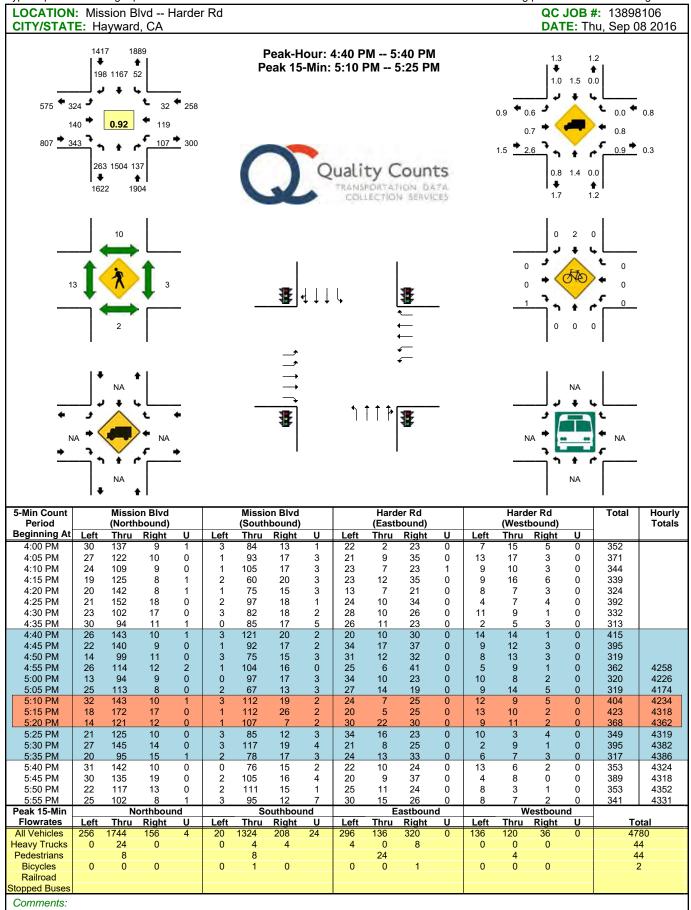


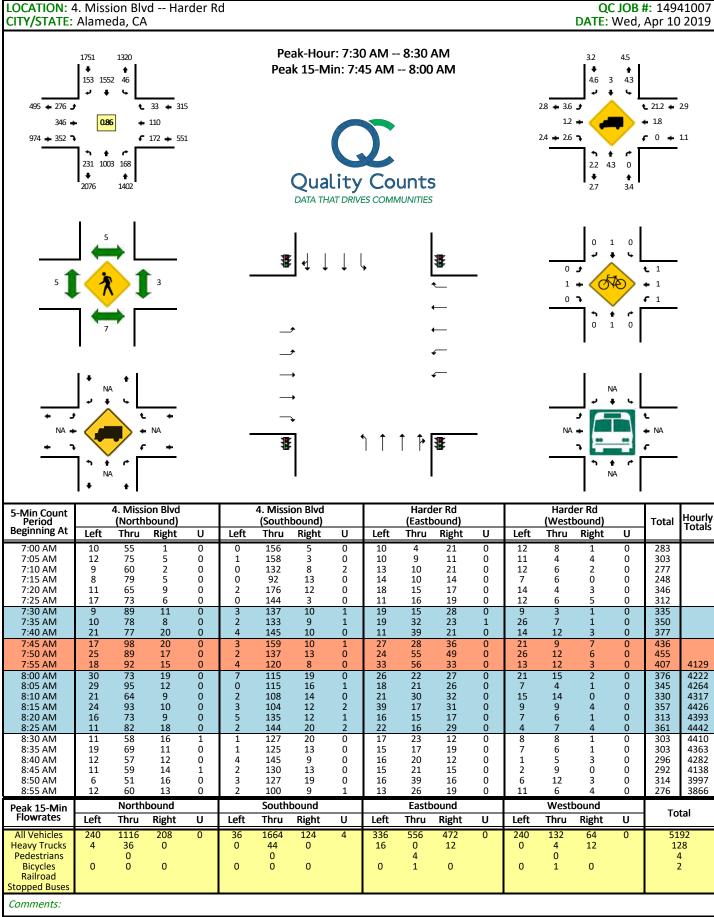


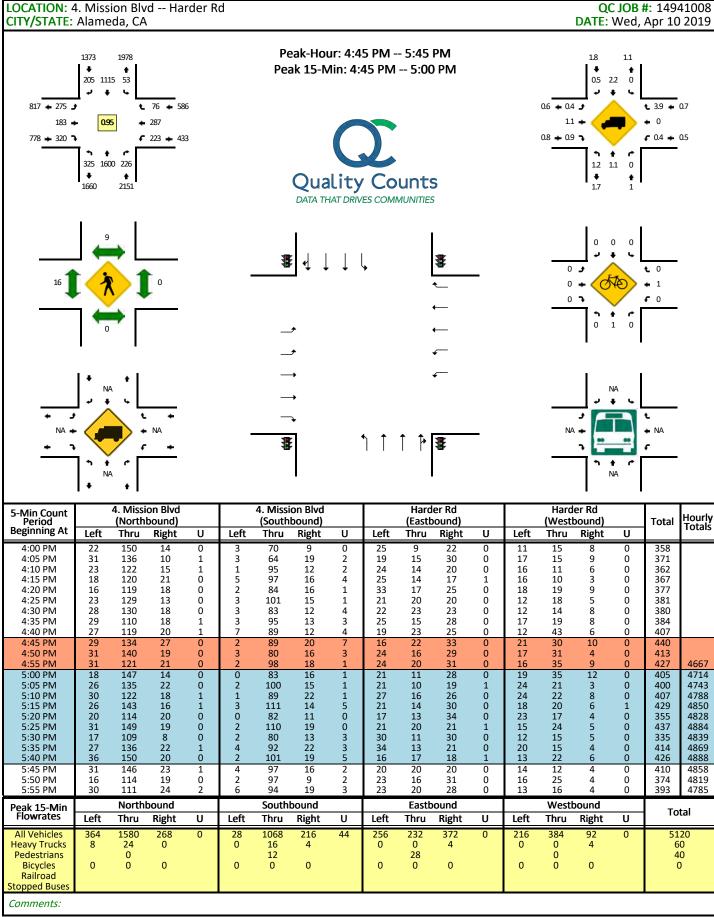


