Proposed Mitigated Negative Declaration

Guadalupe 2021 General Plan

May 31, 2022

Prepared by

EMC Planning Group

PROPOSED MITIGATED NEGATIVE DECLARATION

GUADALUPE 2021 GENERAL PLAN

PREPARED FOR

City of Guadalupe
Larry Appel, Contract Planning Director
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Tel 805.287.9494

PREPARED BY

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May 31, 2022

PROPOSED MITIGATED NEGATIVE DECLARATION

In Compliance with the California Environmental Quality Act (CEQA)

Project Name	Guadalupe 2021 General Plan
Lead Agency	City of Guadalupe
Project Proponent	City of Guadalupe
Project Location	City of Guadalupe, Santa Barbara County
Project Description	The proposed Guadalupe 2021 General Plan is an update to the 2002 general plan. The proposed general plan includes nine elements: land use, circulation, environmental justice, conservation and open space, economic development, community design and historic preservation, air quality and safety, public facilities, and noise. Because the housing element is current, it is not part of the proposed general plan update.
Public Review Period	
Written Comments To	Larry Appel, Contract Planning Director City of Guadalupe 918 Obispo Street, Guadalupe, CA 93434
Proposed Findings	The City of Guadalupe is the custodian of the documents and other material that constitute the record of proceedings upon which this decision is based. The initial study attached hereto indicates that the proposed project has the potential to result in significant adverse environmental impacts. However, the mitigation measures identified in the initial study would reduce the impacts to a less than significant level. There is no substantial evidence, in light of the whole record before the City of Guadalupe that the project, with mitigation measures incorporated, may have a significant effect on the environment. See the following project-specific mitigation measures:

Mitigation Measures

Air Quality

AQ-1 Add the following new policy to the Safety Element:

Implement Dust-Control Measures. Require the implementation of the Santa Barbara County Air Pollution Control District dust control measures during construction of new development projects.

Add the following new policy to the Safety Element:

AQ-2 Implement Santa Barbara County Air Pollution Control District construction exhaust control measures during construction activities.

Biological Resources

BIO-1 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

Where development could occur in areas with potential habitat for special-status species occurs, such as within the riparian or disturbed grassland areas shown on Figure 7, Habitat Map, or in other locations where such habitat may be present as may be identified by the Planning Director, an assessment of potential impacts to biological resources shall be conducted by a qualified biologist. If determined necessary by a qualified biologist, focused surveys per applicable regulatory agency protocols shall be conducted to determine if such species could occur. Impacts to special-status species shall be avoided or minimized to the extent possible. If impacts cannot be avoided, measures to mitigate for the loss of individuals and/or habitat shall be implemented.

BIO-2 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

Where development could occur in areas with potential nesting bird habitat, such as within the riparian or disturbed grassland areas shown on Figure 7, Habitat Map, or in other locations where such habitat may be present as may be identified by the Planning Director, native nesting birds protected by the Federal Migratory Bird Treaty Act and the California Fish and Game Code shall be surveyed for and protected, if found. Disturbance activities shall not occur during the nesting season (generally considered February 1 – August 31) until nesting bird surveys have been conducted and no nesting activity is occurring on or adjacent to a project site. If nesting activity is observed, a qualified biologist may recommend an exclusion area be maintained until birds have fledged.

BIO-3 Replace Policy COS-1.5 of the proposed general plan with the following policy:

~~The City will not allow development of land within 25 feet of the Ninth Street Wetland Complex. The City will make exceptions to this policy for parcels of land designed for residential use to prevent a legal "taking."~~

The City shall protect the ecological, aesthetic, and recreational value of sensitive wetland and riparian habitats associated with aquatic features within and directly adjacent to the city limits. Where development could occur in or within 50 feet of the edge of riparian vegetation or 50 feet from the top of bank of wetland habitats shown on Figure 7, Habitat Map, or in other locations where such features may be present as may be identified by the Planning Director, a qualified biologist or restoration ecologist shall be retained to determine the appropriate development setbacks and other protective measures needed to ensure the long-term protection and enhancement of the sensitive community.

BIO-4 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

Applicants for projects on sites within 50 feet from the top of bank of potential jurisdictional wetlands or waterways as shown on Figure 7, Habitat Map, or in other locations where such features may be present as may be identified by the Planning Director, shall retain a qualified biologist/wetland regulatory specialist to conduct a site investigation and assess whether the wetland or waterway features are jurisdictional, assess potential impacts, and determine whether stream buffers/riparian setbacks are required. If a feature is found to be jurisdictional or potentially jurisdictional, the applicant shall comply with the appropriate permitting processes.

Cultural Resources

CUL-1 Add the following new policy to the Community Design and Historic Preservation Element of the proposed general plan:

If unknown subsurface historical resources, including potential tribal cultural resources, are discovered during grading, excavation, trenching or other disturbance of the existing ground surface of a project site, all work shall be halted within at least 50 meters (165 feet) of the find and the area shall be staked off immediately. The City shall be notified immediately and a qualified professional archaeologist shall be retained to evaluate the find and report to the City. If the find is determined to be significant, recommendations provided by the archaeologist to mitigate potential impacts on archaeological resources and tribal cultural resources shall be required as conditions of project approval. Individual projects shall follow CEQA and other applicable State laws for mitigating impacts on cultural and tribal cultural resources.

CUL-2 All archaeological resources and cultural resources of Native American origin, and all tribal cultural resources uncovered and recovered during the development of vacant or underutilized land shall be returned to local Native American tribes after the resources have been examined by a qualified archaeologist.

CUL-3 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

If human remains are found during earth-moving, grading, or construction activities, pursuant to Section 7050.5 of the California Health and Safety Code, all construction and excavation activity shall cease. If the remains are of Native American descent, actions must be taken to identify and appropriately treat the remains, including the coroner notifying the Native American Heritage Commission within 24 hours, and notifying a most likely descendent pursuant to Section 5097.98 of the California Public Resources Code.

Geology and Soils

GEO-1 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

In the event that evidence of paleontological resources is uncovered during ground disturbing activities, all work shall stop in the immediate area and the Planning Director shall be notified. A qualified paleontologist shall be retained to assess the scientific significance of the paleontological resources. If found to be significant, an appropriate data recovery program shall be developed and implemented by the paleontologist.

Greenhouse Gas Emissions

GHG-1 Modify proposed general plan policy EJ-1.1 as follows:

The City will ~~support the preparation of~~ prepare a climate action plan to identify ways to reduce citywide greenhouse gas emissions and minimize the impacts of climate change on Guadalupe residents. <u>The climate action plan will incorporate the goals of reducing emissions within the city to 40 percent below 1990 levels by 2030 and achieving carbon neutrality by 2045</u>.

GHG-2 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

Until such time as the City adopts a qualified action plan consistent with mitigation measure GHG-1, individual development projects shall be constructed to use no natural gas and to meet California Green Building Standards Code Tier 2 requirements for electric vehicle charging infrastructure. Where such projects

also generate less than 110 vehicle trips per day or produce less than 1,100 metric tons per year of carbon dioxide equivalent, no further action is required. Where such projects do not meet either the daily trip volume or mass emissions criteria, a VMT analysis must be conducted. If the VMT impact is less than significant, no further action is required. If the proposed project cannot meet one or more of the three required best management practices (no natural gas, electric vehicle support infrastructure, and less-than-significant VMT impact), the project applicant shall: 1) identify and implement other GHG reduction measures, with a priority on on-site measures; and/or 2) purchase and retire carbon offsets from a qualified registry that are real, permanent, quantifiable, verifiable, enforceable, and additional. The emission reductions and/or offsets must be equivalent to reductions that would otherwise be realized from the best management practice(s) that cannot be implemented.

Noise

N-1 Construction activities at new development sites shall be managed to reduce noise generation. Construction contractors will implement the following construction noise reduction measures, or equivalent measures that achieve the same noise reduction:

- Restrict noise-generating activities at construction sites or in areas adjacent to construction sites to the hours between 7:00 a.m. and 6:00 p.m., Monday through Saturday. Construction shall be prohibited on Sundays and Federal holidays unless prior written approval is granted by the building official.
- Where feasible, construct temporary noise barriers between the noise source and receiver, where feasible.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers.
- Prohibit unnecessary engine idling.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from receivers as possible. Adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Route all construction traffic via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible.

- Signs shall be posted at the construction site and near adjacent sensitive receptors displaying hours of construction activities and providing the contact phone number of a designated noise disturbance coordinator to whom complaints can be directed and issues resolved.

N-2 The City will review new public and private development proposals to determine whether their construction has potential to cause vibration at levels that could cause strongly perceptible annoyance to nearby sensitive receptors and existing structures or could result in structure damage to adjacent buildings or infrastructure. Where this potential exists, the City will require a vibration analysis to determine whether such impacts may occur and if so, identify mitigation measures that shall be implemented during the construction process to reduce vibration annoyance and damage potential to acceptable levels.

INITIAL STUDY

GUADALUPE 2021 GENERAL PLAN

PREPARED FOR

City of Guadalupe
Larry Appel, Contract Planning Director
918 Obispo Street
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Tel 805.287.9494

PREPARED BY

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May 31, 2022

TABLE OF CONTENTS

Appendices

Figures

Tables

A. BACKGROUND

Project Title	Guadalupe 2021 General Plan Initial Study
Lead Agency Contact Person and Phone Number	Larry Appel, Contract Planning Director (805) 287-9494
Date Prepared	May 31, 2022
Study Prepared by	EMC Planning Group Inc. 301 Lighthouse Avenue, Suite C Monterey, CA 93940 Ron Sissem, Senior Principal Sally Rideout, Principal Planner Kaitlin Ruppert, Archaeologist
Project Location	City of Guadalupe, Santa Barbara County
Project Sponsor Name and Address	City of Guadalupe 918 Obispo Street, Guadalupe, CA 93434
General Plan Designation	Various per 2002 Guadalupe General Plan
Zoning	Various per Guadalupe Municipal Code

Setting

The City of Guadalupe is located in northern Santa Barbara County, about nine miles west of the City of Santa Maria. The city is situated in the heart of the Santa Maria Valley. Guadalupe Dunes, is located to the west. To the south is the City of Lompoc and Vandenberg Space Force Base. To the north is the Nipomo Mesa and the communities of Arroyo Grande and Nipomo in San Luis Obispo County. Figure 1, Location Map, shows the location of Guadalupe in its vicinity and regional context. Figure 2, Aerial Photograph, shows existing conditions within the limits in in the immediate surrounding vicinity.

The *Guadalupe 2002 General Plan* (hereinafter "2002 general plan" or "existing general plan") is the current general plan. The City's current housing element is the separately published *City of Guadalupe, 2019 – 2027 Housing Element, Draft Update*. Figure 3, 2002 General Plan Land Use Diagram, illustrates the location of the city limits, the sphere of influence (which is co-terminus with the city limit), a portion of the broader general plan planning area that was considered for planning purposes as part of the 2002 general plan, the coastal zone boundary, and existing land use designations. Most of the land within the city limits is developed, though vacant land remains, as discussed in the following section.

Existing Land Use

In the fall of 2020, the City estimated that approximately 52 percent (445 acres) of land within the city limits was designated for residential use. Commercial uses accounted for about 5 percent (41 acres) of land, with these uses primarily located along Guadalupe Street/Highway 1. Industrial uses comprised about 12 percent (103 acres) of land, located mostly in the center of the city generally adjacent to the railroad, and to a lesser extent, in the northern part of the city. The remaining 32 percent (72 acres) of land included diverse uses such as public facilities (e.g., schools and parks), and miscellaneous rights of way. Table 1, Existing Land Use, summarizes existing developed and vacant acreage within the city limits and within the unincorporated portion of the existing planning area.

