

Appendix C

Transportation Analysis Memorandum

MEMORANDUM

Date: March 24, 2021 Project #25311

To: George Dix, Rincon Consultants

From: Damian Stefanakis and Fernando Sotelo, Kittelson & Associates, Inc.

Project: 25311- 4150 Point Eden Way U-Haul Industrial Development Project

Subject: Transportation Analysis for the 4150 Point Eden Way Industrial Development - Revised

This memorandum presents the vehicle miles traveled (VMT) impact findings for the 4150 Point Eden Way Industrial Development Project (Project). The Project is located at 4150 Pt. Eden Way, in the City of Hayward, California. The Project involves development of a proposed 116,884 square foot industrial building for U-Haul. This memorandum was prepared to evaluate potential transportation impacts and support environmental review for the Project, and includes the following sections:

- A description of the project's uses and proposed access plan
- A review of baseline traffic volumes
- Estimated trip generation for the proposed uses at the site
- Estimated distribution of project vehicle trips to and from the site
- VMT impact analysis

PROJECT DESCRIPTION

The Project is located at 4150 Pt. Eden Way, in the City of Hayward. The site is generally located south of State Route 92 (SR-92) and west of Eden Landing Road. The project site consists of six parcels in the City of Hayward, identified as Assessor Parcel Numbers (APN) 461-0085-0019-00, APN 461-0085-020-01, APN 461-0085-020-02, APN 461-0061-001-00, and APN 461-0090-001-00, and APN 461-0090-002-00. The property is currently vacant except for three dilapidated structures associated with a former salt production operation and associated salt evaporation ponds. The 7.32-acre site is zoned IP (Industrial Park) and per the General Plan is part of the Industrial Corridor of Hayward. Figure 1 shows the Project site location.

The project will develop a 116,884 square foot industrial building consisting of 114,059 square foot warehouse and 2,785 square foot office, and related site improvements. The office space would be provided at the north end of the building, facing State Route 92. The building would be used to house U-Haul storage pods, materials and trucks and their regional corporate offices. Estimated construction duration of the proposed project would be 12 to 18 months, tentatively beginning in 2021.

During operation of the project, approximately 20 to 25 employees would be present. The Project site plan is presented in Figure 2. The proposed industrial building would be used primarily as a warehouse for storage of U-Haul pods and trucks. Containers would be delivered via tractor trailer or other large delivery trucks.

Access to Point Eden Way is via Eden Landing Road from Exit 24 on State Route 92. Ingress and egress to the industrial building would be from a new driveway on Point Eden Way. The driveway would circle the entire building. Surface parking would be provided along the driveway on the north and west sides of the building. A total of 79 parking spaces would be provided, including two spaces dedicated for electric vehicles and two accessible spaces compliant with the Americans with Disabilities Act (ADA). Two bike lockers and two bike stalls would also be provided on-site.

EXISTING CONDITIONS

Roadway Network

The site is accessed from Point Eden Way, primarily via Eden Landing Road and State Route 92. Point Eden road and Eden Landing road are 2-lane undivided roadways with a functional classification of local roadways in the City's General Plan Circulation Element. State Route 92 (SR-92) is a 6-lane Freeway under the jurisdiction of the California Department of Transportation (Caltrans).

Key intersections to access the site are the signalized intersection at Clawiter Road at SR-92 Eastbound Ramps, and the stop-controlled intersections at Clawiter Road at SR-92 Westbound Ramps, and at Eden Landing Road at Point Eden Way.

No historic traffic volumes are available for the intersection of Eden Landing Road at Point Eden Way. Historic traffic counts were obtained from the transportation study for the Clawiter Road Industrial Project¹ for the intersections of Clawiter Road at SR-92 Eastbound Ramps, and Clawiter Road at SR-92 Westbound Ramps. The counts were collected for vehicles, pedestrian and bicycles on Wednesday, August 5, 2020 during the weekday morning (7:00 AM to 9:00 AM) and evening (4:00 PM to 6:00 PM) peak periods. The 2020 counts were compared to traffic counts collected during normal conditions from July 2017. A comparison of the traffic counts collected in 2020 during the COVID-19 pandemic against historic counts indicate the 2020 counts were approximately 20 to 35% lower than normal. Therefore the 2017 counts are used to represent baseline traffic conditions in the study area. Figure 3 shows the existing peak hour traffic volumes at the intersections of Clawiter Road at SR-92 Eastbound Ramps, and Clawiter Road at SR-92 Westbound Ramps. Table 1 and Table 2 summarize the pedestrian and bicycle volume data for these intersections for the weekday AM and weekday PM peak hours,

¹ CEQA Transportation Analysis for the 25800-25858 Clawiter Road Industrial Project (Former Gillig Site), prepared by Kittelson & Associates in January 2021.

respectively. The tables indicate minimal pedestrian and bicycle activity in the study area, indicative of industrial land uses.

Table 1: Pedestrian and Bicycle Volumes (Weekday AM Peak Hour)

#	Intersection	Pedestrian Crossings (by intersection leg)				Northbound Bicycles			Southbound Bicycles			Eastbound Bicycles			Westbound Bicycles		
		N	S	E	W	L	T	R	L	T	R	L	T	R	L	T	R
1	Clawiter Rd. & Breakwater Ct./SR-92 WB Ramps	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0
2	Clawiter Rd. & SR-92 EB Ramps/Eden Landing Rd.	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0

Data Source: Kittelson & Associates, Inc. 2021

Table 2: Pedestrian and Bicycle Volumes (Weekday PM Peak Hour)

#	Intersection	Pedestrian Crossings (by intersection leg)				Northbound Bicycles			Southbound Bicycles			Eastbound Bicycles			Westbound Bicycles		
		N	S	E	W	L	T	R	L	T	R	L	T	R	L	T	R
1	Clawiter Rd. & Breakwater Ct./SR-92 WB Ramps	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0
2	Clawiter Rd. & SR-92 EB Ramps/Eden Landing Rd.	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0

Data Source: Kittelson & Associates, Inc. 2021

Intersection Conditions

To better understand existing conditions near the U-Haul Project site, level of service (LOS) at nearby study intersections were recently evaluated in the transportation study for the Clawiter Road Hines Industrial Project. These are summarized here for information purposes. LOS results are for the weekday AM and PM peak hours. Table 3 provides a summary of the existing LOS for the intersections of Clawiter Road at the SR-92 Ramps. During typical existing (pre-Covid-19) conditions the intersection of Clawiter Rd. & SR-92 EB Ramps/Eden Landing Rd. operates at a deficient LOS F during the weekday PM peak period.