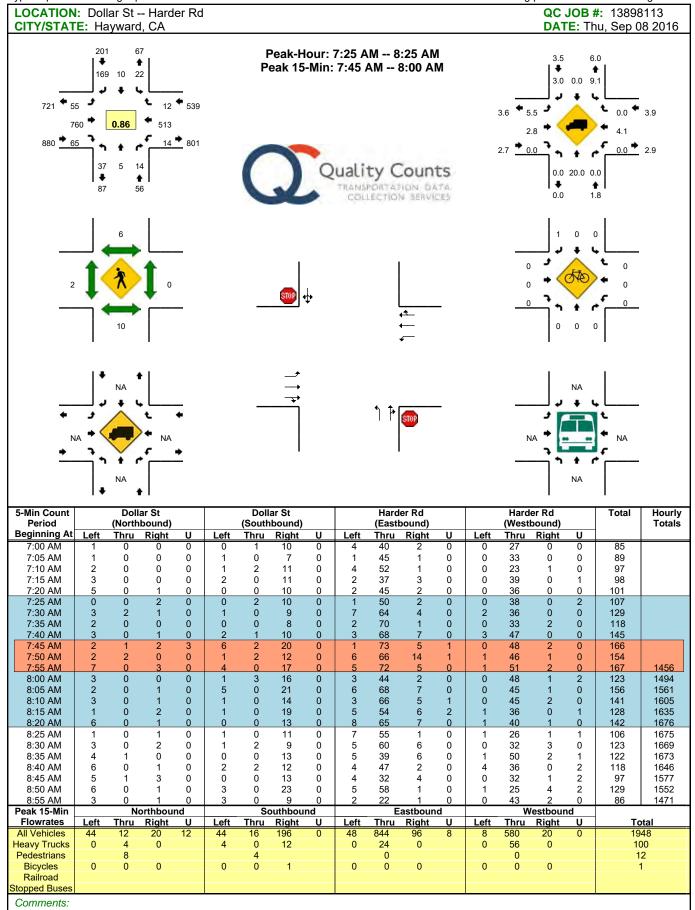


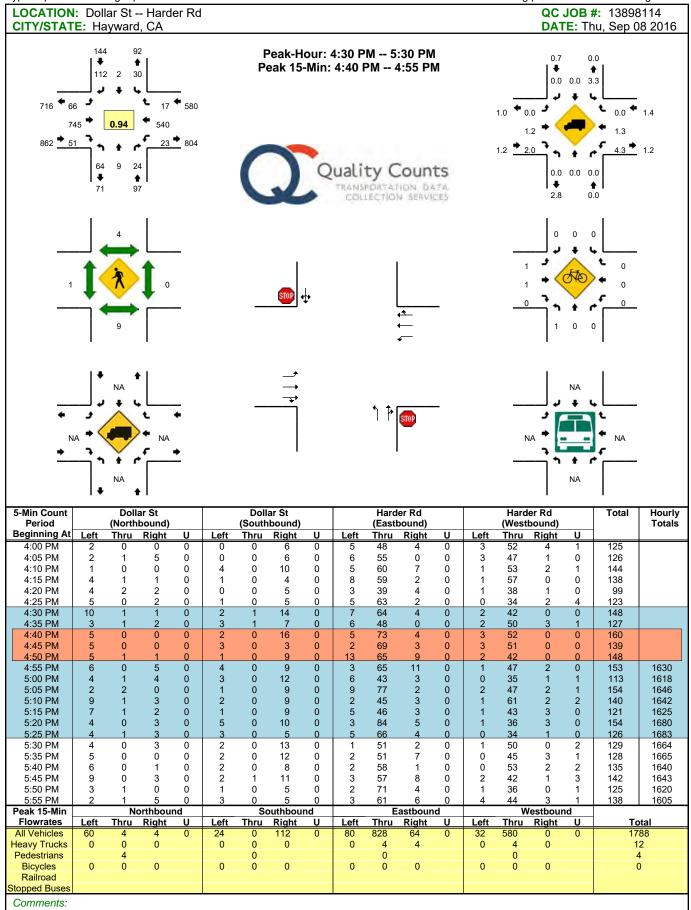














LOCATION

COUNTY

Metro Traffic Data Inc.