Table 1 Existing Land Use

Use Type	Acres in Use	Percent of Total	Vacant Acres	Percent of Total	Total Acreage	Percent of Total
City Limits/Incorporated						
Residential						
Low-Density Residential	157.963		1.697		159.660	
Medium-Density Residential	33.100		6.819		39.919	
High-Density Residential	25.262		13.186		38.447	
Specific Plan (Res)	175.976		31.458		207.434	
Subtotal	392.301	55.2	53.160	34.8	445.461	51.6
Commercial						
Downtown Mixed Use	15.694		2.724		18.418	
General Commercial	2.783		0.241		3.025	
Specific Plan (Comm)	0.000		20.056		20.056	
Subtotal	18.477	2.6	23.022	15.1	41.499	4.8
Industrial						
General Industrial	43.070		39.663		82.733	
Light Industrial	20.760		0.000		20.760	
Subtotal	63.830	9.0	39.663	26.0	103.493	12.0
Public Facilities and Parks						
Public Facility	41.332		na		41.332	
Specific Plan (PF)	0.000		13.636		13.636	
Parks and Open Space	57.899		na		57.899	
Specific Plan (Park)	1.888		23.077		24.965	
Misc. (Rights of Way, etc.)	134.567		na		134.567	
Subtotal	235.686	33.2	36.713	24.1	272.399	31.6
TOTAL (Incorporated)	710.294	100.0	152.558	100.0	862.852	100.0

Use Type	Acres in Use	Percent of Total	Vacant Acres	Percent of Total	Total Acreage	Percent of Total
Unincorporated						
Riparian Corridor	355.916		na		355.916	
Agriculture	2,247.226		na		2,247.226	
TOTAL (Unincorporated)	2,603.143		na		2,603.143	
GRAND TOTAL (Planning Area)	3,313.437				3,465.995	

SOURCE: City of Guadalupe 2020

There are approximately 152.5 acres of vacant land in the city limits. About 35 percent (53 acres) of this total is designated for residential use, 15 percent (23 acres) for commercial use, and 26 percent (40 acres) for industrial use.

Project Description

The proposed *Guadalupe 2021 General Plan* (hereinafter "proposed project" or "proposed general plan") is an update to the 2002 general plan. The proposed general plan includes nine elements: land use, circulation, environmental justice, conservation and open space, economic development, community design and historic preservation, air quality and safety, public facilities, and noise. Because the housing element is current, it is not part of the proposed general plan update.

The proposed general plan focuses on the following priority issues: 1) new requirements in state planning law requiring local jurisdictions to respond to challenges affecting the entire state, such as housing affordability, wildfire safety, environmental justice, climate change, climate adaptation and resilience, and energy; 2) chronic land use conflicts from agricultural uses and the Union Pacific Railroad; and 3) aspirational goals such as social equity, economic growth, and downtown revitalization. The proposed general plan includes changes and additions to, but largely retains the goals, objectives, and policies of the 2002 general plan.

Land Use Element/Proposed Land Use and Development Capacity

The Land Use Element provides land use planning and development planning direction, with a focus on limited changes to land uses designations and existing residential development densities identified in the 2002 general plan. Figure 4, 2021 Guadalupe General Plan Use Diagram, shows the proposed land use plan. The changes are primarily associated with existing vacant parcels within the city limits, the locations and proposed land use designations of which are illustrated in Figure 5, Vacant Parcel Land Use. The primary proposed land use changes consist of: 1) increasing the residential development density on several vacant parcels which were already designated for residential use; 2) designating several vacant parcels in the Central Business District for mixed use that were already designated for commercial use and redesignating much of the Central Business District for

mixed use to allow for limited new residential development above existing commercial buildings; and 3) re-designating several parcels from non-residential to residential use. Development capacity estimates for the proposed general plan are shown in Table 2, Development Capacity Estimates by Land Use.

Table 2 Development Capacity Estimates by Land Use

Land Use	Vacant Acres	Use Intensity[1]	Potential DU/SF[2]	Persons per Household	Additional Population
Residential					
Low-Density Residential	1.697	8.5 du/ac	14 du	3.92	55
Medium-Density Residential	6.819	16.5 du/ac	112 du	3.92	439
High-Density Residential	13.186	25.5 du/ac	336 du	3.92	1,317
Specific Plan (Res)[3]	31.458	12.0 du/ac	377 du	3.92	1,478
Subtotal	53.160		839 du		3,289
Commercial					
Downtown Mixed Use					
Retail Commercial[4]	2.724	0.5 FAR	59,338 sf	n/a	--
High-Density Residential[4]	2.724	25.5 du/ac	35 du	3.92	136
General Commercial	0.241	0.5 FAR	5,254 sf	n/a	--
Specific Plan (Commercial)	20.056	0.5 FAR	436,820 sf	n/a	--
Subtotal (Commercial)	23.022		501,412 sf		--
Subtotal (Residential)	2.724		35 du		136
Industrial					
General Industrial	39.663	0.5 FAR	863,868 sf	n/a	--
Light Industrial	0.000	0.5 FAR	--	n/a	--
Subtotal	39.663		863,868 sf		--
TOTAL					
TOTAL (COMMERCIAL/IND)	62.685		1,365,280 sf		--
TOTAL (RESIDENTIAL)	55.884		874 du		3,425

SOURCE: EMC Planning Group 2020

1. Use intensity is the average density based on the range presented in the proposed general plan.
2. du = dwelling unit, sf = square feet, FAR = floor-to-area ratio.
3. DJ Farms has 363 existing dwelling units according to the Guadalupe Building Department; A total of 740 dwelling units are authorized for the site. The difference is 377 units, which when developed on approximately 31.5 acres of land results in an average density of 12.0 dwelling units per acre.
4. Development potential for vacant land designated Downtown Mixed Use was calculated assuming that all new development would be ground-floor commercial and second-story residential. Residential use was calculated by multiplying the total achievable single-story commercial square footage (109,292 SF) by 25.5 du/ac (the midpoint of the allowable density in the High-Density Residential designation). The limited additional residential development that may be possible above existing commercial buildings in areas designated Downtown Mixed Use is assumed to be within the 874 residential unit capacity for the proposed general plan as a whole.

Other Proposed General Plan Elements

Circulation Element

When transportation networks are safe and efficient, they can contribute to the local economy, minimize impacts to the environment, and provide freedom of movement. The Circulation Element provides the framework for decisions concerning the citywide transportation system. It seeks to create a balanced transportation network that supports and encourages walking, bicycling, and transit ridership. The goals and policies address a variety of topics, including pedestrian and bicycle facilities and user safety, public transit, vehicular transportation and overall mobility and connectivity.

Environmental Justice Element

Senate Bill 1000 (2016) requires cities and counties that have disadvantaged communities to incorporate environmental justice policies into their general plans, either in a separate environmental justice element or by integrating related goals, policies, and objectives throughout the other elements. The Environmental Justice Element has been included in the proposed general plan to promote positive, community-oriented investments, give the community the opportunity to have a meaningful impact on the development of plans and programs that may affect them, and create a healthy and vibrant community while preventing harmful outcomes that can be costly. Policies in this element address climate change, air quality, healthy food access, safe and sanitary homes, physical activity, civic engagement, public spaces, and health services.

Conservation and Open Space Element

The Conservation and Open Space Element addresses natural resource and open space management. Topics include agricultural soils, biotic resources, sustainability, floodwater management, tribal and archaeological resources, and parks and other recreational resources. Policies address agricultural land conservation, biotic resources protection, avoiding adverse tribal and archaeological resource effects, and expanding park and recreation resource availability.

Economic Development Element

The Economic Development Element puts forward an economic development strategy that addresses key factors that drive the City's economy, attract quality employment for residents, and generate revenue for City programs. Policies focus on developing a vibrant downtown, retaining existing economic assets (buildings and businesses), diversifying the City’s economic base, and promoting the agricultural economy.

Community Design and Historic Preservation Element

The primary purpose of the Community Design and Historic Preservation Element is to promote well-designed development that is compatible with the community's historic character and to protect and preserve existing structures with historic significance. This element describes the built and social environment of Guadalupe and discusses how these contribute to the City's unique aesthetic qualities, or "sense of place." Policies address using the City's design and development review processes as tools to achieve design and preservation goals, updating the City's design guidelines, and formalizing the City's list of historical resources.

Air Quality and Safety Element

The Air Quality and Safety Element addresses air quality and potential short- and long-term risks to public health and safety resulting from climate change, hazardous materials conditions, flooding, fires, earthquakes, and crime. The element combines two of the nine mandatory general plan elements: air quality, which is required by Government Code 65302.1(c), and safety, which is required by Government Code 65302(g). The safety portion of this element incorporates Guadalupe's local hazard mitigation plan. Policies address air quality and toxic air contaminants; climate change adaptation and electric vehicle infrastructure; regulating hazardous materials and preparing for hazardous materials release events; minimizing flood, fire and seismic hazards risks; and maintaining police protection level of service.

Public Facilities Element

The Public Facilities Element plans for basic utilities provided to residents, including potable water, sanitary sewer, solid waste services, and storm drainage (including surface water quality). Water supply and demand issues, commonly found in a conservation and open space element, are also discussed in this element. Information and high-level planning and policy for public schools is also included. Policies address costs and funding of new services and facilities, implementing the City's water and sewer master plans, managing stormwater through specific site design measures and compliance with state standards, minimizing and managing solid waste, and continuing to support and work toward bringing additional education opportunities to the city.

Noise Element

The Noise Element identifies the City's approach to control and abate noise to protect residents from excessive exposure. Existing noise conditions are described as a basis to plan for noise control needs and resolving existing noise issues, and strategies for abating existing

and projected future noise to avoid land use incompatibilities for noise sensitive uses are provided. Policies are focused on noise compatibility and exposure standards, and the development review process as mechanism to enforce the standards.

Initial Study Scope and Methodology

The potential for new development capacity (residential dwelling unit number, non-residential building square footage, and population) identified in Table 2, as well as other physical changes that could directly or indirectly result from supporting future development, give rise to the potential environmental effects of implementing the proposed general plan as evaluated in this initial study. Where significant environmental impacts are identified, policies or programs in the proposed general plan, and/or other uniformly applied development regulations that serve as mitigation are identified. Where a potentially significant impact would remain significant even after implementation of proposed general plan policies/programs and/or other uniformly applied development standards, additional mitigation is proposed to substantially lessen the impact. Additional mitigation is proposed as new policy to be incorporated into the proposed general plan.

Other Public Agencies Whose Approval is Required

None

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

On November 2, 2021, the City sent an offer of tribal consultation letter to tribal representatives of the Barbareno/Ventureno Band of Mission Indians, Chumash Council of Bakersfield, Coastal Band of the Chumash Nation, Northern Chumash Tribal Council, Santa Ynez Band of Chumash Indians, San Luis Obispo County Chumash Council, and Yak Tityu Tityu Yak Tilhini – Northern Chumash Tribe. The City received one response from the Santa Ynez Band of Chumash Indians, who declined the offer of consultation.