The transportation study for the Clawiter Road Industrial Project recommended that a traffic signal be installed at this location. With signalization, the intersection would operate acceptably at LOS E (79.8 seconds of delay) during the weekday PM peak hour. It should be noted that signalization may occur as part of the planned SR-92/Clawiter interchange improvements. The interchange improvement project involves improving access to and from Route 92 in the area of the existing Route 92 / Clawiter Road Interchange to provide some congestion relief to I-880 and several major arterials, such as Winton Avenue, Clawiter Road, and Depot Road. The City of Hayward will implement this project in two phases. Phase 1 is completed and comprised of local street system modifications (including extension of Whitesell Avenue). Phase 2 will be the reconstruction of the SR 92 Clawiter Road – Whitesell Street Interchange.²

Due to lack of count data before Covid-19, Intersection analysis was not conducted at the main access intersection for the U-Haul site at Eden Landing Road and Point Eden Way. It is assumed that the limited number of project trips would not substantially reduce the operations at this location.

Table 3: Automobile Level of Service, Existing Conditions

#	Intersection	Traffic Control	Weekday AM		Weekday PM	
			Delay (Sec)	LOS	Delay (Sec)	LOS
12	Clawiter Rd. & Breakwater Ct./SR-92 WB Ramps	Signal	36.3	D	28.7	C
13	Clawiter Rd. & SR-92 EB Ramps/Eden Landing Rd.	AWSC	40.8	E	114.3	F

Source: Kittelson & Associates, Inc. 2021

Bold signifies unacceptable operations.

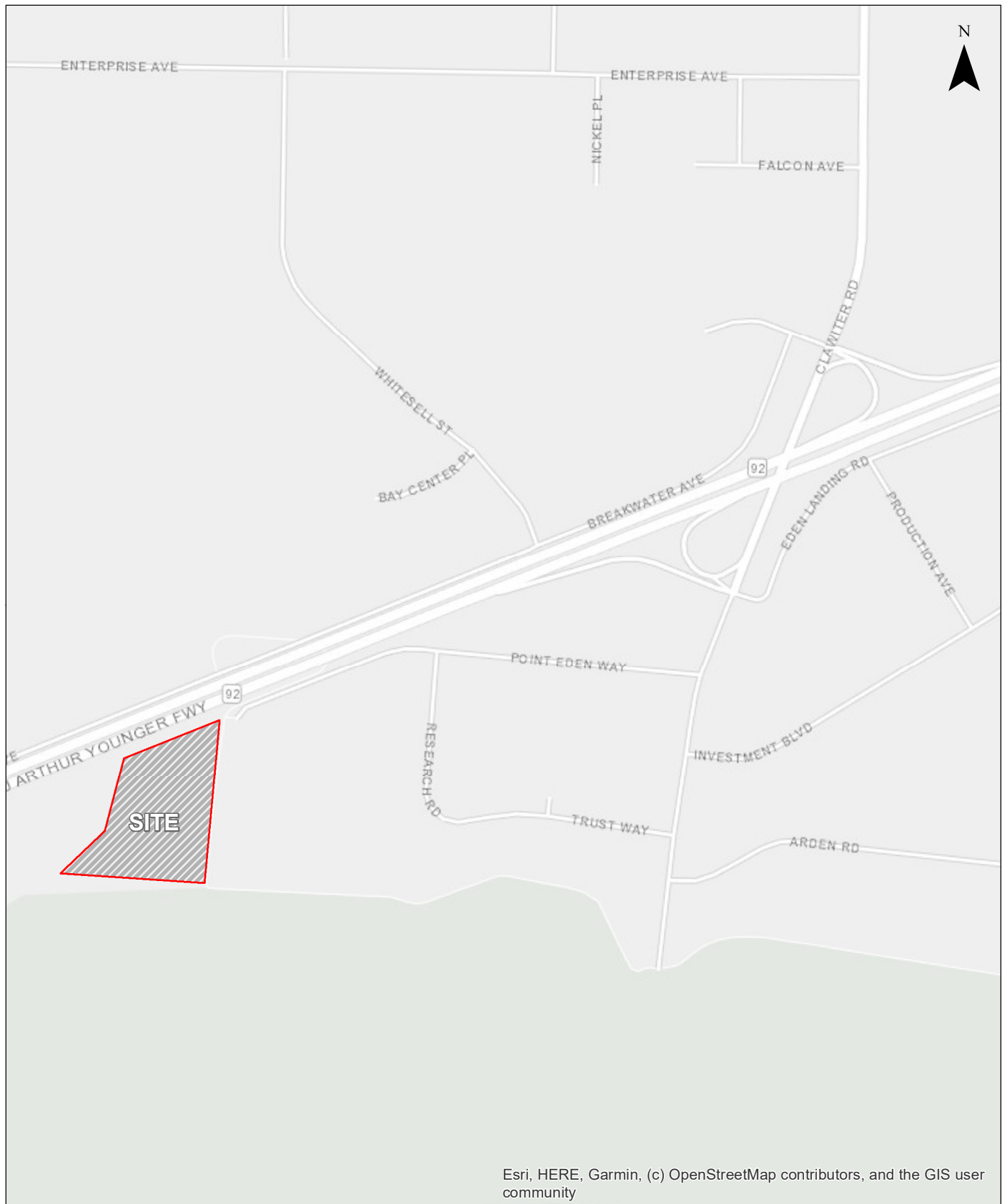
Transit, Pedestrian and Bicycle Facilities