310 N. Irwin Street - Suite 20 Hanford, CA 93230

800-975-6938 Phone/Fax www.metrotrafficdata.com

Prepared For:

37.650355°

Turning Movement Report

Kittelson & Associates, Inc. 155 Grand Avenue, Suite 900 Oakland, CA 94612

System Peak

46 66 85 2 242 44 453 8 293 1197 11 8 34 684 216

Harder Road @ Jane Avenue LATITUDE LONGITUDE Alameda

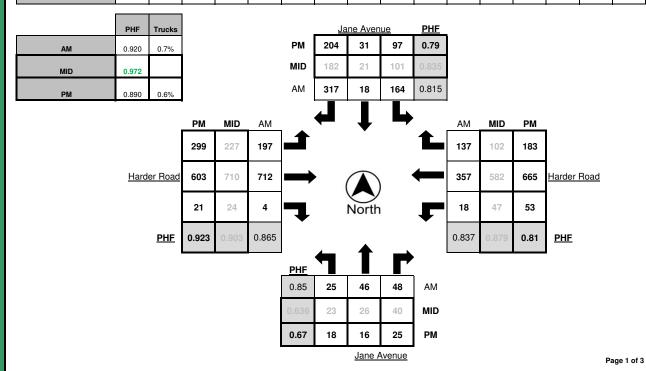
-122.071031° WEATHER Sunny and Clear

COLLECTIO	COLLECTION DATE			lay, June 0	2, 2016			WE	EATHER		Su	nny and Cl	ear			
		North	bound			South	bound			Eastb	ound			Westl	bound	
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	4	8	11	0	12	2	37	0	19	75	1	1	0	59	24	1
7:15 AM - 7:30 AM	4	5	10	0	19	2	37	3	26	103	1	4	4	66	21	4
7:30 AM - 7:45 AM	7	15	13	0	27	3	47	0	41	159	0	0	3	79	19	2
7:45 AM - 8:00 AM	5	6	16	0	45	5	78	0	61	201	2	1	4	87	39	2
8:00 AM - 8:15 AM	7	16	11	1	44	7	102	3	37	149	0	0	4	100	49	3
8:15 AM - 8:30 AM	6	9	8	1	48	3	90	1	58	203	2	1	7	91	30	0
8:30 AM - 8:45 AM	6	4	9	0	21	1	36	0	29	139	2	0	7	104	17	6
8:45 AM - 9:00 AM	7	3	7	0	26	21	26	1	22	168	3	1	5	98	17	4

		North	bound			South	bound			Eastb	ound			Westl	oound	
Time	Left	Thru	Right	Trucks												
2:00 PM - 2:15 PM	0	0	9	1	13	1	28	1	41	167	3	4	7	150	29	4
2:15 PM - 2:30 PM	9	5	6	0	22	4	57	3	54	165	2	5	9	130	25	2
2:30 PM - 2:45 PM	8	3	9	0	16	6	45	1	49	162	2	4	11	104	34	4
2:45 PM - 3:00 PM	4	9	12	0	21	4	66	1	63	151	6	2	15	135	21	2
3:00 PM - 3:15 PM	6	0	9	2	30	10	40	0	58	175	8	5	8	129	27	2
3:15 PM - 3:30 PM	9	14	12	0	20	4	43	0	56	206	4	2	10	155	23	2
3:30 PM - 3:45 PM	4	3	7	0	30	3	33	1	50	178	6	6	14	163	31	4
3:45 PM - 4:00 PM	3	13	5	0	29	8	34	3	50	165	9	5	10	108	32	1
TOTAL	43	47	69	3	181	40	346	10	421	1369	40	33	84	1074	222	21
2:15 PM - 3:15 PM	27	17	36	2	89	24	208	5	224	653	18	16	43	498	107	10

		North	bound			South	bound			Eastb	ound			Westl	oound	
Time	Left	Thru	Right	Trucks												
4:00 PM - 4:15 PM	5	5	4	0	36	3	43	0	54	197	5	7	7	180	29	4
4:15 PM - 4:30 PM	1	3	3	0	26	9	44	1	50	145	5	3	7	168	32	1
4:30 PM - 4:45 PM	2	6	9	0	33	13	24	1	52	164	5	2	13	144	23	2
4:45 PM - 5:00 PM	6	5	10	0	26	12	41	0	60	155	6	3	8	152	41	1
5:00 PM - 5:15 PM	3	3	9	0	26	5	51	0	66	166	6	2	15	177	39	0
5:15 PM - 5:30 PM	2	5	6	1	22	9	42	0	64	163	10	3	11	162	47	0
5:30 PM - 5:45 PM	3	3	3	0	27	11	67	0	75	120	3	2	7	122	43	0
5:45 PM - 6:00 PM	10	5	7	0	22	6	44	2	94	154	2	2	20	204	54	2
TOTAL	32	35	51	1	218	68	356	4	515	1264	42	24	88	1309	308	10

		North	bound			South	bound			Eastb	ound			Westl	oound	
PEAK HOUR	Left	Thru	Right	Trucks												
7:30 AM - 8:30 AM	25	46	48	2	164	18	317	4	197	712	4	2	18	357	137	7
2:45 PM - 3:45 PM	23	26	40	2	101	21	182	2	227	710	24	15	47	582	102	10
5:00 PM - 6:00 PM	18	16	25	1	97	31	204	2	299	603	21	9	53	665	183	2





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Turning Movement Report

Prepared For:

Kittelson & Associates, Inc. 155 Grand Avenue, Suite 900 Oakland, CA 94612

 LOCATION
 Harder Road @ Jane Avenue
 LATITUDE
 37.650355°

 COUNTY
 Alameda
 LONGITUDE
 -122.071031°

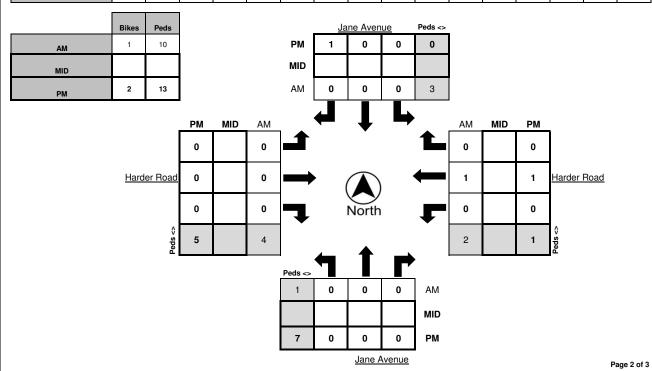
 COLLECTION DATE
 Thursday, June 02, 2016
 WEATHER
 Sunny and Clear

	Nort	hbound E	Bikes	N.Leg	Sout	thbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	stbound B	ikes	W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1
7:15 AM - 7:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	3
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0	3
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	0	0	0	8	0	0	0	4	0	0	0	3	0	2	0	8

	Nort	hbound E	Bikes	N.Leg	Sout	thbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	stbound B	ikes	W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	4	0	0	0	2	0	0	0	1	0	0	0	2
2:15 PM - 2:30 PM	0	0	0	6	0	0	0	1	0	0	0	1	0	0	0	5
2:30 PM - 2:45 PM	0	0	0	3	0	0	0	4	0	0	0	6	0	0	0	2
2:45 PM - 3:00 PM	0	0	1	2	0	1	0	0	0	0	0	1	0	0	0	1
3:00 PM - 3:15 PM	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	4	0	0	0	1	0	0	0	1	0	0	0	2
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1
3:45 PM - 4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	1	22	1	1	0	10	0	0	0	10	0	0	0	13
2:15 PM - 3:15 PM	0	0	1	13	1	1	0	5	0	0	0	8	0	0	0	8

	Nort	hbound B	likes	N.Leg	Sout	thbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	tbound B	ikes	W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	2
4:30 PM - 4:45 PM	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	1
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	1	7	0	0	0	1	0	1	0	5

_	Nort	thbound E	Bikes	N.Leg	Sou	thbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	stbound B	ikes	W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:30 AM - 8:30 AM	0	0	0	3	0	0	0	1	0	0	0	2	0	1	0	4
2:45 PM - 3:45 PM																
5:00 PM - 6:00 PM	0	0	0	0	0	0	1	7	0	0	0	1	0	1	0	5





310 N. Irwin Street - Suite 20 Hanford, CA 93230

800-975-6938 Phone/Fax www.metrotrafficdata.com

Turning Movement Report

Prepared For:

Kittelson & Associates, Inc. 155 Grand Avenue, Suite 900 Oakland, CA 94612

LOCATION Harder Road @ Jane Avenue COUNTY Alameda

COLLECTION DATE Thursday, June 02, 2016

CYCLE TIME ______ 111 Seconds

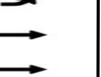
N/S STREET	Jane Avenue
E/W STREET	Harder Road
WEATHER	Sunny and Clear
CONTROL TYPE	Signal

COMMENTS Northbound and southbound left turns are permitted. Eastbound and westbound left turns are protected.













310 N. Irwin Street - Suite 20 Hanford, CA 93230

800-975-6938 Phone/Fax www.metrotrafficdata.com

Turning Movement Report

Prepared For:

Kittelson &

155 Grand Avenue, Suite 900 Oakland, CA 94612

 LOCATION
 Harder Road @ Soto Road
 LATITUDE
 37.649377°

 COUNTY
 Alameda
 LONGITUDE
 -122.076821°

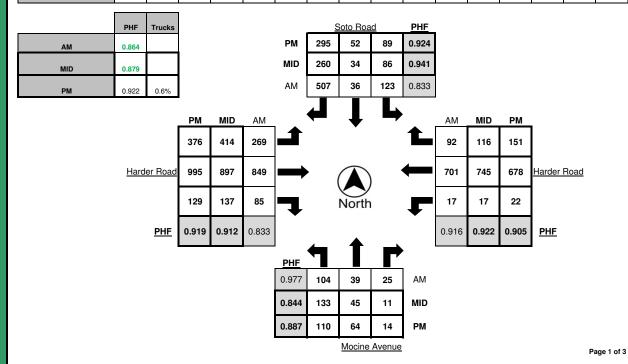
 COLLECTION DATE
 Thursday, June 02, 2016
 WEATHER
 Sunny and Clear

		North	bound			South	bound			Easth	ound			Westl	oound	
Time	Left	Thru	Right	Trucks												
7:00 AM - 7:15 AM	20	4	2	1	8	4	98	6	30	88	5	2	2	97	10	4
7:15 AM - 7:30 AM	19	10	9	1	14	3	112	3	38	108	10	6	4	112	5	4
7:30 AM - 7:45 AM	29	8	3	2	20	1	144	3	35	159	8	3	2	137	11	3
7:45 AM - 8:00 AM	30	6	7	1	41	4	142	4	72	216	8	4	0	203	15	3
8:00 AM - 8:15 AM	25	12	6	0	40	9	151	4	65	276	20	9	7	182	28	4
8:15 AM - 8:30 AM	25	10	7	1	26	14	119	7	71	190	31	1	4	185	32	2
8:30 AM - 8:45 AM	24	11	5	0	16	9	95	1	61	167	26	8	6	131	17	9
8:45 AM - 9:00 AM	27	9	3	0	22	5	68	2	50	157	17	7	2	135	12	2
TOTAL	199	70	42	6	187	49	929	30	422	1361	125	40	27	1182	130	31
7:30 AM - 8:30 AM	109	36	23	4	127	28	556	18	243	841	67	17	13	707	86	12
	•			00/												