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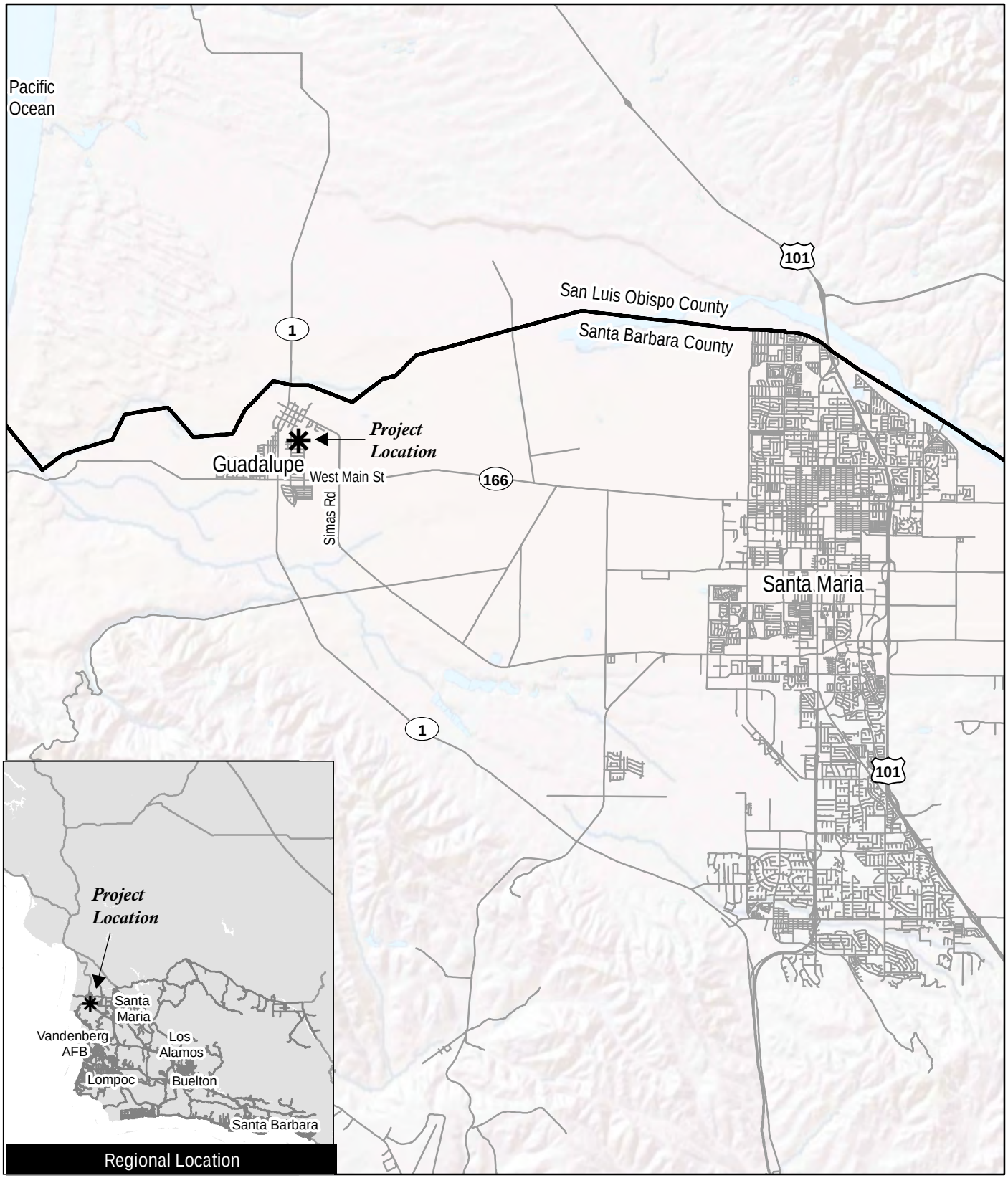

Source: Environmental Systems Research Institute 2021

Figure 1

Location Map

Guadalupe 2021 General Plan Initial Study

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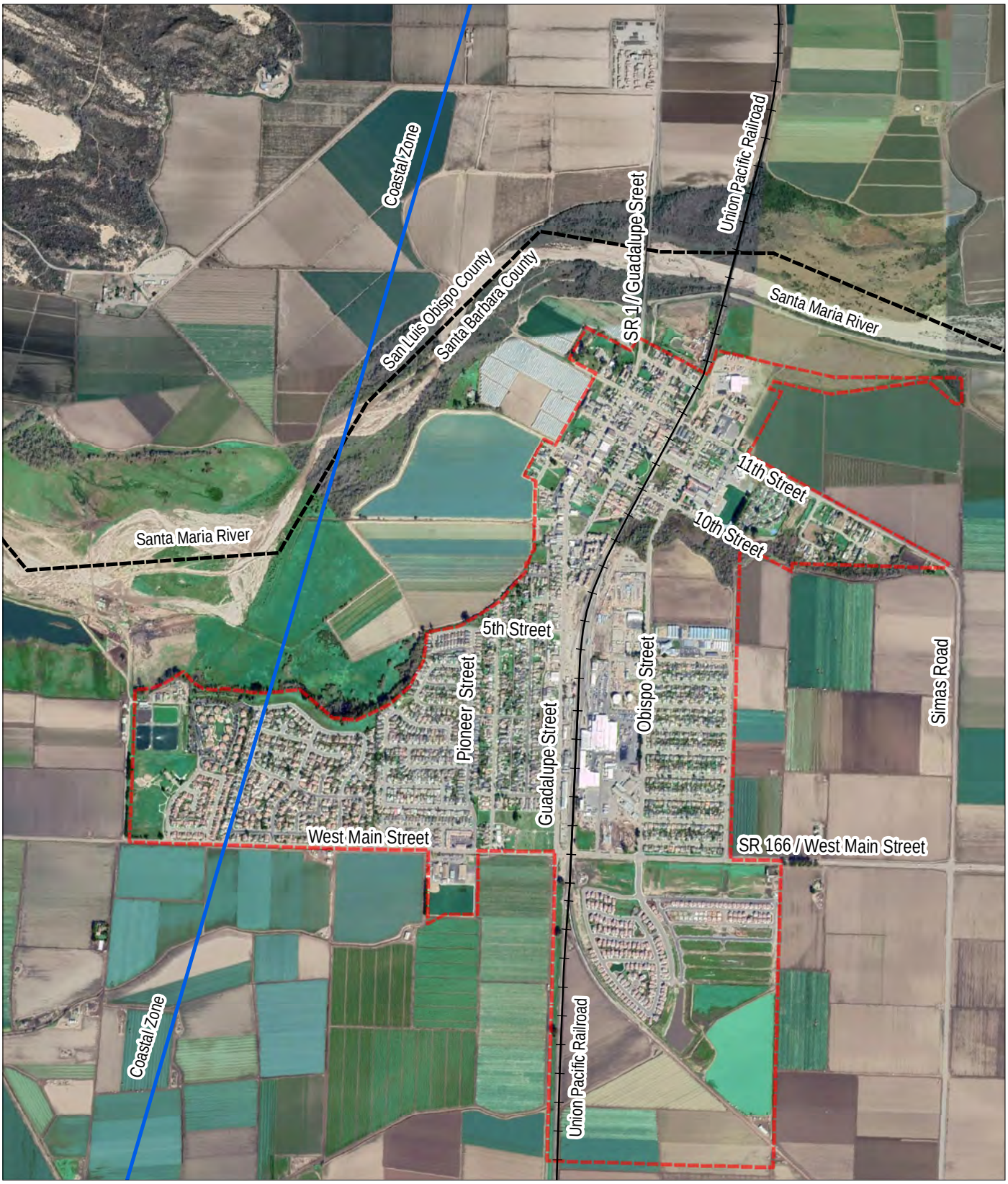

0 1950 feet

Project Boundary
(City Limits and Sphere of Influence)

Coastal Zone

Source: Santa Barbara County GIS 2021, Google Earth 2021

Figure 2

Aerial Photograph

Guadalupe 2021 General Plan Initial Study

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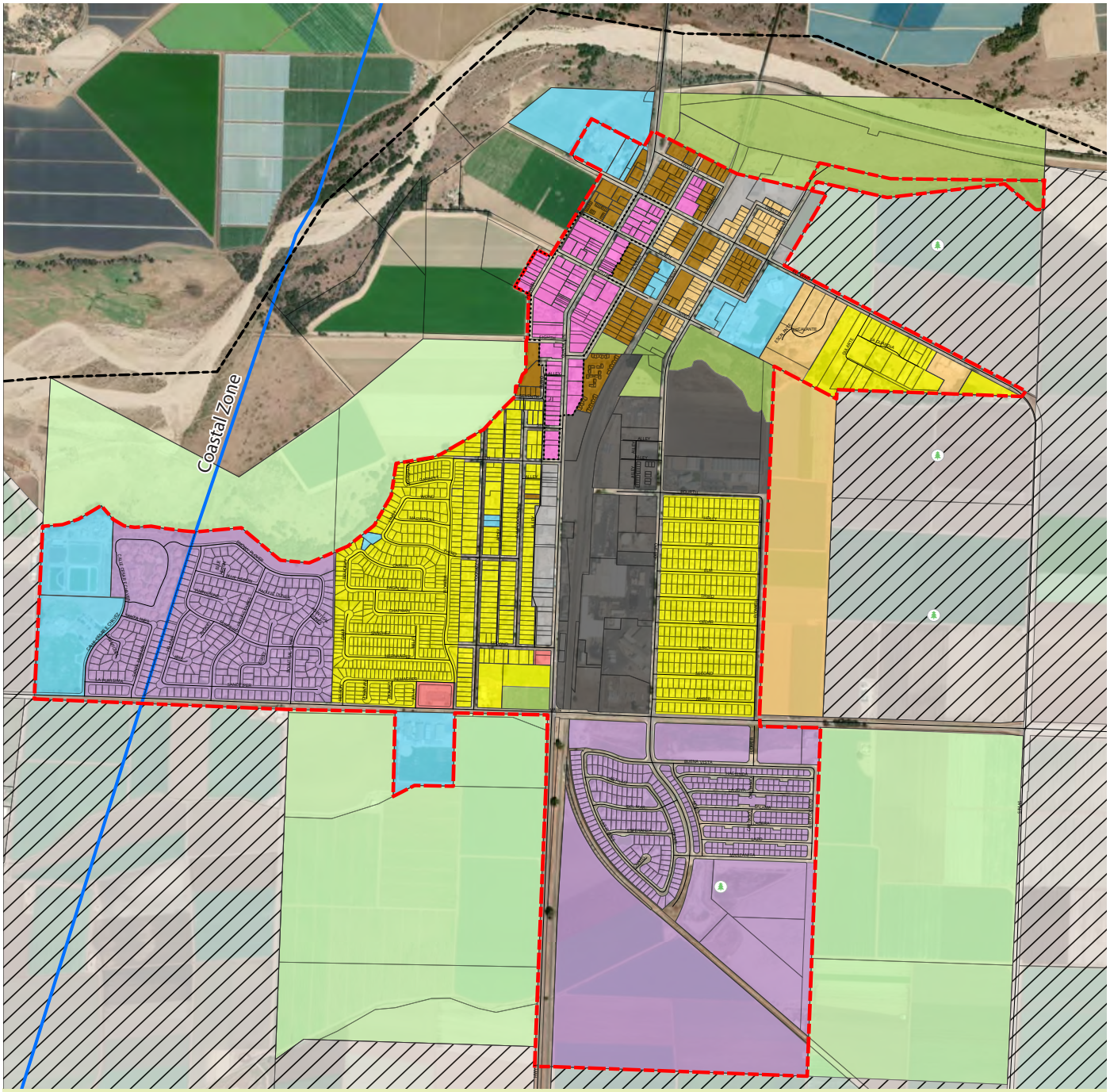

Source: City of Guadalupe 2002, EMC Planning Group 2020

Figure 3

2002 General Plan Land Use Diagram

Guadalupe 2021 General Plan Initial Study

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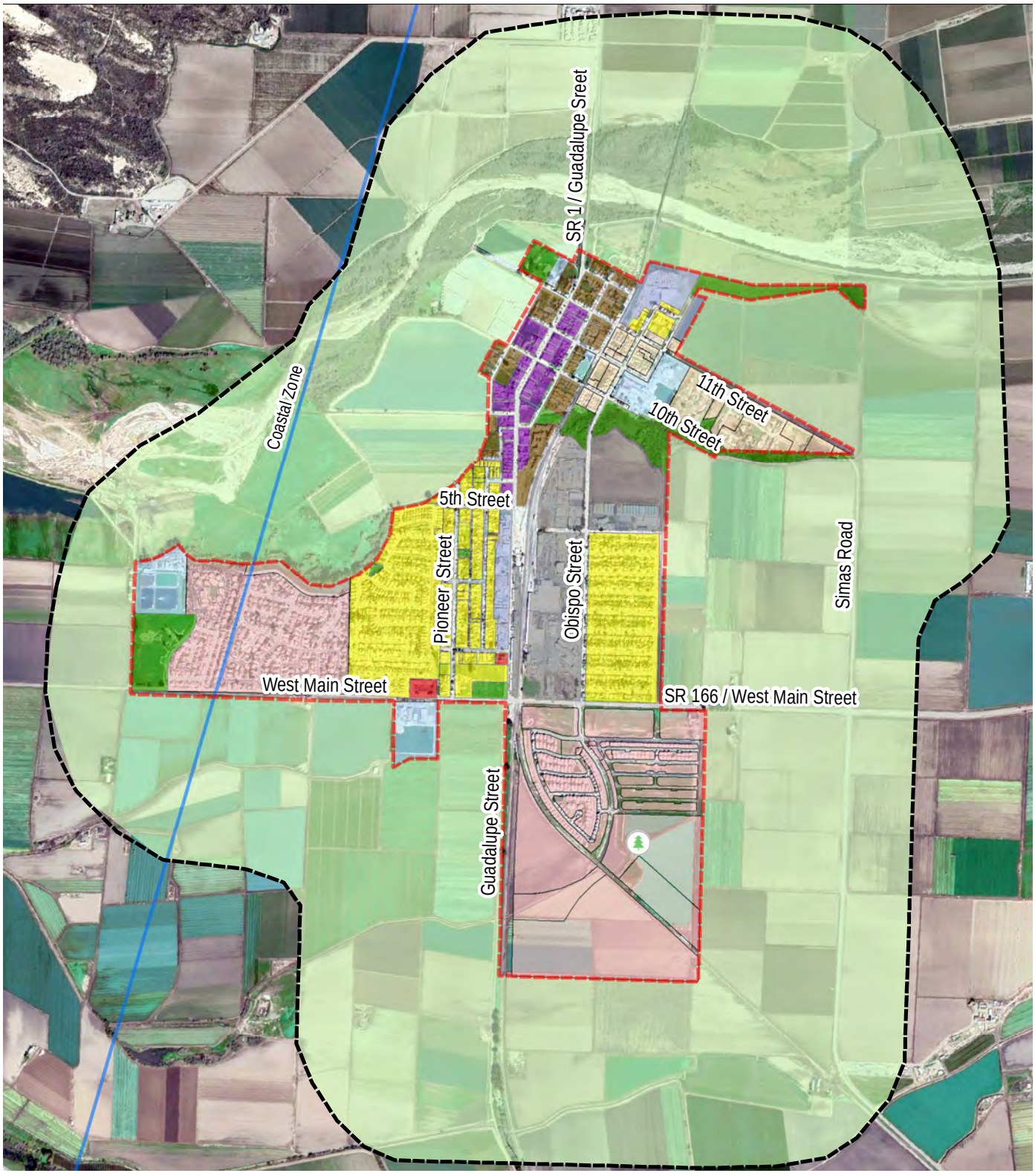