The transit system in the study area consists of local bus service. Alameda-Contra Costa Transit District (AC Transit) provides bus service in the study area. The nearest AC Transit bus route is Route 86. Route 86 begins at the Hayward Bart station and travels west on Winton Avenue, south on Cabot

² https://www.hayward-ca.gov/sites/default/files/documents/RR_Fact_Sheet.pdf

Boulevard, and east on Depot Road. It then travels south on Industrial Boulevard and east on Tennyson Road before terminating at the South Hayward BART station. It has a frequency service during the peak and poo-peak hours of 35 minutes. The nearest bus stop along this route is on Industrial Boulevard at Depot Road, approximately 1 mile from the project site. At the intersection of Clawiter Road and Depot Road, there are seven bus stops within a ¼-mile radius of the intersection that serve the 86 bus.

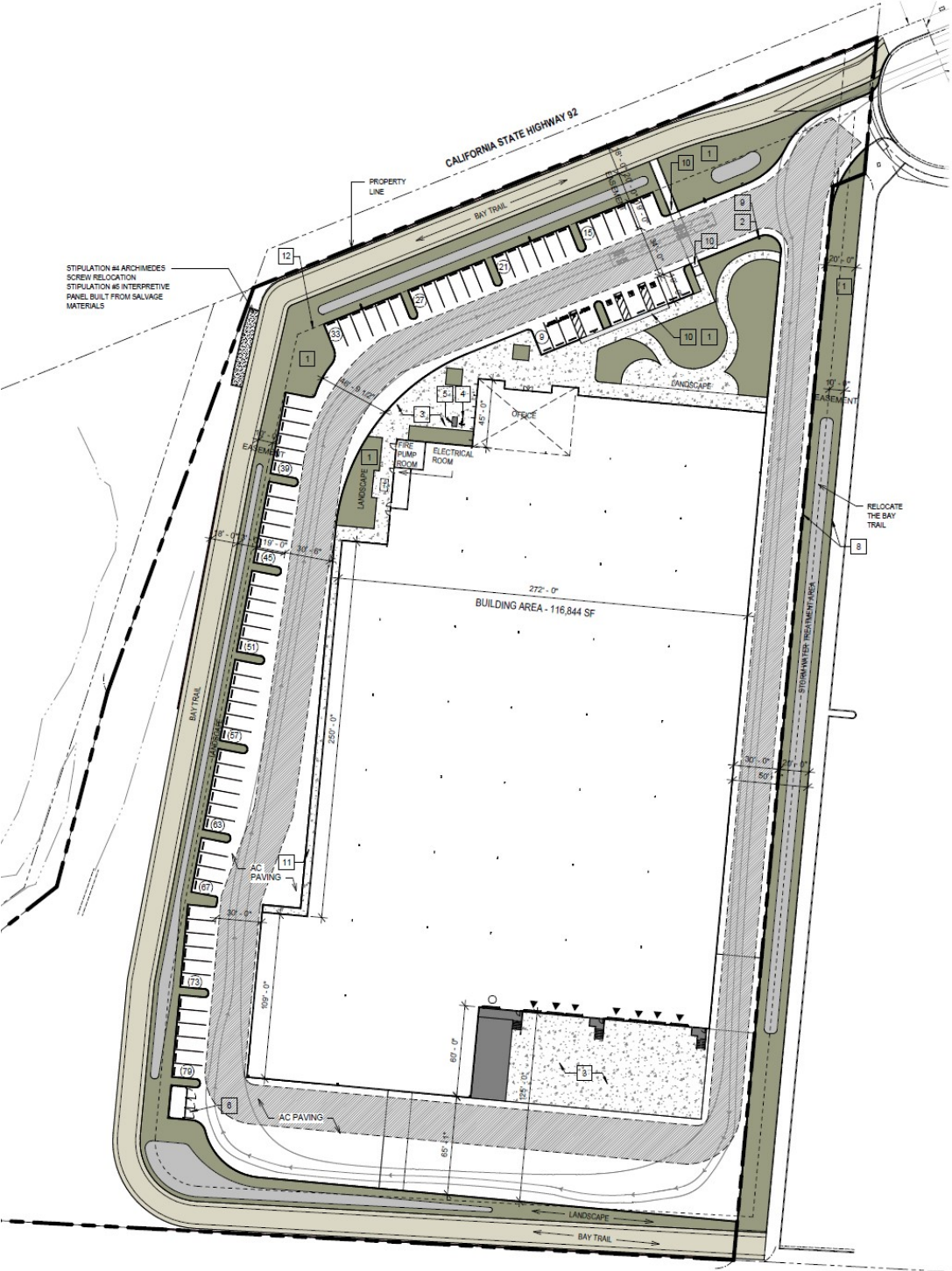
The roads in the vicinity of the project site such as Point Eden Way and Eden Landing Road do not have sidewalks and no bicycle lanes and are not designated as bicycle routes. Eden Landing Road has buffered bike lanes southwest of Clawiter Road and has bike lanes to the east.