		North	bound			South	bound			Easth	ound			Westl	oound	
Time	Left	Thru	Right	Trucks												
2:00 PM - 2:15 PM	34	8	3	0	22	7	43	3	56	159	30	7	0	197	15	3
2:15 PM - 2:30 PM	35	4	4	1	14	12	44	4	61	197	33	9	2	163	19	4
2:30 PM - 2:45 PM	26	7	3	0	17	6	69	4	66	209	29	7	6	166	8	10
2:45 PM - 3:00 PM	27	8	5	0	20	7	60	0	99	211	33	7	3	134	31	6
3:00 PM - 3:15 PM	37	10	3	0	18	15	64	2	105	199	42	7	5	199	34	4
3:15 PM - 3:30 PM	29	8	2	1	21	7	63	1	112	248	37	7	3	183	37	4
3:30 PM - 3:45 PM	33	18	5	2	27	5	69	4	109	213	30	6	4	185	25	5
3:45 PM - 4:00 PM	34	9	1	1	20	7	64	3	88	237	28	8	5	178	20	2
TOTAL	255	72	26	5	159	66	476	21	696	1673	262	58	28	1405	189	38
2:15 PM - 3:15 PM	125	29	15	1	69	40	237	10	331	816	137	30	16	662	92	24
Trucks				3%												

		North	bound			South	bound			Easth	ound			Westl	oound	
Time	Left	Thru	Right	Trucks												
4:00 PM - 4:15 PM	21	7	4	0	14	11	73	2	87	254	31	6	2	183	25	3
4:15 PM - 4:30 PM	35	5	7	1	17	7	56	2	83	223	24	3	5	193	27	3
4:30 PM - 4:45 PM	23	8	6	0	17	9	74	3	95	241	26	5	4	136	27	2
4:45 PM - 5:00 PM	25	11	2	1	23	6	54	1	83	238	33	3	2	162	34	1
5:00 PM - 5:15 PM	23	14	3	0	21	10	72	1	97	224	30	4	5	172	43	0
5:15 PM - 5:30 PM	31	14	5	2	22	13	83	1	93	271	28	3	5	182	33	1
5:30 PM - 5:45 PM	25	15	5	0	19	16	69	0	91	230	28	0	2	147	27	0
5:45 PM - 6:00 PM	31	21	1	0	27	13	71	0	95	270	43	6	10	177	48	1
TOTAL	214	95	33	4	160	85	552	10	724	1951	243	30	35	1352	264	11

		North	bound			South	bound			Easth	ound			Westl	bound	
PEAK HOUR	Left	Thru	Right	Trucks												
7:45 AM - 8:45 AM	104	39	25	2	123	36	507	16	269	849	85	22	17	701	92	18
3:00 PM - 4:00 PM	133	45	11	4	86	34	260	10	414	897	137	28	17	745	116	15
5:00 PM - 6:00 PM	110	64	14	2	89	52	295	2	376	995	129	13	22	678	151	2





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Turning Movement Report

Prepared For:

Kittelson & Associates, Inc. 155 Grand Avenue, Suite 900 Oakland, CA 94612

 LOCATION
 Harder Road @ Soto Road
 LATITUDE
 37.649377°

 COUNTY
 Alameda
 LONGITUDE
 -122.076821°

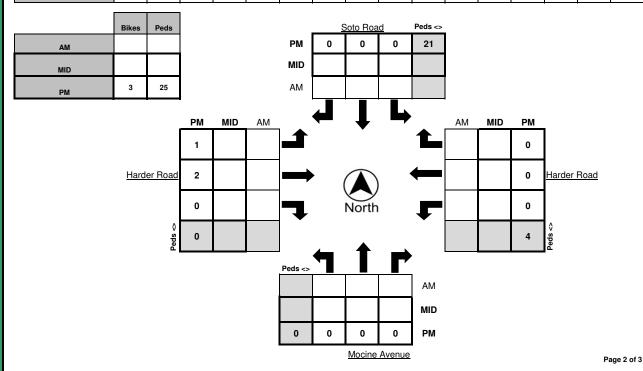
 COLLECTION DATE
 Thursday, June 02, 2016
 WEATHER
 Sunny and Clear

	Nort	hbound E	Bikes	N.Leg	Sou	thbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	stbound B	likes	W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	14	0	0	0	0	0	0	0	1	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	1	0	0	0	0	0	1	0	2	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	4	0	0	0	0	0	0	0	2	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	1	0	0	0	0	0	0	0	3	0	1	0	0
TOTAL	0	0	0	41	0	0	0	1	0	2	0	8	0	1	0	0
7:30 AM - 8:30 AM	0	0	0	35	0	0	0	0	0	1	0	3	0	0	0	0