Source: Santa Barbara County GIS 2021, Google Earth 2021

Figure 4

2021 General Plan Land Use Diagram

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Source: Santa Barbara County GIS 2021, Google Earth 2021

Figure 5

Vacant Parcel Land Use

Guadalupe 2021 General Plan Initial Study

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B. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☒ Greenhouse Gas Emissions	☐ Population/Housing
☐ Agriculture and Forestry Resources	☐ Hazards & Hazardous Materials	☐ Public Services
☒ Air Quality	☐ Hydrology/Water Quality	☐ Recreation
☒ Biological Resources	☐ Land Use/Planning	☐ Transportation
☒ Cultural Resources	☐ Wildfire	☐ Tribal Cultural Resources
☐ Energy	☐ Mineral Resources	☐ Utilities/Service Systems
☒ Geology/Soils	☒ Noise	☐ Mandatory Findings of Significance

C. DETERMINATION

On the basis of this Initial Study, the Community Development Department:

☐ Finds that the proposed project is a Class ___ **CATEGORICAL EXEMPTION** and no further environmental review is required.

☐ Finds that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☒ Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. **A MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ Finds that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ Finds that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT (EIR)/SUBEQUENT EIR/SUPPLEMENTAL EIR/ADDENDUM** is required, but it must analyze only the effects that remain to be addressed.

☐ Finds that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Ron Sissem, EMC Planning Group
(Consultant to the City of Guadalupe)

May 31, 2022
Date

Larry Appel
Contract Planning Director

May 31, 2022
Date

D. Evaluation of Environmental Impacts

Notes

1. A brief explanation is provided for all answers except "No Impact" answers that are adequately supported by the information sources cited in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer is explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once it has been determined that a particular physical impact may occur, then the checklist answers indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less-Than-Significant Impact with Mitigation Measures Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from section XVII, "Earlier Analyses," may be cross-referenced).
5. Earlier analyses are used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. [Section 15063(c)(3)(D)] In this case, a brief discussion would identify the following:
    a. "Earlier Analysis Used" identifies and states where such document is available for review.
    b. "Impact Adequately Addressed" identifies which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and states whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. "Mitigation Measures"—For effects that are "Less-Than-Significant Impact with Mitigation Measures Incorporated," mitigation measures are described which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances, etc.) are incorporated.
7. "Supporting Information Sources"—A source list is attached, and other sources used or individuals contacted are cited in the discussion.
8. This is a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected. This is the format recommended in the CEQA Guidelines as amended 2018.
9. The explanation of each issue identifies:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any to reduce the impact to less than significant.

1. AESTHETICS

Except as provided in Public Resources Code Section 21099 (Modernization of Transportation Analysis for Transit-Oriented Infill Projects), would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b.	Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d.	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Comments:

a. There are no scenic vistas identified in the proposed general plan. Nevertheless, expansive views of agricultural lands that surround the city and of more distant landforms with agricultural land in the foreground could be considered valuable scenic vistas if such views are available from public viewing locations. Such locations could include public highways, public parks, or public open space areas.

New development would occur solely within the city limits. Land within the city limits is largely urbanized. New development opportunities are distributed throughout the city limits. To the extent that scenic vistas are available through existing, scattered vacant lots or public viewing areas, the views would be of short duration (from traveling vehicles) and of limited expanse or quality.

The City's design review regulations, codified as Ordinance 2008-393, include direction for considering the effects of new development within the Central Business District, new commercial and industrial development outside that district and new

multi-family residential development on public views. Policy CD-1.1 in the proposed general plan reiterates the need for the City to continue to use the design review process and the Downtown Design Guidelines to consider the visual effects of new development. Program CD-1.1.1 requires that the Downtown Design Guidelines be updated to, among other things, include refined direction for preserving unique landscape features, including unusual landforms, scenic vistas, and sensitive habitats. These development review processes reinforce consideration of scenic views as part the design and siting of new development.

Given the information presented above, implementation of the proposed general plan would have a less-than-significant impact on scenic vistas.

b. There are no state scenic highways designated in the city.

c. All new development enabled by the proposed general plan would occur within the existing city limits in an urbanized area. New development with the city would not conflict with regulations governing scenic quality. As described in item "a" above, all new development is subject to design review by the City pursuant to its design review process. New development in the Downtown would also be subject to review per the Downtown Design Guidelines. The potential impact is less than significant.

d. New development in the city would include exterior lighting in various forms depending on the land use type. New commercial and industrial development is commonly a greater source of potential light and glare associated with building, parking lot, and other outdoor space lighting, than is residential development. As described in item "a" above, the City's design review process is the fundamental method by which new development is reviewed for its visual characteristics. Through that process, the City evaluates new development to ensure all exterior site, structure and building lighting is well-designed and appropriate in size and location. Therefore, impacts on day or nighttime views would be less than significant.

2. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts on agricultural resources are significant environmental effects and in assessing impacts on agriculture and farmland, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	☐	☐	☒	☐
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☒	☐
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Comments:

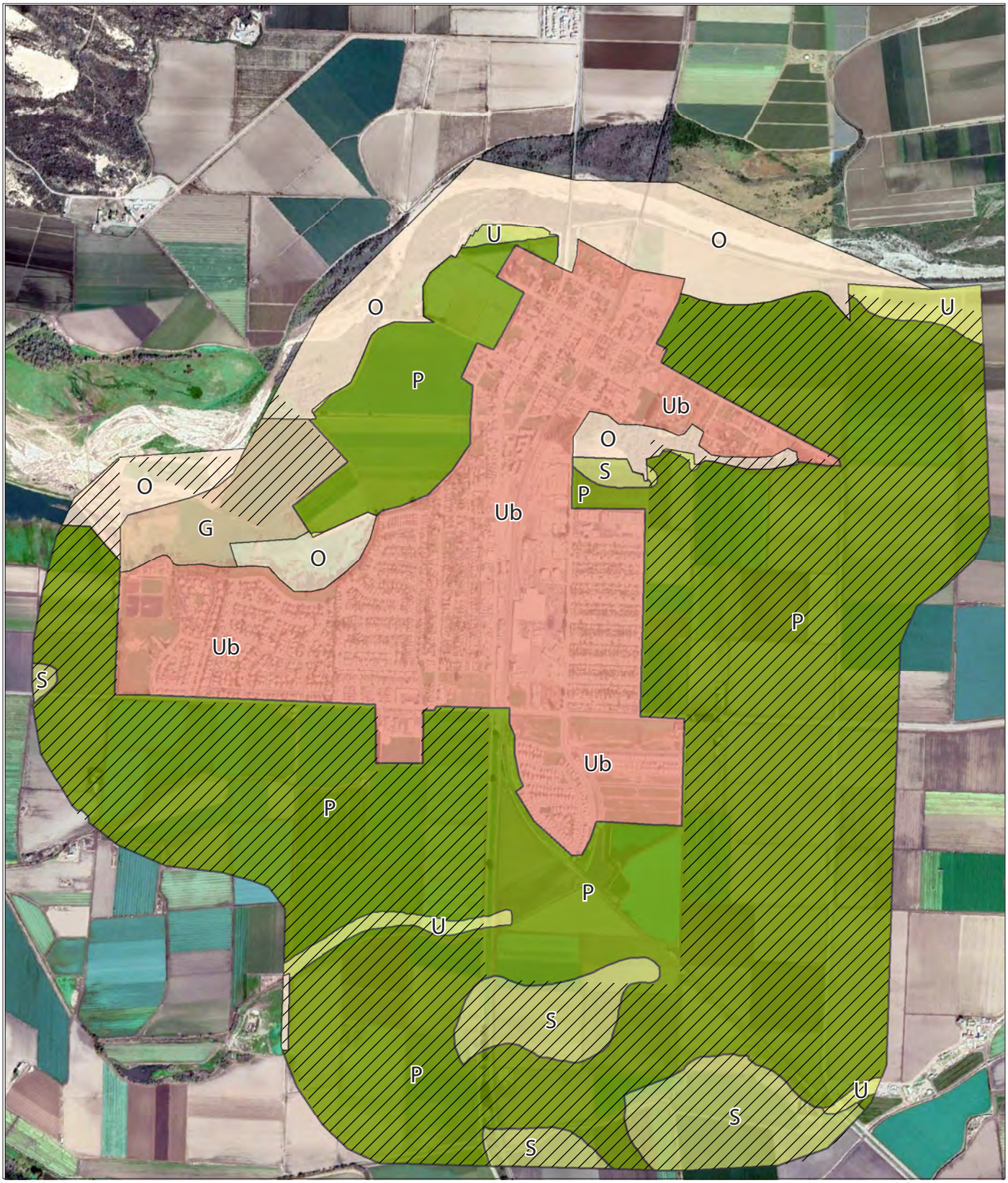
a. Farmland as classified by the California Department of Conservation occurs within the city limits as shown in Figure 6, Important Farmland. The largest area of Farmland is in the southern portion of the city limits within the boundary of the adopted DJ Farms specific plan. In 2005, the City certified the *Revised DJ Farms Specific Plan Environmental Impact Report*. That document found that implementing the specific plan would have an unavoidable significant impact from converting all Farmland within the specific plan boundary to non-agricultural use. The proposed general plan designates urban uses within the specific plan boundary consistent with the specific plan land use designations. Portions of the specific plan area have already been converted to urban use. Consequently, the proposed general plan would not result in converting Farmland in this area that has not already been assumed to occur.

   Additional Farmland (prime farmland and farmland of statewide importance) is designated east of Obispo Street and north of 4th Street within the northeast portion of the city. This area is bordered on two sides by urban development and is of minimal size relative to the large tracts of prime farmland adjacent to it that are outside the city limits and currently under Williamson Act contract. The effects of converting this Farmland to non-agricultural use would have been evaluated as part of the prior CEQA documentation prepared at the time the land was annexed to the city and proposed for urban use as part of a prior general plan process. The proposed general plan would not result in conversion of Farmland in this area that has not already been assumed. The proposed general plan would have no new impact from Farmland conversion.

b. All new development would occur within the city limits. There are no recorded Williamson Act contracts or land zoned for agricultural use within the city limits as illustrated in Figure 6. Therefore, the proposed general plan would not conflict with Williamson Act or agricultural zoning.

c,d. All new development would occur within the city limits. There is no land within the existing city limits that is zoned or designated forest land or timberland.

e. The proposed general plan would allow development primarily on existing vacant parcels, some of which are adjacent to agricultural land that is located outside the city limits and already designated for urban use in the existing 2002 general plan. The proposed general plan would not place new sensitive land uses, particularly residential uses, adjacent to agricultural land. Consequently, increased potential for land use conflicts (noise, dust, agricultural chemicals, etc.) between urban and adjacent agricultural uses is not expected as a result of the proposed general plan and therefore, the proposed general plan would have no impact.