**Project Site
Hayward, California**

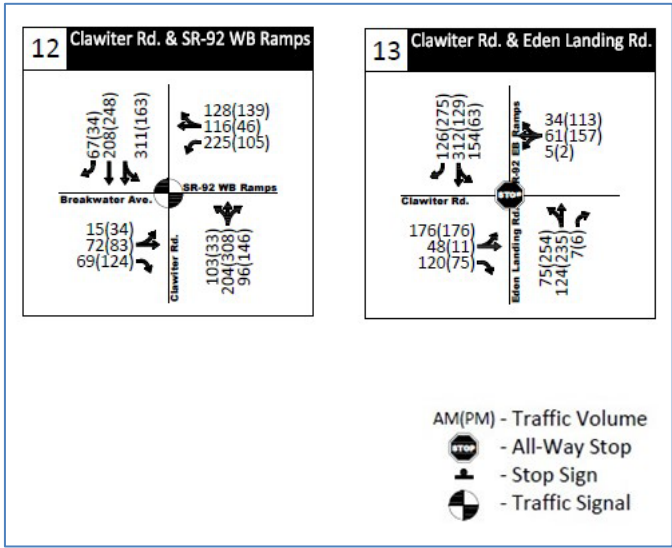
**Figure
1**

Figure 2: Site Plan



Source: ATI Architects, dated: 01/18/2021

Figure 3: Intersection Peak Hour Traffic Volumes



Source: CEQA Transportation Analysis for the 25800-25858 Clawiter Road Industrial Project (Former Gillig Site), prepared by Kittelson & Associates in January 2021.

TRIP GENERATION ESTIMATE

Project trip generation was estimated for the following three time periods:

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

Trip rates were estimated using data provided by the Institute of Transportation Engineers (ITE) and shown in Table 3. Trip generation for the project was estimated using rates for the Warehousing land use code (Code 150) and General Office (Code 710), which is appropriate for the project's proposed uses.

Table 3: Trip Generation Rates

Trip Generation Rates								
Land Use	Rate	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Warehousing (ITE Code 150)	KSF	1.74	77%	23%	0.17	27%	73%	0.19
Office (ITE Code 710)	KSF	9.74	86%	14%	1.16	16%	84%	1.15

Source: ITE Trip Generation Manual, 10th Edition.

As shown in Table 4, the project is expected to generate 225 daily trips (22 during the AM Peak Hour; and 26 trips during the PM Peak Hour). Because the project is an industrial use, passenger car equivalent (PCE) factors were applied. Truck volumes were converted to PCE volumes to reflect the fact that trucks take up more room on the road than automobiles and are typically slower during acceleration and deceleration. Table 5 shows the project trip generation in PCE terms. In PCE, the project will generate 286 daily trips (27 during the AM Peak Hour; and 33 trips during the PM Peak Hour).

Table 4: Project Trip Generation (Vehicles)

Land Use	TSF	Trip Generation						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Warehousing Trips	114	198	15	4	19	6	16	22
Office Trips	3	27	3	0	3	1	3	4
Total Trips		225	18	4	22	7	19	26

¹Trip generation rates for peak hour of adjacent streets, per the ITE Trip Generation Manual 10th Edition.

Source: Kittelson & Associates, Inc., 2021

Notes: TSF signifies thousand square feet.

Table 5: Project Trip Generation (Passenger Car Equivalents -PCE)

Land Use	TSF	Trip Generation						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Warehousing Trips	114	259	20	4	24	8	21	29
Office Trips	3	27	3	0	3	1	3	4
Total Trips		286	23	4	27	9	24	33

¹Trip generation rates for peak hour of adjacent streets, per the ITE Trip Generation Manual 10th Edition.

Source: Kittelson & Associates, Inc., 2021

Notes: TSF signifies thousand square feet.

TRIP DISTRIBUTION

Project trip distribution was developed based on a review of a review of land uses, the circulation network, and a review of local travel patterns and circulation conditions. The trip distribution for the project is generally as follows:

- 60% to/from destinations in the north, east, and west via SR-92 and I-880
- 10% to/from the east via Eden Landing and Arden Road
- 30% to/from the north via Eden Landing Road and Clawiter Road

All trip distribution destinations total up to 100%.

SITE ACCESS

As previously discussed, access to the project site is via Eden Landing Road. Ingress and egress to the building would be from a new driveway at the western terminus of the cul-de-sac on Point Eden Way. The internal driveway would circle the entire building. Surface parking would be provided along the driveway on the north and west sides of the building. A total of 79 parking spaces would be provided. Based on aerial photography, sight distance at Project driveway would be adequate to provide vehicular ingress/egress to/from the site.

VEHICLE MILES TRAVELED IMPACT ANALYSIS

Senate Bill 743 (SB 743) was signed into law in September 2013 and requires changes to guidelines for the California Environmental Quality Act (CEQA). The purpose of SB 743 is to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. Under 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 CEQA analysis. 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 developed VMT thresholds of significance and screening criteria³, which are used in this memorandum for impact analysis purposes. To analyze the project's VMT potential impacts, the project can be analyzed in terms of its two major components:

- **Office:** the 2,785 square foot office would house U-Haul's regional corporate offices. For this project component it would be appropriate to apply the screening criteria and thresholds of significance for employment-office projects.
- **Industrial:** the 114,059 square foot warehouse would be used to house U-Haul storage pods, materials and trucks. For this project component it would be appropriate to apply the screening criteria and thresholds of significance for employment-industrial projects.

SCREENING CRITERIA AND VMT THRESHOLDS

Before any VMT analysis is undertaken, the project should undergo a screening assessment to determine if it can be screened out of a detailed VMT study. The City has provided screening criteria, which can be used to quickly identify whether a project should be expected to cause a less-than-significant impact related to VMT. Per City Guidelines, Projects may be screened out as follows:

- Small Projects
- Local Serving Retail
- Local Serving Public Facilities
- Location-Based (low VMT areas, near a major transit stop, or high-quality transit corridor)

The City's thresholds of significance by land use are shown in Table 6. The project is comprised of two major components:

³ City of Hayward Transportation Impact Analysis Guidelines Final Draft, December 2020.

- **Office:** the 2,785 square foot office would house U-Haul's regional corporate offices. For this project component it was determined that the employment-office threshold (15% below existing regional average VMT per employee) would be appropriate.
- **Industrial:** the 114,059 square foot warehouse would be used to house U-Haul storage pods, materials and trucks. For this project component it was determined that the employment-industrial threshold (Below existing regional average VMT per employee) would be appropriate.