	Nort	hbound E	Bikes	N.Leg	Sou	thbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	tbound B	likes	W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0	2
2:15 PM - 2:30 PM	0	0	0	6	0	0	0	0	0	0	0	3	0	0	0	1
2:30 PM - 2:45 PM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1
2:45 PM - 3:00 PM	0	0	0	4	0	2	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	7	0	0	0	0	0	0	0	12	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	2
3:30 PM - 3:45 PM	0	0	0	1	0	0	0	0	1	0	1	2	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	4
TOTAL	0	0	0	30	0	2	0	1	1	0	1	24	0	0	0	10
2:15 PM - 3:15 PM	0	0	0	21	0	2	0	0	0	0	0	15	0	0	0	2

	Nort	hbound E	Bikes	N.Leg	Sout	hbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	tbound B	ikes	W.Leg
Time	Left	Thru	Right	Peds												
4:00 PM - 4:15 PM	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	4	0	0	0	0	0	1	0	2	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	8	0	0	0	0	1	1	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	4	0	0	0	0	0	0	0	2	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	21	0	0	0	0	1	2	0	4	0	0	0	0

	Nort	hbound E	Bikes	N.Leg	Sout	hbound E	Bikes	S.Leg	Eas	tbound B	ikes	E.Leg	Wes	tbound B	likes	W.Leg
PEAK HOUR	Left	Thru	Right	Peds												
7:45 AM - 8:45 AM																
3:00 PM - 4:00 PM	0	0	0	16	0	2	0	0	0	0	0	7	0	0	0	4
5:00 PM - 6:00 PM	0	0	0	21	0	0	0	0	1	2	0	4	0	0	0	0





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800-975-6938 Phone/Fax www.metrotrafficdata.com

Turning Movement Report

Prepared For:

Kittelson & Associates, Inc. 155 Grand Avenue, Suite 900 Oakland, CA 94612

LOCATION Harder Road @ Soto Road COUNTY Alameda

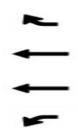
COLLECTION DATE Thursday, June 02, 2016

CYCLE TIME 108 Seconds

N/S STREET	Soto Road
E/W STREET	Harder Road
WEATHER	Sunny and Clear
CONTROL TYPE	Signal

COMMENTS Eastbound and westbound left turns are protected. Northbound and southbound left turns are permitted.









Project #25541 Appendices

Appendix 2 Alameda CTC Development Review Complete Streets Checklist



Development Review Complete Streets Checklist

This checklist is designed to assist the applicant and jurisdiction staff identify and assess a range of Complete Streets-related needs in the vicinity of each development. These needs, if addressed, would better serve the multimodal transportation needs of those coming and going from the site and the surrounding area. The checklist is to be completed during the pre-application phase, but can be used as a reference throughout the development and design of the project. Following completion of the checklist, staff will identify and document project modifications for further evaluation and discussion.

Project Name: Hayward Retail Center	Project Description / Project Type: Retail				
Project Location :26231 Mission Boulevard, Hayward, California					
Project Manager: Mike Alston, Kittelson & Associates, Inc.					
Anticipated construction date: 2022					

Pre-Application Phase

10	Application i hase		I			
Pro	oject Description		Adjacent Street 1 N	ame: <u>Mission Bo</u>	oulevard	
1.	What are the proposed land uses (check all that ap		Auto		□Second	□Other
	☐ residential ☐ commercial /mixed use ☐	∃ industrial	Bicycle	☐ First	⊠Second	□Other
	□ civic/institutional □ other: Click or to	ap here to enter text.	Pedestrian	☐ First	□Second	□Other
2.	What are the major trip generators near the proje (existing and future)	Transit Trucks	☐ First ☐ First	□Second □Second	□Other □Other	
	a) Schools	⊠ yes □ no	Adjacent Street 2 N	ame: <u>Harder Ro</u> a	<u>ad</u>	
	b) Major employers	⊠ yes □ no	Auto	□First	□Second	□Other
	c) Civic/community destinations	⊠ yes □ no	Bicycle		□Second	□Other
	d) Medium to high-density residential	⊠ yes □ no	Pedestrian	☐ First	⊠Second	□Other
	e) Senior centers/healthcare facilities	□ yes ⊠ no	Transit	☐ First	□Second	□Other
	f) Daily needs (grocery, retail, etc.)g) Other: Click or tap here to enter text.	⊠ yes □ no	Trucks	☐ First	□Second	□Other
3	Is the project site located on the path to/from nea	arby trin generators?	Adjacent Street 3 N	ame: Click or tap	here to enter text.	
٥.	✓ yes ☐ no	inby trip generators:	Auto	☐ First	□Second	□Other
	Explain: Mission Blvd. is a state route east of the	project site.	Bicycle	☐ First	□Second	□Other
		•	Pedestrian	☐ First	□Second	□Other
4.	Based on the modal priority maps (available		Transit	☐ First	□Second	□Other
	ctc.maps.arcgis.com/apps/View/index.html?appid a5f59c6e82ca16c7), list the modal priorities on adj that apply):		Trucks	☐ First	□Second	□Other

Work with Transportation and Engineering Staff to fill out questions 5-8.

- - If yes, explain: Broadside fatal crash occurred on roadway 1,075 feet south of Mission Boulevard and Harder Road. Fatal crash occurred south of the project site.
- 6. Within the past five years, have there been any collisions within ¼ mile of the site involving pedestrians or bicyclists? ⊠yes □no

If yes, explain: Eight crashes involved pedestrians and one crash involved a bicyclist. One pedestrian related crash was a fatal crash.