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Prime Farmland (P)
Farmland of Statewide Importance (S)
Unique Farmland (U)
Grazing Land (G)
Urban and Built-Up Land (U)
Other Land (O)
Agricultural Preserve Williamson Act Parcels
Planning Area
City Limits and Sphere of Influence

Note: City limit and farmland mapping boundaries are approximate

Source: California Department of Conservation 2018, Santa Barbara County Assessor's Office 2021

Figure 6
Important Farmland

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The proposed general plan includes programs and policies designed to address and reduce land use conflicts between future new urban development in the city and agricultural uses. Program CD-1.1.2 requires that the City's design review process be updated, in part to address noise and air quality impacts created by the presence of the Union Pacific Railroad tracks and agriculture uses adjacent to residential neighborhoods. Policy LU-1.19 identifies that the City will continue to support agricultural uses outside the city limits and build relationships to address adverse agricultural use effects on city residents. Policy LU-1.20 affirms that the City will protect prime agricultural land and lands under Williamson Act contract from urban development until such time as that the City considers conversion to urban uses necessary for the City's vitality. Policy COS-1.1 states that the City will work with Santa Barbara County in support of preserving agricultural lands that do not conflict with urban uses in Guadalupe's unincorporated area. Policy COS-1.2 states that with the exception of DJ Farms, the City will direct new residential development to infill locations in Downtown Guadalupe so as to reduce the pressure to urbanize agricultural lands outside of the current city limits/sphere of influence.

As expressed in the proposed general plan, new infill development capacity is anticipated to meet the City's growth needs over the 20-year planning horizon of the proposed general plan. The City has prioritized infill development in large part to preserve adjacent agricultural land and to avoid the potential for creating new land use conflicts between agricultural uses and new urban development. This land use strategy, along with implementation of the policies and programs above, would assure that potential impacts from indirect conversion of Farmland to non-agricultural use will be less than significant.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c.	Expose sensitive receptors to substantial pollutant concentrations	☐	☒	☐	☐
d.	Result in other emissions, such as those leading to odors adversely affecting a substantial number of people	☐	☐	☒	☐

Comments:

a. The proposed project is located in the northern portion of the South Central Coast Air Basin (air basin). The Santa Barbara County Air Pollution Control District (air district) is the agency with primary responsible for assuring that national and state ambient air quality standards are attained and maintained in the air basin.

CEQA requires that proposed projects be analyzed for conflicts with applicable air quality plans. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of an air quality plan is to bring the area into compliance with the requirements of the federal and State ambient air quality standards. The primary pollutants of concern in the air basin are particulate matter (PM_{10}), for which the air basin is in nonattainment with the state's ambient air quality standards, and nitrous oxides (NOx) and reactive organic compounds (ROC), which are ozone precursors. Mobile and stationary sources of ROC and NOx are the largest contributors to the county's ozone emissions.

The air district's most recent adopted air quality plan is the ("ozone plan"). To bring the air basin into attainment for ozone, the air district prepared and approved the ozone plan to satisfy Clean Air Act requirements and ensure attainment of the State ozone standard. Per the air district's website, attainment of the standard was achieved in December 2021. The ozone plan includes measures to minimize mobile-source ozone precursor emissions from mobile and stationary sources to ensure sustained attainment within the air basin. The air district does not have an adopted plan to attain the State's PM_{10} standard, but does recommend several control measures for reducing construction-related and operational PM_{10} emissions (refer also to the discussion in item b, later in this section).

The air district guidance for determining consistency with the ozone plan is outlined in *Scope and Content of Air Quality Section in Environmental Documents* ("environmental review guidance"). According to the environmental review guidance, the ozone plan relies primarily on the land use and population projections provided by Santa Barbara County Association of Governments (SBCAG) in its *Regional Growth Forecast 2050 Santa Barbara County* ("regional growth forecast") and the California Air Resources Board on-road emissions forecast as a basis for vehicle emission forecasting. For a project to be consistent with the air district's ozone plan, project emissions must be accounted for in the ozone plan's growth assumptions and consistent with its policies. Commercial and industrial projects are also required to be monitored as set forth in SBCAG's Congestion Management Plan. Both SBCAG and the air district focus on reducing mobile-source emissions by reducing vehicle miles travelled (VMT) through encouraging compact development and implementation of locally adopted transportation control measures.

Population

According to Chapter 2 of the *City of Guadalupe 2019 – 2027 Housing Element Draft Update*, the city has experienced steady population growth since 1990. Table 2-1 of the housing element shows that between 1990 and 2017, the City's population increased by 33 percent to 7,313 people, which represented 1.7 percent of the total County population. Guadalupe's growth to 2017 equated with an annual increase of 1.2 percent. By comparison, Santa Barbara County's total 2017 population of 442,996 represented an annual growth of 0.7 percent over the same period. Although a relatively small city, Guadalupe was growing about one and a half times as fast as the County through 2017. According to the 2020 United States Census, the city's population was 8,057 as of April 1 2020.

As shown in Table 2-2 of the proposed general plan, at general plan buildout the City's population would increase by approximately 3,425 people, which equates to a population of over 11,000 people. However, according to the SBCAG regional growth forecast, the City's 2050 population is forecast to increase by 20 percent over its 2017 population. As shown in the regional growth forecast Table 8, Population Forecasts 2017-2050, SBCAG projects the city's population growth as 8,900 in 2040, 9,000 in 2045 and 9,100 in 2045. The forecast for the year 2020 was 7,900 persons, which is fewer than the amount reported in the housing element and the 2020 U.S. Census. The discrepancy between current conditions and the regional forecasts would be a significant impact if it leads to conflicts that would jeopardize the successful implementation of the ozone plan.

Ozone Plan Control Measures

There are over 45 adopted control measures in the ozone plan, many of which are applicable only for industrial or regional implementation, and do not apply to local land use planning.

Stationary-Source Controls

The ozone plan summarizes rules for the control of stationary-source ROG and NOx emissions primarily through the use of source review and best available control technologies. The impacts of project-specific stationary-source emissions generated by future development within the city would be analyzed when and if such uses are proposed. Air district permits may be required and prescribe that best available control technologies be used to reduce ROC and NOx emissions. The placement of such uses is subject to general plan policies EJ-1.2, EJ-1.3, and S.1.2, which require cooperation and coordination with the air district and evaluation of development proposals to address and reduce the effects of air pollution to sensitive receptors.

Non-Stationary Source Controls

For non-stationary-source emissions, the ozone plan identifies 19 transportation control measures to reduce on-road mobile-source emissions from future development. These are presented in the chapter 5 of the ozone plan and summarized in the Table 5-2 and Table 5-3 of the ozone plan. The proposed general plan policies identify multiple transportation control measures to reduce emissions through reductions in VMT and promote alternative forms of transportation. The ozone plan transportation control measures applicable to the proposed general plan and a brief discussion of general plan consistency with them are presented in Table 3, Transportation Control Measures Consistency - 2019 Ozone Plan.

Table 3 Transportation Control Measure Consistency – 2019 Ozone Plan

Measure	Consistency
T-1 Trip Reduction Program	Consistent. The proposed general plan land focuses on mixed use and infill development to reduce vehicle trips and VMT, which in turn reduces transportation-related criteria pollutant emissions. Policy COS-1.6 encourages compact development that focuses on infill development in Downtown Guadalupe to achieve higher levels of sustainability and to reduce greenhouse gas emissions. See also the response to T-14, below. Policy S-1.2 requires the review of all non-residential development proposals for air quality impacts, for which trip reduction programs may be required to reduce significant mobile-source emissions impacts. A new general plan policy is recommended that requires new non-residential development to prepare and implement transportation demand management and trip reduction programs to mitigate significant mobile-source emissions.
T-2 Employer-Based Transportation Demand Management (TDM) Program	Consistent. Program CIR-1.1.7 addresses employer-based transportation demand management measures by encouraging the creation and implementation of a bus transportation program for farmworkers travelling to and from the fields in and around the city. Additionally, see the response to Measure T-1. A new general plan policy is recommended that requires trip reduction and TDM strategies and programs to mitigate significant mobile-source emissions from non-residential development.
T-5 Improve Commuter Public Transit Service	Consistent. Policy CIR-1.6 supports improvements to the public transit system through the short-range transit planning process and encourages the use of commuter rail transit. The city's *Short Range Transit Plan* (2020) evaluates current needs and services, includes recommendations for improved services and is periodically updated and will continue to be implemented as the proposed general plan is implemented over time.
T-7 Traffic Flow Improvements	Consistent. See response to Measure T-5. Policy CIR-1.2 requires cooperation with federal, state, and regional transportation agencies to plan and fund circulation system maintenance and improvements; Policies CIR-1.4 supports creation of a Class I Bike Route that connects to regional trails to the revitalized Downtown and neighborhoods to the west; Policy CIR-1.5 supports Safe Routes to School, which will improve walkability for school children; Policy CIR-1.6 supports improvements to the public transit system and encourages the use of commuter rail transit; Programs 1.1 - 1.10 outline improvements within the city and improvements to improve regional connectivity for all modes of travel. In addition to the improvements identified in the Short Range Transit Plan, the proposed general plan calls for replacing the Santa Maria River Bridge in conformance with "Complete Streets" design standards, and signalizing two intersections along Main Street to provide pedestrian crossings, improve operations and traffic flow, and add pedestrian crossings at two intersections on Guadalupe Street.
T-10 Bicycle and Pedestrian Programs	Consistent. See response to Measure T-5 and Measure T-7. Policies CIR-1.1, 1.4, and 1.5 along with Programs 1.1-1.10 support the creation and maintenance of safe pedestrian and bicycle routes that increase connectivity within the city, and with regional facilities. Policy CD-1.1 and Program CD-1.1.1 incorporate street and sidewalk improvement ideas, including those that would help connect the Westside Neighborhood to Downtown Guadalupe, that were developed in the *City of Guadalupe Bicycle and Pedestrian Master Plan*, the *Guadalupe Mobility Revitalization Plan*, and the *Guadalupe to Beach Multi-Use Trail Feasibility Study.* Policy EJ-1.10 requires provision of safe streets with well-lit crosswalks and sidewalks for pedestrians and maintain a continuous, accessible, and connected system of sidewalks and crosswalks. Policy EJ-1.11 prioritizes funding to improve bicycle infrastructure.
T-14 Activity Centers	Consistent. See responses to Measures T-1, T-5, T-7, and T-10. The proposed general plan focuses on mixed use and infill development particularly in the downtown that will reduce vehicle trips and VMT and related mobile-source emissions. Policies LU-1.2 – LU-1.4 support and encourage land uses that develop existing vacant and underused land with mixed uses and preserve existing neighborhoods and improve and maintain public rights of way and infrastructure efficiency; Policy LU-1.9 encourages higher density residential uses; Policies LU-1.12 – LU-1.14 support community-serving uses in the Downtown area and

Measure	Consistency
	commit to working with Caltrans to improve sidewalks in the Central Business District to increase pedestrian amenities sidewalk cafe seating, pocket parks, etc.); LU-1.16, LU-1.17, and LU-1.18 encourage job-creating industrial uses that do not encroach on and are buffered from residential or other sensitive land uses. In addition to the policies already identified, Policies ED-1.1 and ED-1.2 set forth the City's primary economic development strategy of creating a vibrant, mixed-use downtown. Program CIR-1.1.4 and Program CD-1.1.1 seek to fund and implement improvements identified in the Guadalupe Mobility Revitalization Plan for the downtown area.
T-18 Alternative Fuels	Consistent. Policy S-1.1 requires and provides performance standards for installing EV chargers in new development. Mitigation measures in this initial study to reduce GHG emissions include providing EV infrastructure in all new development consistent with California Green Building Standards Code Tier 2.

SOURCE: EMC Planning Group 2021, SBCAPCD 2019

Despite the difference between the city's population and regional growth forecasts, the proposed general plan is substantially consistent with the ozone plan and would not conflict with or jeopardize its implementation.