Table 6: 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 thresholds for this project.

VMT IMPACT ANALYSES

The following describes the VMT analyses conducted for each project component.

Office Component

Screening

Projects that meet at least one screening criterion would not require a detailed CEQA transportation analysis. CEQA Guidelines Section 15303 provides a categorical exemption for new construction or conversion of small structures. The City's guidelines provide an opportunity to screen out small projects such as offices of 10,000 square feet of gross floor area or less. The office component would consist of 2,785 square foot office space. Therefore, the office project component would have a **less-than-significant** VMT impact and no mitigation measures would be required for this project component.

Industrial Component

Screening

Per City VMT maps, Industrial employment projects located in areas of low VMT and/or within a half mile of a major transit stop or corridor and that include low VMT-supporting features will produce

low VMT per employee. These areas are shown in Figure 4. A review of the project site location and the low-VMT area screening map indicate that the project site is not located in a low VMT area and cannot be screened out.

Detailed VMT Analysis

When a project does not meet the screening criteria described in the previous section, a detailed VMT analysis is required. This analysis is used to evaluate a project's VMT generation against the appropriate thresholds of significance. As previously described in Table 6, the threshold for employment-industrial projects is the existing regional average VMT per employee, which is 18.15 VMT (according to the Alameda CTC travel demand model). The existing VMT for the project site was obtained from the City's GIS portal⁴, which provided 18.23 VMT/employee. Figure 5 shows a screenshot of the VMT/employee results for the project site TAZ and surroundings. Without mitigation the VMT/employee for the project would be 18.23, which is above the VMT/capita regional average of 18.15, resulting in a significant impact.

VMT MITIGATION MEASURES

Projects above the VMT threshold that are considered impacted must propose measures to reduce project VMT or mitigate a CEQA transportation impact. For this project, given the VMT/employee is only slightly higher than the regional average (18.23 vs 18.15), a 0.5% reduction in VMT/employee would be needed to reduce this to less than significant. The City of Hayward requires applicants and consultants to select mitigation measures provided in Appendix A of the City's Guidelines with associated VMT percentage reductions. Mitigation measures fall in five categories:

- land use strategies
- parking management
- neighborhood enhancements
- transit strategies
- Travel Demand Management TDM measures

Given the project characteristics and location, TDM measures would be the only effective measures to reduce VMT for the project. When TDM measures are recommended, the project must include a TDM Plan that demonstrates how it will provide monitoring and reporting, compliance, and funding for the life of the project. A TDM plan would be incorporated as part of the project and could be a part of the conditions of project approval. The monitoring portion of the TDM Plan must identify the monitoring elements and time frame for reporting to the City. Monitoring elements can include a

⁴ <https://maps.hayward-ca.gov/portal/apps/webappviewer/index.html?id=b5a75035f77e4d80972424580c636354>, last accessed 01/25/2021.

TDM program report, parking surveys, resident/employee surveys, and/or a trip cap as well as the time frame for submitting reports.

To achieve the needed 0.5% reduction of VMT any one of the following Employer Commute Programs listed in Figure 19, Mobility Management VMT Reduction VMT Measures for Project/Site Level Application (Appendix A of the TIA Guidelines) would be acceptable as mitigation measures to reduce project impacts to less than significant levels:

- 1A, Voluntary Employer Commute Program
- 1B, Mandatory Employer Commute Program
- 1C, Employer Carpool Program
- 1D, Employer Transit Pass Subsidy
- 1E, Employer Vanpool Program
- 1F, Employer Telework Program

A description of each measure and their maximum reduction are listed in Attachment A of this memorandum. The TIA guidelines lists the TDM measures associated with employer commute programs listed in the SANDAG's Mobility Management VMT Reduction Calculator Tool – Design Document (June 2019). This analysis presents two feasible mitigation measures that would provide the reduction of 0.5% in VMT or greater that would reduce project impacts to less than significant levels. Only one of the following mitigation measures below would achieve the needed VMT reduction. With implementation of any of the mitigation measures below, the industrial project component would have a **less-than-significant** VMT impact.

Measure 1A, Voluntary Employer Commute Program

Under this strategy, Employers would encourage alternative modes of transportation, no monitoring and reporting is required, and there are no established performance standards. The program may include a carpool or vanpool program, subsidized or discounted transit passes, bike amenities, commute trip-reduction marketing, and preferential parking permit program. This strategy encompasses strategies 1C (Employer Carpool Program), 1D (Employer Transit Pass Subsidy), and 1E (Employer Vanpool Program) and cannot be analyzed in combination with these strategies. The range of effectiveness at between 1% and 6% commute trip VMT reduction. The VMT reduction calculation formula is shown below:

VMT Reduction Formula: % VMT Change in commute trips = A * % employees participating with A = - 6% for urban area. The percentage of employees participating refers to percentage of employees that would be able to participate in the strategy's program if they desired to. This will usually be 100%. Employees who might not be able to participate could include those who work nighttime hours when transit and rideshare services are not available or employees who are required to drive to work as part of their job duties. This input does not refer to the percentage of employees who actually participate in the program. For this analysis it is assumed that 100% of employees would be able to participate as U-Haul does not anticipate night shifts.

Assuming that 100% of employees would be able to participate of the employer carpool program, a reduction of 6% would occur.

Measure 1C, Employer Carpool Program

Employers can encourage carpooling by providing ride matching assistance to employees, providing priority parking for carshare vehicles, and providing incentives for carpooling. The VMT reduction calculation formula is shown below:

% change VMT = -A * % participation, where A= 8% (for urban area) and % participation is the number of employees eligible to participate in the program.

Assuming that 100% of employees would be able to participate of the employer carpool program, a reduction of 8% would occur. Note that higher reductions may be achieved with this measure compared to strategy 1A, if this strategy is accompanied by a regular performance-monitoring and reporting program.