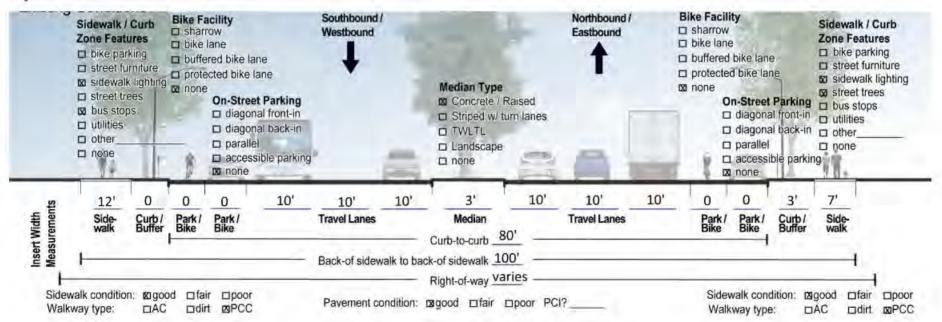
7.	Have you observed other oppor	tunities to	improve safety performance?
	(based on field observation)	□ves	□no

If yes, note: Pedestrian crossings on Harder Road in the project vicinity are limited to signalized intersections and one improved crossing at Franklin Avenue--four crossing locations in about 3,000 feet (one every 750 feet). The crossings at Franklin Avenue and Mission Boulevard are high-visibility continental crossings; the crossings at Soto Road and Jane Avenue are basic transverse crossings striped yellow for school proximity. More frequent crossing opportunities would improve pedestrian accessibility and safety. Harder Road includes on-street Class II bicycle lanes but but 2020 Hayward Bicycle and Pedestrian Master Plan recommends separated Class IV bicycle lanes which would improve comfort and safety. The Plan also recommends Class IV bicycle lanes on Mission Boulevard, which does not include any bicycle facilities in the study area.

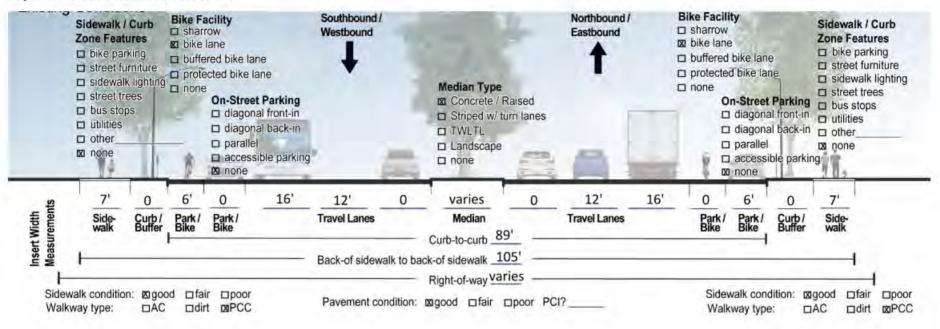
Existing Physical Conditions

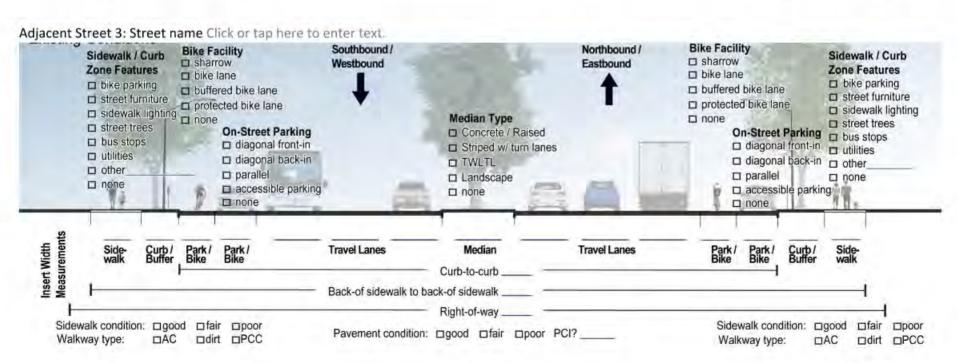
8. What are the existing right-of-way elements adjacent to the project site? Use cross section graphic for each street adjacent to the site.

Adjacent Street 1 name: Mission Boulevard



Adjacent Street 2 name: Harder Road





Plans, Policies, Guidelines, and Standards

9. What are relevant ongoing or existing plans?

Plan	Identifie	ed Needs	(yes or no)		
Pidii	Ped	Bike	Transit	Vehicular	Other
Bicycle and Pedestrian	⊠ yes	⊠ yes	⊠ yes	□ yes	□ yes
Master Plan	□ no	□ no	□ no	□ no	□ no
Click or tap here to enter text.	☐ yes	☐ yes	☐ yes	☐ yes	□ yes
	☐ no	☐ no	☐ no	☐ no	□no
Click or tap here to enter text.	☐ yes	□ yes	□ yes	☐ yes	☐ yes
	☐ no	□no	□ no	☐ no	☐ no
Click or tap here to enter text.	□ yes	☐ yes	□ yes	□ yes	☐ yes
	□ no	☐ no	□ no	□ no	☐ no
Click or tap here to enter text.	□ yes	☐ yes	□ yes	□ yes	☐ yes
	□ no	☐ no	□ no	□ no	☐ no

List any transportation improvement needs identified in the plan documents listed above:

Bicycle and Pedestrian Master Plan was completed in 2020.