The traffic report prepared for the proposed general plan is discussed in Section 17, Transportation. It concludes that at buildout, the proposed general plan will generate far fewer per capita and employee VMT than the regional average; the VMT impact would be less than significant. Therefore, although the proposed general plan is not in agreement with the regional population growth forecasts of the SBCAG, the proposed general plan achieves regional goals for VMT. This beneficial effect, coupled with its consistency with ozone plan transportation control measures policies ensures that implementation of the proposed general plan would not jeopardize or conflict with successful implementation of the ozone plan. No impact would occur.

b. The six most common and widespread air pollutants of concern, or "criteria pollutants," are ground-level ozone, nitrogen dioxide, particulate matter, carbon monoxide, sulfur dioxide, and lead. In addition, reactive organic gases, also known as volatile, or reactive, organic compounds are a key contributor to the criteria air pollutants because they react with other substances to form ground-level ozone. Health effects of criteria air pollutants include asthma, bronchitis, chest pain, coughing, and heart diseases.

Air Basin Attainment

The air district is the agency with the primary responsibility for assuring that national and state ambient air quality standards are attained and maintained in the air basin. The attainment status for criteria air pollutants in the air basin is provided in Table 4, Attainment Status: National and California Ambient Air Quality Standards. With the exception of PM_{10}, the air district is in attainment or is unclassified with all criteria air pollutant standards.

Table 4 Attainment Status: National and California Ambient Air Quality Standards.

Pollutant	Averaging Time	State Standard	Federal Standard
Ozone (O_3)	8 hour	Attainment	Unclassified/Attainment
	1 hour		
Respirable Particulate Matter (PM_{10})	Annual Arithmetic Mean	Non-attainment	Attainment
	24-hour		
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	Attainment	Unclassified/Attainment
	24-hour		
Carbon Monoxide (CO)	8 hour	Attainment	Attainment
	1 hour		
Nitrogen Dioxide (NO_2)	Annual Average	Attainment	Unclassified/Attainment
	1-hour		
Sulfur Dioxide (SO_2)	Annual Average	Attainment	-
	24-hour		-
	1-hour		Attainment
Lead (Pb)	Calendar Quarter	Attainment	Attainment
	30-day Average		-
	Rolling 3-month Average		Unclassified
Hydrogen Sulfide	1 hour	Attainment	-
Vinyl Chloride (chloroethene)	24 hour	Attainment	-
Visibility Reducing Particles	8 hour (1000 to 1800 PST)	-	-

SOURCE: LSA 2009; Santa Barbara County Air Pollution Control District 2021

Air District Thresholds and Control Measures

The air district has not developed thresholds of significance for impacts of implementing plans such as a general plan and does not provide specific guidance on whether the air district's criteria air pollutant emissions thresholds for individual projects should be applied at a plan level. The air district also has not adopted quantitative plan-level thresholds of significance for construction emissions.

Construction of stationary sources that require air district permits are subject to air district Rule 202 D.16, which requires the provision of offsets as set forth in Rule 804, if the combined emissions from all construction equipment used has the potential to exceed 25 tons of any pollutant, except carbon monoxide, in a 12-month period. Future development of stationary sources of emissions that would involve a one-year construction period would be subject to compliance with Rule 202 and Rule 804, which would reduce potentially significant impacts from the construction of project-specific stationary sources to less than significant.

The air basin is in nonattainment for PM_{10} and the air district recommends fugitive dust control measures be incorporated into all discretionary construction activities involving earthmoving activities regardless of the project size or duration, and whether or not significant construction dust impacts would occur. Projects are expected to manage fugitive dust emissions such that emissions do not exceed the air district's visible emissions limit (Rule 302), create a public nuisance (Rule 303), and are in compliance with the air district's requirements and standards for visible dust (Rule 345). The dust control measures include using water and suppressants to control dust from vehicle movement, limiting on-site vehicle speeds, installing track-out prevention devices that preventing track out of dirt onto adjoining construction site roadways, covering/controlling dust from stockpiles of fill soil and transporting fill, minimizing the size of disturbed areas and treating/paving such areas to control dust, conducting activities during periods of low wind speed to the extent feasible, and designating a dust control program manager to implement and monitor dust control measures.

Operational Emissions

Future development within the city will generate criteria air pollutant emissions during its operations. New stationary source emitters will be subject to compliance with air district permitting requirements and best available control technologies to reduce emissions, as discussed previously.

Criteria air pollutant emission volume projections for operations of future development were made using the California Emissions Estimator Model (CalEEMod) version 2020.4. The model results and a memorandum summarizing the methodology, assumptions and results are included in Appendix A. Adjustments were made to CalEEMod defaults and data inputs to that reflect information provided by the transportation consultant, compliance with state and local regulations, and implementation of proposed general plan policies that are quantifiable using CalEEMod. The results are presented in the CalEEMod results for summer and winter emissions in Appendix A and the overall results are summarized in Table 5, Projected Criteria Air Pollutant Emissions.

The model results indicate that mobile-sources are by far the greatest source of emissions, with non-residential commercial retail uses generating the majority of the mobile-source emissions (see section 4.2 of the CalEEMod results in Appendix A).

Table 5 Projected Criteria Air Pollutant Emissions

Emissions Sources	Reactive Organic Compounds (ROC)[1,2]	Nitrogen Oxides (NO_X)[1,2]	Particulate Matter (PM_{10})[1,2,3]
Area	66.98	0.66	0.30
Energy	1.18	10.50	0.82
Mobile[4]	45.32[5]	41.64[6]	93.36
Total all Sources	113.48	53.86	94.48

SOURCE: EMC Planning Group 2022
NOTES:
1. Results have been rounded, and may, therefore, vary slightly.
2. Expressed in pounds per day.
3. Reported PM_{10} emissions include fugitive dust and exhaust particulates.
4. For Santa Barbara County, operational mobile-source defaults in CalEEMod version 2020.4 assume all paved roadways.
5. Daily summer ROC emissions are shown as they are greater than daily winter ROC emissions. Detailed model results are included in Appendix A.
6. Daily winter NOx emissions are shown as they are greater than daily summer NOx emissions. Detailed model results are included in Appendix A.

The proposed general plan land use strategy and policies would result in reduced vehicle trips and associate criteria emissions. Air quality policy S-1.2 requires the review of all non-residential development projects for impacts on air quality and requires all development projects to pave roads and parking areas. Climate change policy S-1.1 requires EV infrastructure in non-residential developments. Policy EJ-1.1 and program COS-1.1.1 support the preparation of a climate action plan to identify ways to reduce citywide GHG emissions, including through reducing mobile-sources emissions, which would also reduce mobile-source criteria pollutant emissions.

As noted previously in the discussion of ozone plan consistency, the proposed general plan incorporates many transportation control measures that reduce emissions associated with VMT. However, the proposed general plan does not include specific policies that encourage participation in the air district's voluntary transportation demand management (T-2) and/or vehicle trip reduction programs (T-1) for non-residential vehicle fleets, which would further reduce single-occupant vehicle trips and their related emissions. A new air quality policy is recommended that promotes participation in these two programs.

The land use design approach in the proposed general plan, as supported by the suite of policies it contains that promote compact, development, mix of uses, walkable and connected neighborhoods, and reductions in VMT, ensures that mobile-source criteria emissions impacts would be less than cumulatively considerable.

Construction Emissions

Constructing new development projects would generate short-term emissions that may negatively affect regional and local air quality conditions, and expose sensitive receptors to particulate emissions that can adversely affect human health. Sensitive receptors and potential exposures to harmful emissions are discussed in item "c" below. Construction emissions estimates were not generated by CalEEMod because project-specific data is not available with which to calculate meaningful emissions results. Construction activity would generate PM_{10} emissions that contribute to regional PM_{10} pollutant volumes for which the air basin is in non-attainment. This would be a cumulatively considerable impact.

Air quality policy S-1.2 requires review of air quality impacts from new non-residential development, but does not address construction dust impacts. The air district dust control measures summarized would be required because the county is in nonattainment for PM_{10}. Implementing the following mitigation measure will ensure compliance with the air district construction dust control measures and will reduce potentially significant construction PM_{10} emissions to less than cumulatively considerable.

Mitigation Measure

AQ-1 Add the following new policy to the Safety Element:

> Implement Dust-Control Measures. Require the implementation of the Santa Barbara County Air Pollution Control District dust control measures during construction of new development projects.

c. Toxic air contaminants (TACs) are pollutants that may pose a hazard to human health. Potential health effects could include cancer, birth defects, neurological damage, damage to the body's natural defense system, and diseases that lead to death. Children, the elderly, and the chronically or acutely ill are the most sensitive population groups that are more susceptible to adverse effects of air pollution than others. These sensitive receptors are commonly associated with specific land uses such as residential areas, elementary schools, retirement homes, and hospitals.

TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuels combustion, and commercial operations (e.g., dry cleaners). Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs. Construction equipment and associated heavy-duty truck traffic generates diesel exhaust and fugitive dust ($PM_{2.5}$) that poses health risks for sensitive receptors. Diesel particulate matter, which is a known TAC, is a component of diesel exhaust.

The California Air Resources Board has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of diesel particulate matter. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of diesel particulate matter emissions from California highways, and a number of others apply to off-road vehicles and construction equipment. The California Air Resources Board recommends that local planning agencies consider proximity of sensitive receptors to high-volume roadways. The California Air Resources Board recommends that local agencies take steps to avoid siting new, sensitive land uses in the following locations:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day;
- Within 1,000 feet of a major service and maintenance rail yard;
- Immediately downwind of ports (in the most heavily impacted zones) and petroleum refineries;
- Within 300 feet of any dry-cleaning operation (for operations with two or more machines, provide 500 feet); and
- Within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater).

Proximity to high-volume roadways is the primary potential TAC related land use issue for implementing the proposed general plan under CEQA. No new maintenance yards, ports or large gas stations would be anticipated given the land use direction included in the proposed general plan. State Route 1 and State Route 166 within the city limit current carry less than 10,000 vehicles per day. Appendix C of the noise study included as Appendix E to this initial study shows that traffic volumes on both roadways would be below 14,000 vehicles per day under general plan buildout conditions. Therefore, potential TAC impacts from locating new sensitive uses in close proximity to these roadways would be less than significant.

New stationary sources of TACs could have potential to impact sensitive receptors. Compliance with general plan policies S-1.2 and S-1.3 would ensure that development of new TAC sources or new land use projects near TAC sources would be subject to review and approval by the City to ensure that the health risks of such use or placement of sensitive uses near a source would be evaluated and appropriate mitigation measures implemented. Policy EJ-1.3 also requires the city to condition projects to reduce the effects of pollution on site sensitive receptors. These policies ensure that potential impacts from exposure to operational TAC emissions generated by future development associated with general plan buildout would be less than significant.

Construction activity associated with future development consistent with the general plan land use designations may result in sensitive receptor exposures to diesel particulate matter that can result in increased health risks. Potential impacts associated with individual construction projects are not generally considered significant because of their temporary, short-term nature. However, it is possible that major construction activity could occur as the proposed general plan is implemented. Such activity could have potentially significant construction related TAC impacts on nearby sensitive receptors. This impact would be reduced to less than significant with implementation of the following mitigation measure.

Mitigation Measure

Add the following new policy to the Safety Element:

AQ-2 Implement Santa Barbara County Air Pollution Control District construction exhaust control measures during construction activities.

According to the air district Permitted Facilities Map, the following permitted stationary diesel generator sources of TACs are located within or near the city limits:

- 10982 - Main Street, Main Street Farm (Booster Pump);
- 10508 - 227 Guadalupe Road, Frontier California, Inc (Emergency Generator);
- 10563 - State Route 1, Sprint Nextel (Emergency Generator);
- 10704 - Obispo St, City of Guadalupe (Emergency Generator);
- 08672 - 393 Obispo St, Lupe's Company (Gas Station);
- 08062 - 393 Obispo St, Lupe's Company (Gas Station);
- 02990 - 400 Obispo Street, Pan American Seed (Emergency Generator);
- 01556 - Guadalupe St, Fastrip Oil Company, L.P. (Gas Station);
- 01554 - Guadalupe St, Pfg Guadalupe inc. (Gas Station);
- 11258 - Guadalupe, Verizon Wireless, Inc. (Emergency Generator);
- 10963 - Eleventh Street, B & D Farms Inc. (Booster Pump);
- 10963 - Eleventh Street, B & D Farms Inc. (Emergency Generator);
- 01558 - City of Guadalupe WWTP (Emergency Generator);
- 10959 - Gold Coast Farms, Inc. (Booster Pump); and
- 04108 - Union Sugar Lease - Conway Energy, Inc. (Oil Extraction).