Measure 1D, Employer Transit Pass Subsidy

Employers can encourage employees to take transit by providing subsidized or discounted daily or monthly public transit passes to employees. The VMT reduction calculation formula is shown below:

$$\text{Percent (\%) change in VMT} = \% \text{ of employees eligible} \times \% \text{ change in commute VMT}$$

Where % change in commute VMT differs by place type (low-density suburb, suburban center, or urban) and level of daily transit subsidy (\$1 to \$4). Table 7 below shows the reductions that may be achieved if 100% employees are eligible to participate of the program.

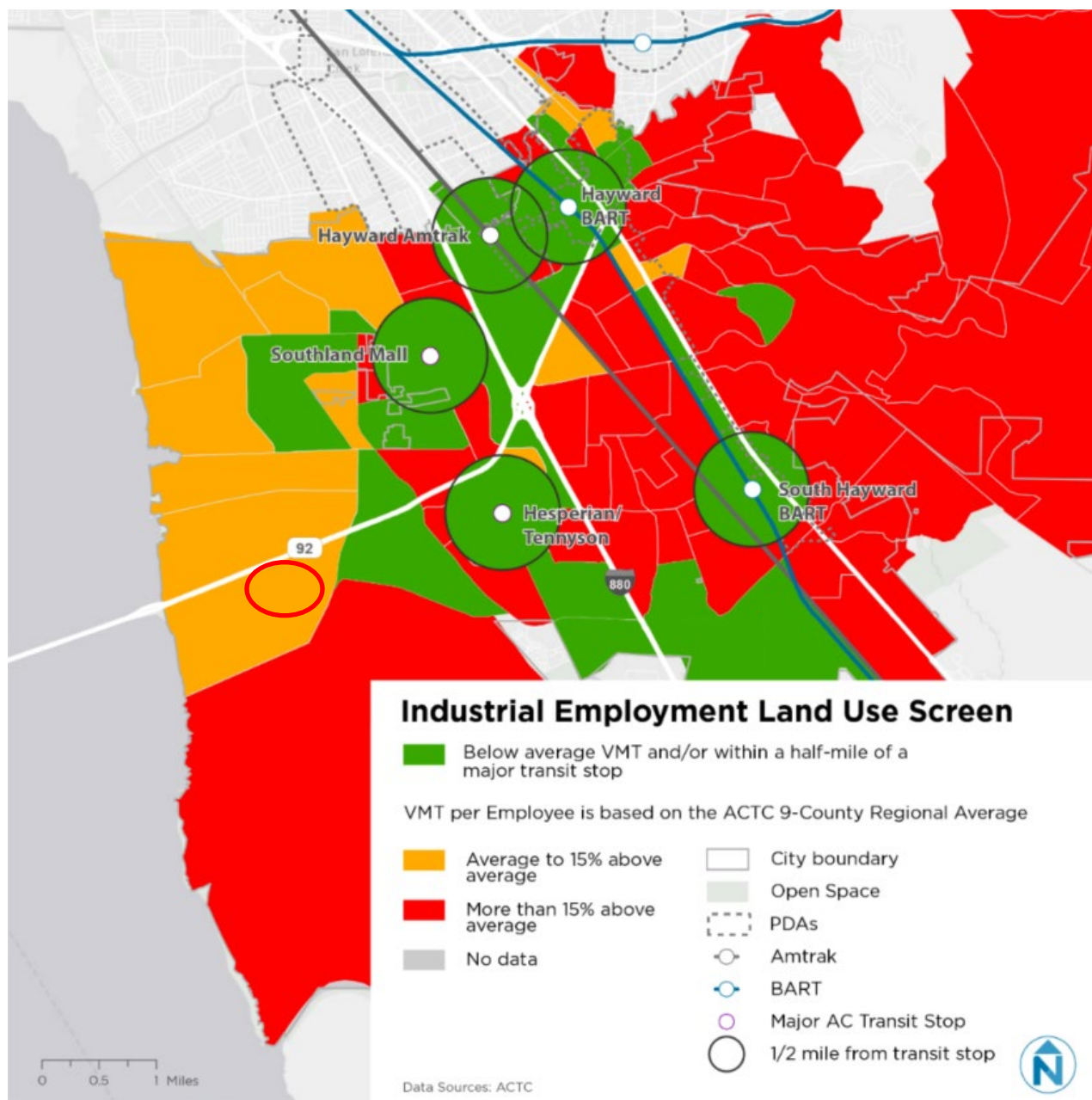
Table 7: Maximum VMT Reductions Per Level of Subsidy And Urban Setting

Place Type	Subsidy Level per Day			
	\$1.00	\$2.00	\$3.00	\$4.00
Low-Density Suburb	-0.1%	-0.2%	-0.4%	-0.6%
Suburban Center	-1.1%	-2.4%	-4.1%	-5.8%
Urban	-2.2%	-4.7%	-7.8%	-10.9%

Source: *Mobility Management VMT Reduction Calculator Tool – Design Document, SANDAG June 2019.*

Given the distance to the nearest bus stop located approximately 1 mile from the project site, and the nearby streets lack sidewalks and bike lanes, for this estimate a suburban center setting is assumed. With a \$1.00 subsidy, and assuming that 100% of employees would be eligible for the program, a 1.1% reduction in VMT would occur. Higher reductions of up to 5.8% in VMT may be achieved with subsidy levels of \$4.00 per day.