The Plan designates the following roadways as Pedestrian High Injury Corridors:

- Harder Road between Soto Road and Jane Avenue
- Mission Boulevard between Webster Street and Tennyson Road

Class IV bicycle facilities are recommended along Mission Boulevard and Harder Road.

Transportation Evaluation

(project entrance).

existing conditions at the site and surroundi each mode:	·	
Pedestrian		
Internal site circulation and pedestrian routes	oxtimes yes	□ no
Site access and street frontage	imes yes	□ no
Signage and wayfinding	\square yes	oxtimes no
Intersections and street crossings	oxtimes yes	□ no
Access to/from surrounding area	oxtimes yes	□ no
Lighting	\square yes	oxtimes no
ADA Carillata	⊠ yes	□ no
ADA facilities	•	
Other: Click or tap here to enter text. List any pedestrian deficiencies identified:	☐ yes oad to project si	□ no te.
Other: Click or tap here to enter text. List any pedestrian deficiencies identified:	,	
Other: Click or tap here to enter text. List any pedestrian deficiencies identified: No marked pedestrian crossing across Harder Ro	,	
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ADA facilities Other: Click or tap here to enter text. List any pedestrian deficiencies identified: No marked pedestrian crossing across Harder Ro Bicycle Parking supply and ease of use Site access	oad to project si	te.
Other: Click or tap here to enter text. List any pedestrian deficiencies identified: No marked pedestrian crossing across Harder Re Bicycle Parking supply and ease of use Site access	oad to project si	te. ⊠ no
Other: Click or tap here to enter text. List any pedestrian deficiencies identified: No marked pedestrian crossing across Harder Ro	oad to project si □ yes ⊠ yes	⊠ no
Other: Click or tap here to enter text. List any pedestrian deficiencies identified: No marked pedestrian crossing across Harder Robbe Bicycle Parking supply and ease of use Site access Signage and wayfinding	oad to project si □ yes ⊠ yes □ yes	⊠ no □ no ⊠ no

Auto		
On-street parking	\square yes	oxtimes no
Off-street parking	\boxtimes yes	\square no
Disabled parking	oxtimes yes	\square no
Green infrastructure	oxtimes yes	□ no
Driveway placement and ped/bike conflict points	oxtimes yes	\square no
Other: Click or tap here to enter text.	\square yes	□ no
List any auto deficiencies identified:		
Click or tap here to enter text.		
Transit		
Bus stop placement	oxtimes yes	□no
Waiting area amenities and stop design parameters	oxtimes yes	□ no
Other: Click or tap here to enter text.	\square yes	□ no
List any transit deficiencies identified: No covered waiting area for SB transit stop on Mission B	Soulevard	I
The covered watching area for 35 transfestop on imission 2	,ouic var a	
Trucks and Heavy Vehicles		
Curbside loading areas	☐ yes	⊠ no
On-site loading areas	□ yes	oxtimes no
Turning radii	\square yes	oxtimes no
Emergency vehicle access	\square yes	oxtimes no
Other: Click or tap here to enter text.	\square yes	\square no
List any truck/heavy vehicle deficiencies identified:		
Click or tap here to enter text.		

11. How does the proposed <u>site design</u> impact conditions for each mode? If negative or positive, note the impact. (Note: both negative and positive impacts could be found for one mode.)

		·
Mode	Impacts	
Auto	□ positive□ neutral⊠ negative	Increased delay at Harder Road & Dollar Street plus peak hour signal warrant met
Bicycle	□ positive□ neutral⋈ negative	Without improvement at Harder Road & Dollar Street, increased conflicts at project driveway. With signalization improvement, neutral or positive.
Pedestrian	□ positive⊠ neutral□ negative	Without improvement at Harder Road & Dollar Street, increased conflicts at project driveway. With signalization improvement, neutral or positive.
Transit	□ positive□ neutral⊠ negative	Increased delay at Mission Boulevard & Harder Road (intersection serves AC Transit lines 99 and 801)
Trucks	□ positive⊠ neutral□ negative	
Other mode?	□ positive□ neutral□ negative	

Other mode?	□ positive	
	\square negative	Click or tap here to enter text.

External Agency/Stakeholder Coordination

12. List agencies requiring coordination:

Agency	Has coordination occurred? Note any issues that are outstanding.
AC Transit	□ yes ⊠ no
Click or tap here to enter text.	□ yes □ no
Click or tap here to enter text.	□ yes □ no

This project is not expected to need stakeholder coordination.

Maintenance and Construction Phase Considerations

13. How will access for all modes be maintained during construction (check one box per mode)?

Agency	Auto	Bicycle	Pedestrian	Transit	Trucks
Detour for duration of project					
Time-of-day closures only (e.g. nighttime)					
Short-term closures (e.g. 24 hour) with detour route					
Access maintained with reduced facilities*					
Full access maintained (work does not impact mode)					
Other					

*"Access maintained with reduced facilities" could mean some travel lanes closed for vehicles; could mean bicycle lane is closed, with signage for bicycles to share travel lane; could mean that sidewalk is closed with pedestrian space provided on shoulder; could mean that some transit stops are closed; etc.)

14. Will any transportation facilities or street elements be privately maintained? \Box yes $\ \boxtimes$ $\$ no

If yes, explain: Click or tap here to enter text.

15. Will Complete Streets design be applied on privately maintained facilities? ☐ yes ☒ no