The air district requires permits for all diesel-powered emergency standby generator engines with a rated brake-horsepower rating of 50 or greater and health risk assessments are required as part of the permit process.

Under CEQA, impacts of existing conditions on new development is generally not required. In California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, 377, the California Supreme Court held that agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on the future users or residents of planned projects. The court determined that CEQA analysis is concerned with the impact of new development on the environment, rather than with the environment's impact on future development. The court did, however, determine that CEQA may apply when a proposed project risks exacerbating environmental hazards or other conditions that already exist, in which case an agency must analyze the potential impact of such hazards on future residents or users.

It is possible that new development that could occur as guided by the proposed general plan could include stationary TAC sources. Since such development could exacerbate existing TAC conditions, its impacts on nearby existing sensitive receptors may require specific evaluation and may require permits from the air district. Compliance with general plan Policy S-1.2 and Policy S-1.3 would ensure that new development of, or near, any source of TACs is subject to review and approval by the City to ensure that the health risks of such use or placement of sensitive uses near a source would be evaluated and appropriate mitigation measures implemented. Policy EJ-1.3 also requires the city to condition projects to reduce the effects of pollution on site sensitive receptors. These policies would ensure that potential exposure of sensitive receptors to operational TAC emissions generated by future development associated with general plan buildout would be minimized.

d. Future industrial uses could be sources of nuisance odors. Proposed general plan policies S-1.2, S-1., and EJ-1.3, discussed previously, require new non-residential projects to be reviewed for their potential effects on sensitive receptors. Policy LU-1.2 discourages incompatible land uses. Policy CD-1.1 and program CD-1.1.2 call for using the City's design review process to address potential conflicts between industrial uses and neighboring residential uses and noise, and air quality impacts from trains and from agriculture uses adjacent to residential neighborhoods. Implementation of these policies and uniformly applied regulations of the air district, which could include preparing and implementing an odor abatement plan, would ensure that potential impacts from new substantial sources of odor would be less than significant.

Effects of existing odors on new proposed sensitive receptors is generally not subject to CEQA review per the California Building Industry Association v. Bay Area Air Quality Management District court case described in item "c" above, unless the new proposed uses generate odors which could exacerbate existing odor conditions. The policies referenced above would ensure than odors from new development would be evaluated and minimized.

4. BIOLOGICAL RESOURCES

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐
c.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.), through direct removal, filing, hydrological interruption, or other means?	☐	☒	☐	☐
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Comments:

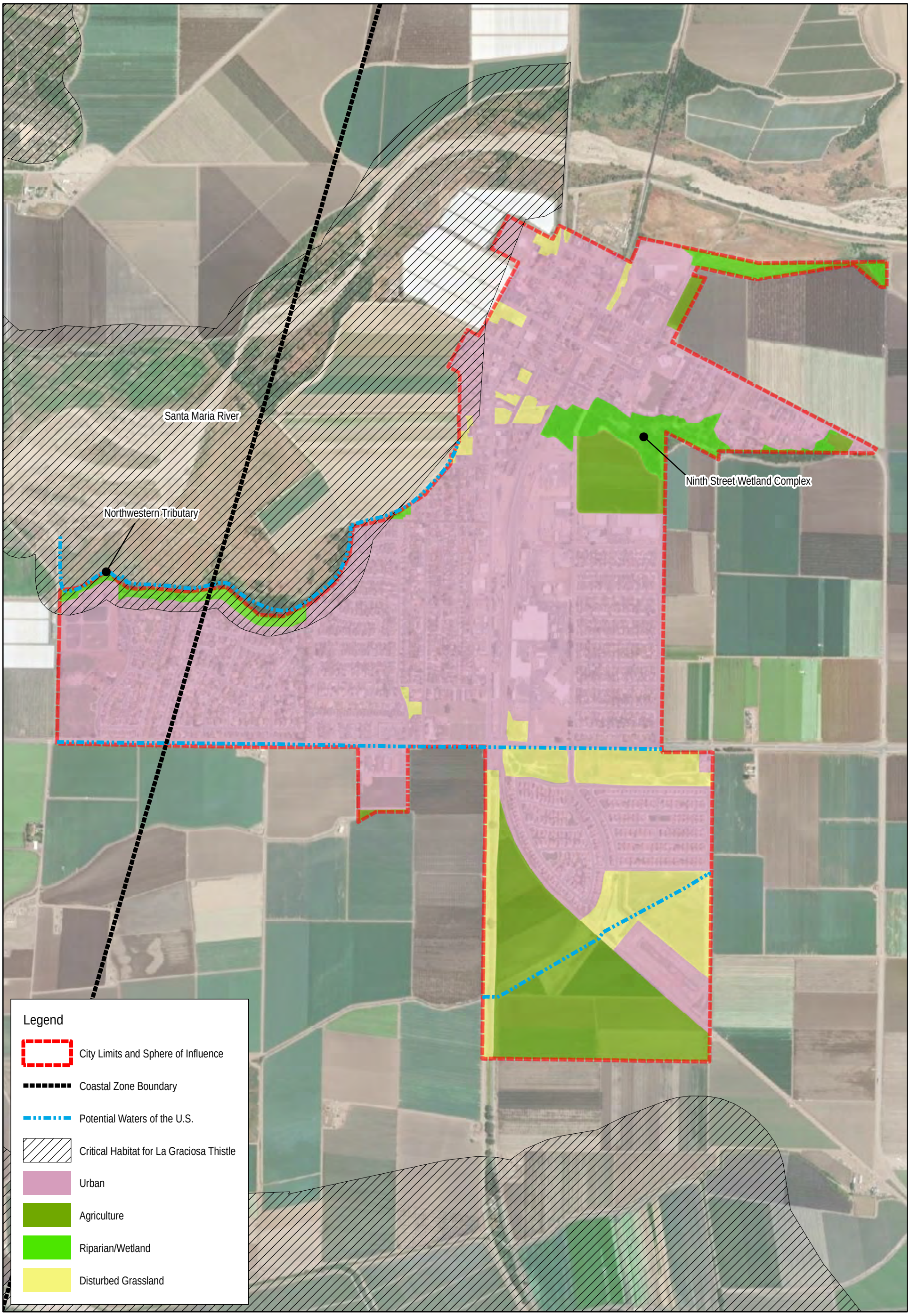
a. The biological resources setting and impact analyses are based on the review of existing biological studies, biological databases, U.S. Geological Survey mapping, aerial photographs, and other relevant scientific literature. This included searching

the U.S. Fish and Wildlife Service Endangered Species Database, California Department of Fish and Wildlife California Natural Diversity Database, and California Native Plant Society Inventory of Rare and Endangered Plants, to identify special-status plants, wildlife, and habitats known to occur in the vicinity of the city limits. Special-status species are those listed as Endangered, Threatened, or Rare, or as Candidates for listing by the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife; as Species of Special Concern or Fully Protected species by the California Department of Fish and Wildlife; or as Rare Plant Rank 1B or 2B species by the California Native Plant Society. The National Wetlands Inventory was also reviewed to identify potential jurisdictional aquatic features within or adjacent to the city limits. Based on the data review, habitat types within and directly adjacent to the city limits were identified at a general level as shown in Figure 7, Habitat Map. It is possible that habitat may be located on specific sites that is not identified in Figure 7.

A search of the California Department of Fish and Wildlife California Natural Diversity Database was conducted for the target U.S. Geological Survey Guadalupe quadrangle and six surrounding quadrangles: Nipomo, Santa Maria, Orcutt, Casmalia, Point Sal, and Oceano, to generate a list of potentially occurring special-status species in the vicinity of the city limits. Records of occurrence for special-status plants were also reviewed for all seven U.S. Geological Survey quadrangles in the California Native Plant Society Inventory of Rare and Endangered Plants. A U.S. Fish and Wildlife Service Endangered Species Program threatened and endangered species list was generated for Santa Barbara County. Appendix B, Special-Status Plant and Wildlife Species in the Vicinity of the Planning Area, presents tables with California Natural Diversity Database results, including special-status species documented within the vicinity, their listing status and suitable habitat description, and their potential to occur within the vicinity. Figure 8, Recorded Observations of Special-Status Species, presents a map of California Natural Diversity Database records within one mile of the city limits.

Special-Status Plant Species

Of the special-status plant species with potential to occur in the vicinity of the city limits identified in Appendix B, the following species have low to moderate potential to occur: black-flowered figwort (*Scrophularia atrata*), Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), crisp monardella (*Monardella undulata* ssp. *crispa*), Kellogg's horkelia (*Horkelia cuneata* ssp. *sericea*), La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*), marsh sandwort (*Arenaria paludicola*), Santa Barbara ceanothus (*Ceanothus impressus* var. *impressus*), and surf thistle (*Cirsium rhothophilum*).



Source: ESRI 2022, Santa Barbara County 2022, EMC Planning Group 2022

Figure 7
Habitat Map

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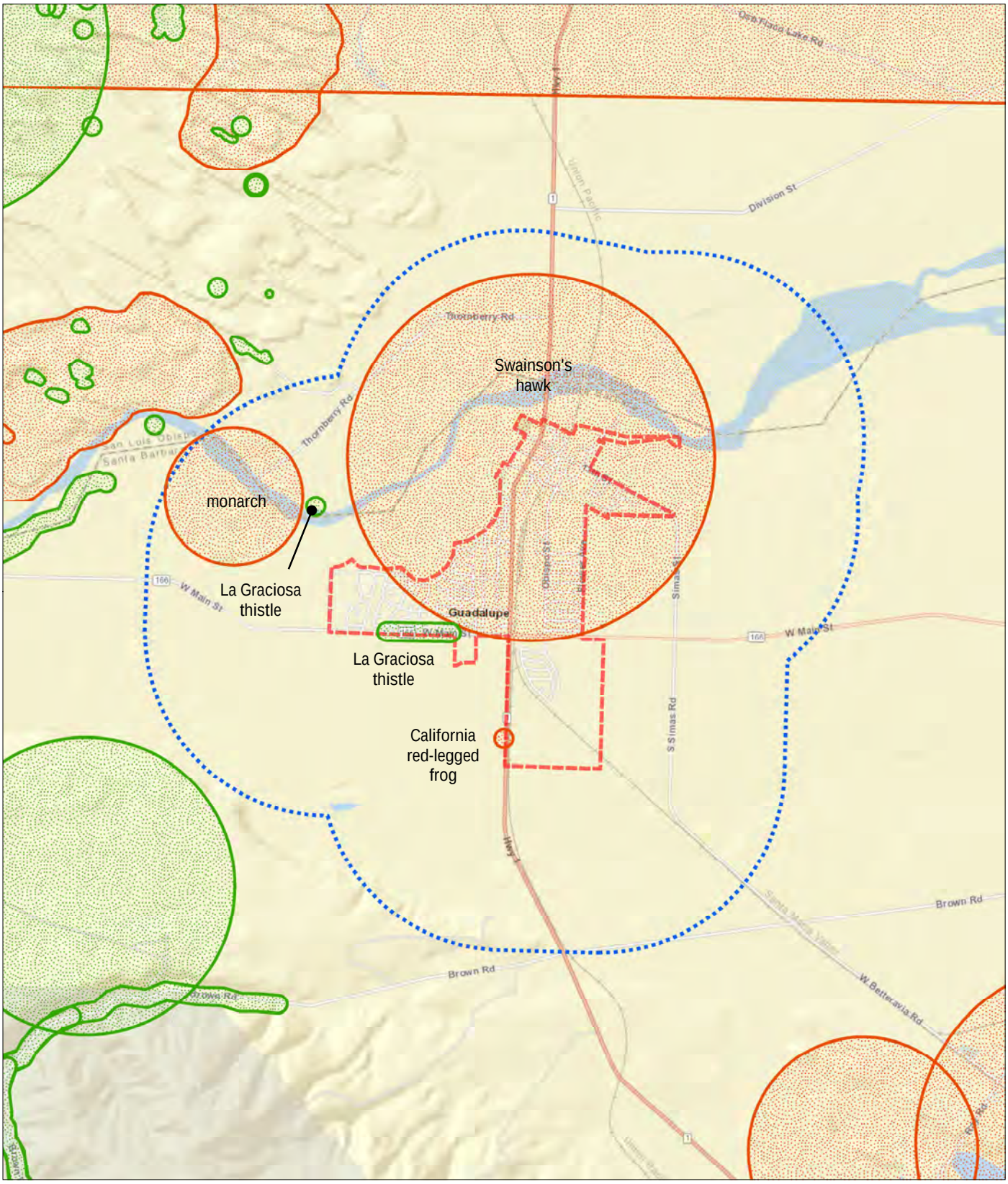

Source: Santa Barbara County GIS 2021, ESRI 2022, CNDDB 2022

0 0.75 miles

City Limits and Sphere of Influence

1-Mile Buffer

Special-Status Plants

Special-Status Wildlife

Figure 8

Recorded Observations of Special-Status Species

Guadalupe 2021 General Plan Initial Study

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Special-Status Wildlife Species

Of the special-status wildlife species known to occur in the vicinity as identified in Appendix B, the following species have low to moderate potential to occur: American badger (*Taxidea taxus*), burrowing owl (*Athene cunicularia*), California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), coast horned lizard (*Phrynosoma blainvillii*), monarch butterfly (*Danaus plexippus*), Northern California legless lizard (*Anniella pulchra*), sharp-shinned hawk (*Accipiter striatus*), two-striped garter snake (*Thamnophis hammondii*), western pond turtle (*Emys marmorata*), western spadefoot (*Spea hammondii*), hoary bat (*Lasiurus cinereus*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and western red bat (*Lasiurus blossevillii*). Nesting birds are likely to occur within the city limits.