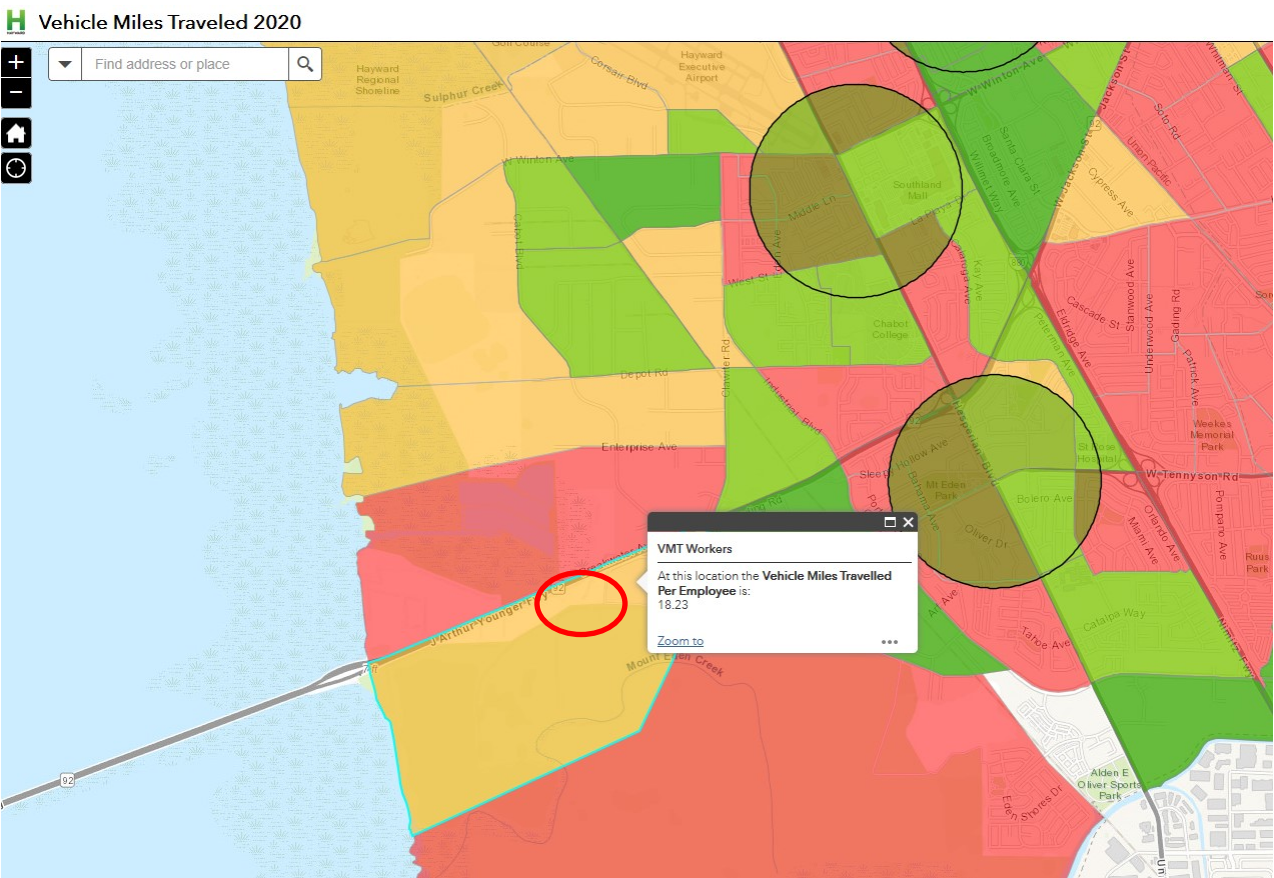
Figure 4: Employment-Industrial Land Use Screening Map



Source: City of Hayward, December 2020.

 = Project Location

Figure 5: Employment-Industrial VMT/Employee Screenshot



Source: City of Hayward GIS Portal, December 2020.

 = Project Location

FINDINGS/CONCLUSIONS

The following summarizes the findings of the transportation analysis for the 4150 Point Eden Way Industrial Development Project.

- The project is located at 4150 Pt. Eden Way, in the City of Hayward. The site would be developed with a 116,884 square foot industrial building for U-Haul consisting of 114,059 square foot warehouse and 2,785 square foot office, and related site improvements. During operation of the project, approximately 20 to 25 employees would be present.
- Access to the project site is via Eden Landing Road. Ingress and egress to the building would be from a new driveway at the western terminus of the cul-de-sac on Point Eden Way.
- The project is anticipated to generate 225 daily trips (22 during the AM Peak Hour; and 26 trips during the PM Peak Hour.
- The transit system in the study area consists of local bus service. Alameda-Contra Costa Transit District (AC Transit) provides bus service in the study area. The nearest bus stop is on Industrial Boulevard at Depot Road, approximately 1 mile from the project site. The roads in the vicinity of the project site such as Point Eden Way and Eden Landing Road do not have sidewalks and no bicycle lanes and are not designated as bicycle routes.
- The City of Hayward has developed VMT thresholds of significance and screening criteria, which are used in this memorandum for impact analysis purposes. To analyze the project's VMT potential impacts, the project can be analyzed in terms of its two major components:
 - Office: the 2,785 square foot office would house U-Haul's regional corporate offices. For this project component it would be appropriate to apply the screening criteria and thresholds of significance for employment-office projects.
 - Industrial: the 114,059 square foot warehouse would be used to house U-Haul storage pods, materials and trucks. For this project component it would be appropriate to apply the screening criteria and thresholds of significance for employment-industrial projects.
- The office component would screen out as a small project, and therefore would have a **less-than-significant** VMT impact. No mitigation measures would be required for this project component.
- The industrial component would not screen out and therefore a detailed VMT analysis was performed. Without mitigation, the VMT/employee for the project would be 18.23, which is above the VMT/capita regional average of 18.15, resulting in a potential **significant impact**.
- For this project, a 0.5% reduction in VMT/capita would be needed. To achieve the needed 0.5% reduction, a VMT employer commute program would be required for mitigation. The VMT analysis demonstrated that Measure 1A -Voluntary Employer Commute Program, or Measure 1C -Employer Carpool Program, or Measure 1D - Employer Transit Pass Subsidy

would reduce VMT by more than 0.5% and therefore mitigate impacts to **less than significant** levels.

- City and Applicant would need to coordinate during the conditions of approval which TDM program is most appropriate for this Project.

ATTACHMENT A

Mobility Management VMT Reduction VMT Measures for Project/Site Level Application

Appendix A VMT Mitigation Measures

The tables below show the Mobility Management Tool's VMT reduction measures under consideration by Alameda CTC for inclusion in their VMT Calculator. The first table presents the project and site level mitigations and the second table presents the community and city level mitigations. A summary description of each measure and the highest reduction percentage possible are provided, and different reduction measures are listed for each land use category where SANDAG considers that input (this only applies to project/site level applications).

Figure 19 Mobility Management VMT Reduction Measures for Project/Site Level Application

Category	Measure	Description	Maximum Reduction (by land use where applicable)
Employer Commute Programs	1A. Voluntary Employer Commute Program	<ul style="list-style-type: none"> Employer offers a voluntary employer commute trip-reduction program May include a carpool or vanpool program, subsidized or discounted transit passes, bike amenities, commute trip-reduction marketing, and preferential parking permit program. Encompasses strategies 1C (Employer Carpool Program), 1D (Employer Transit Pass Subsidy), and 1E (Employer Vanpool Program) and cannot be analyzed in combination with these strategies. Unlike strategy 1B (Mandatory Employer Commute Program), this strategy does not require monitoring, reporting, or performance standards. If this strategy is selected, strategy 1B cannot be analyzed as part of the total VMT reduction. 	<ul style="list-style-type: none"> Low-density suburb: 6.2% Suburban center: 5.4% Urban: 5.2%
	1B. Mandatory Employer Commute Program	<ul style="list-style-type: none"> Employer offers a mandatory employer commute trip-reduction program. May include a carpool or vanpool program, subsidized or discounted transit passes, bike amenities, encouragement for telecommuting and alternative work schedules, commute trip-reduction marketing, and preferential parking permit program. This strategy encompasses strategies 1C, 1D, and 1E and cannot be analyzed in combination with these strategies. Unlike strategy 1A (Voluntary Employer Commute Program), this strategy would be contractually required of the developer or property owner and is accompanied by a regular performance-monitoring and reporting program. If this strategy is selected, strategy 1A cannot be analyzed as part of the total VMT reduction. 	26%
	1C. Employer Carpool Program	Employers can encourage carpooling by providing ride-matching assistance to employees, providing priority parking for carshare vehicles, and providing incentives for carpooling.	<ul style="list-style-type: none"> Low-density suburb: 3% Suburban center: 5% Urban: 8%
	1D. Employer Transit Pass Subsidy	Employers can encourage employees to take transit by providing subsidized or discounted daily or monthly public transit passes to employees.	Reduction varies by amount of subsidy <ul style="list-style-type: none"> Low-density suburb: 0.1-0.6% Suburban center: 1.1-5.8%

Transportation Impact Analysis Guidelines | ADMINISTRATIVE DRAFT

City of Hayward

			▪ Urban: 2.2-10.9%
	1E. Employer Vanpool Program	<ul style="list-style-type: none"> Vanpooling is a flexible form of public transportation that provides groups of 5–15 people with a cost-effective and convenient rideshare option for commuting. An employer can encourage ridesharing by subsidizing vanpooling for employees who have a similar origin and destination and by providing priority parking for employees who vanpool. 	7.1%
	1F. Employer Telework Program	<ul style="list-style-type: none"> A telework program enables employees to work from home or a remote location one or more days per week. Depending on the nature of the work, schedules can range from full-time, specific days of the week, or as needed. The VMT impacts of telework are similar to a flexible work schedule program, which enables employees to work long hours in exchange for one day off every week or two. 	44% (maximum, but not typical)
Land Use Strategies	2A. Transit Oriented Development	<ul style="list-style-type: none"> Transit Oriented Development (TOD) refers to projects built in compact, walkable areas that have easy access to public transit, ideally in a location with a mix of uses, including housing, retail, offices, and community facilities. TODs are generally described as places within a 10-minute walk of a high-frequency rail transit station (BART) They should, at a minimum, incorporate bike and pedestrian access to transit, thereby encouraging transit use and reducing vehicle travel. 	14.4%
	2B. Mixed Use Development	<ul style="list-style-type: none"> Mixed use projects incorporate a range of complementary land uses that provide a balanced development approach relative to the surrounding neighborhood and encourage transportation alternatives. This could include co-location residential development, office space, retail shops, and others. Land use mix is measured using an entropy index. An index of 0 indicates a single land use while an index of 1 indicates equal distribution of all land uses. For ease of use, the strategy is calculated using only two land use types - residential (number of residents) and commercial (number of jobs). 	30%
Parking Management	3A. Parking Pricing	<ul style="list-style-type: none"> Priced parking can be implemented on- or off-street and helps to effectively manage the parking supply. Priced parking works best in areas where on-street parking is managed (e.g., priced parking, residential permit programs, time limits, etc.) to reduce unintended consequences of parking in adjacent neighborhoods. 	7.5%
	3B. Parking Cash Out	<ul style="list-style-type: none"> Employers can offer employees who are provided free parking the option to take the cash value of the space in lieu of the space itself. California state law (AB 2109, Katz) requires that certain employers who provide subsidized parking for their employees offer a cash allowance in lieu of a parking space. This strategy is only applicable where employers pay for or rent parking for their employees. Parking cash-out is most successful when paired with incentives or programs that encourage the use of transportation alternatives. 	12%

Figure 20 Mobility Management VMT Reduction Measures for Community/City-Level Application

Category	Measure	Description	Reduction
Neighborhood Enhancements	4A. Street Connectivity Improvement	<ul style="list-style-type: none"> A connected and complete street network improves accessibility, safety, and livability of the community. Traditional grid street patterns with short blocks offer a high degree of connectivity compared to street networks with curvilinear designs and cul-de-sacs. This strategy uses intersection density as a proxy for street connectivity improvements, which help to facilitate a greater number of short trips. 	6%