Direct or indirect removal, disturbance, degradation, or conversion of occupied special-status species habitat(s) and/or direct injury or mortality of special-status species or protected nesting birds would result in significant environmental impacts to these species. The proposed general plan allows future development on vacant parcels and above existing commercial buildings located solely within the city limits, which substantially limits areas where significant impacts to habitat or nesting birds could occur. Nevertheless, future development could impact special-status plant and wildlife species, and future construction activities or vegetation removal during the bird nesting season (February 1 through August 31) could also impact nesting birds protected by the California Fish and Game Code and/or the federal Migratory Bird Treaty Act.

Several policies in the Conservation and Open Space Element of the proposed general plan protect natural habitats and other open space areas to ensure the longevity of native species as the built environment develops and to preserve aesthetic and visual amenities. Policy COS-1.4 states that the City will work to protect existing open space and habitat resources. Policy COS-1.5 limits the development of land within 25 feet of the Ninth Street Wetland Complex.

Implementing these policies would reduce potentially significant impacts to special-status plant and wildlife species and protected nesting birds, but not to a less-than-significant level. These impacts would be reduced to less than significant with implementation of the following mitigation measures.

Mitigation Measures

BIO-1 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

Where development could occur in areas with potential habitat for special-status species occurs, such as within the riparian or disturbed grassland areas shown on Figure 7, Habitat Map, or in other locations where such habitat may be present as may be identified by the Planning Director, an assessment of potential impacts to biological resources shall be conducted by a qualified biologist. If determined necessary by a qualified biologist, focused surveys per applicable regulatory agency protocols shall be conducted to determine if such species could occur. Impacts to special-status species shall be avoided or minimized to the extent possible. If impacts cannot be avoided, measures to mitigate for the loss of individuals and/or habitat shall be implemented.

BIO-2 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

Where development could occur in areas with potential nesting bird habitat, such as within the riparian or disturbed grassland areas shown on Figure 7, Habitat Map, or in other locations where such habitat may be present as may be identified by the Planning Director, native nesting birds protected by the Federal Migratory Bird Treaty Act and the California Fish and Game Code shall be surveyed for and protected, if found. Disturbance activities shall not occur during the nesting season (generally considered February 1 – August 31) until nesting bird surveys have been conducted and no nesting activity is occurring on or adjacent to a project site. If nesting activity is observed, a qualified biologist may recommend an exclusion area be maintained until birds have fledged.

b. Riparian and wetland habitats within the city limits are shown on Figure 7, Habitat Map, and include areas of arroyo willow riparian scrub along the northern city limit boundary adjacent to the Santa Maria River, riparian woodland along a tributary to the northwest, and wetlands and riparian woodland along the Ninth Street wetland complex. Though few vacant parcels available for development are located near or adjacent to these habitat areas, direct or indirect removal, disturbance, degradation, or conversion of riparian and/or wetland habitat resulting from new development would result in significant environmental impacts to these habitats.

Policies in the Conservation and Open Space Element protect natural habitats and other open space areas. Policy COS-1.4 states that the City will work to protect existing open space and habitat resources. Policy COS-1.5 limits the development of land within 25 feet of the Ninth Street Wetland Complex. Implementation of these policies would reduce potentially significant impacts to riparian habitat, but not to a less-than-significant level. The potential impact can be reduced to less than significant with implementation of the following mitigation measure.

Mitigation Measure

BIO-3 Replace Policy COS-1.5 of the proposed general plan with the following policy:

~~The City will not allow development of land within 25 feet of the Ninth Street Wetland Complex. The City will make exceptions to this policy for parcels of land designed for residential use to prevent a legal "taking."~~

The City shall protect the ecological, aesthetic, and recreational value of sensitive wetland and riparian habitats associated with aquatic features within and directly adjacent to the city limits. Where development could occur in or within 50 feet of the edge of riparian vegetation or 50 feet from the top of bank of wetland habitats shown on Figure 7, Habitat Map, or in other locations where such features may be present as may be identified by the Planning Director, a qualified biologist or restoration ecologist shall be retained to determine the appropriate development setbacks and other protective measures needed to ensure the long-term protection and enhancement of the sensitive community.

c. A review of the National Wetlands Inventory online database was conducted to identify the closest jurisdictional aquatic features within or adjacent to the city limits that could be affected by planned development per the proposed general plan. Potential wetlands and waters of the U.S. within or adjacent to the city limits are shown on Figure 7, Habitat Map, and include the Santa Maria River, a tributary to the northwest, the Ninth Street wetland complex, and agricultural ditches. Development within the city limits could potentially impact potential wetlands and waters of the U.S., including those near the Ninth Street wetland complex and those along agricultural ditches.

Policies in the Conservation and Open Space Element protect natural habitats and other open space areas. Policy COS-1.4 states that the City will work to protect

existing open space and habitat resources. Policy COS-1.5 limits the development of land within 25 feet of the Ninth Street Wetland Complex. Implementation of the policies would reduce potentially significant impacts to wetlands and waters of the U.S., but not to a less-than-significant level. These impacts can be reduced to less than significant with implementation of the following mitigation measure.

Mitigation Measure

BIO-4 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

Applicants for projects on sites within 50 feet from the top of bank of potential jurisdictional wetlands or waterways as shown on Figure 7, Habitat Map, or in other locations where such features may be present as may be identified by the Planning Director, shall retain a qualified biologist/wetland regulatory specialist to conduct a site investigation and assess whether the wetland or waterway features are jurisdictional, assess potential impacts, and determine whether stream buffers/riparian setbacks are required. If a feature is found to be jurisdictional or potentially jurisdictional, the applicant shall comply with the appropriate permitting processes.

d. Terrestrial species must navigate a habitat landscape that meets their needs for breeding, feeding and shelter. Natural and semi-natural components of the landscape must be large enough and connected enough to meet the needs of all species that use them. Wildlife movement corridors provide connectivity between habitat areas, enhancing species richness and diversity, and usually also provide cover, water, food, and breeding sites.

The California Department of Fish and Wildlife California Essential Habitat Connectivity Project identifies an essential wildlife corridor along the Santa Maria River and the northern edge of the Guadalupe Planning Area. However, the proposed general plan would not result in development in the vicinity of the Santa Maria River. Development within the city limits as guided by the proposed general plan would have no impact from substantially interfering with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e. The City of Guadalupe does not have a specific native tree removal policy or ordinance. However, all trees and shrubs planted in any public parking strip or other public place in the city must conform as to species and location with the

recommendation of the City Council, or to the street tree plan of the City (Municipal Code Section 12.12.040). New development would, therefore, not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impacts from such conflict would occur.

f. Designated critical habitat for the La Graciosa thistle (Cirsium scariosum var. loncholepis) is located within the Guadalupe Planning Area, primarily along the Santa Maria River corridor, as shown on Figure 7, Habitat Map. However, there are no vacant parcels of land within the city limits to which the proposed general plan directs new development that are within the critical habitat boundary. No impacts would occur.

There are no habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans applicable within the city limits. No impacts from conflict with such plans would occur.

5. CULTURAL RESOURCES

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5?	☐	☒	☐	☐
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?	☐	☒	☐	☐
c.	Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Comments:

a. Information regarding historic resources located within the city limits is included in the Community Design and Historic Preservation Element of the proposed general plan. The northern portion of the city is noted as having developed earlier than the southern portion, with buildings dating back to 1913 and many others built before World War II. The downtown area is noted as containing the highest concentration of historic resources in the city. Some buildings have been identified as dating from construction periods at the turn of the 19th century. None of these properties are recorded on the National Register of Historic Places or the California Landmark Series. The City has developed a Local Register of Historical Resources, which is included in the proposed general plan as Table 7.1. The locations of the listed resources are illustrated in Figure 7-3 of the proposed general plan.

To supplement the information in the proposed general plan, an archival database search was conducted through the Central Coast Information Center of the California Historical Resource Information Center. The record search concluded that there are historic and archaeological resources located within the city limits. One record included four historic buildings that are also identified in the proposed general plan as the 1931 Veterans Memorial Building, the 1913 Masonic Lodge, the 1916 Grisingher Building, and the Far Western Tavern built in 1912. The same record included residences that span from the Victorian Era to the 1930s, the 1945 Druids Temple, the 1912 A. Bondiett Building, commercial buildings from 1922, the 1894 Cameron Grange Building, stucco bungalows that have been estimated to have been built in the 1920s, the Aluminite Manufacturing Company, and a cemetery that has the year

1883 as the earliest date present. Additional records include historic resources such as the Guadalupe Buddhist Church, a public housing complex, a historic site, two historic refuse scatters, and two chert flakes.

Development of vacant parcels within the city limits as guided by the proposed general plan would not directly impact historic structures identified in the Local Register of Historical Resources list, historic structures identified through the archival database search, or other structures which due to their age, may have potential to be historic. Refer to Section 13, Noise, for discussion of potential indirect impacts on such structures from future construction activities. However, the possibility exists that accidental discovery or recognition of historic below-ground historic resources could occur during grading, excavation, trenching and other activities associated with new development. If discovered, these activities could have a potentially significant impact on the resources.

The proposed general plan allows for developing limited residential uses above existing commercial buildings in areas designated Downtown Mixed Use. Were such development to be proposed above structures that are identified on the City's Local Register of Historical Resources, or above structures that may otherwise qualify as historic, direct impacts to such resources could occur.

Policy CD-1.2 in the proposed general plan requires the City to consider and approve development and demolition proposals only if they preserve, restore, and maintain significant architectural and historical resources identified in the Local Register of Historical Resources or as may be identified on other properties in evidence provided as part of the development review process. Program CD-1.1.3 requires the City to formalize its Local Register of Historical Resources and evaluate properties that are not currently on the list, for potential inclusion. Program CD-1.1.3 would support the process of identifying the full range of potential historic structures in the city. Policy CD-1.2 would lessen potential indirect and direct impacts on historic resources by ensuring that such impacts be considered and addressed during the development review process. However, policy CD-1.2 does not address potential impacts on unknown, buried historical resources, and therefore, would not mitigate such impacts to less than significant. Implementation of the following mitigation measure is needed to ensure that impacts are reduced to less than significant.

Mitigation Measures

CUL-1 Add the following new policy to the Community Design and Historic Preservation Element of the proposed general plan:

If unknown subsurface historical resources, including potential tribal cultural resources, are discovered during grading, excavation, trenching or other disturbance of the existing ground surface of a project site, all work shall be halted within at least 50 meters (165 feet) of the find and the area shall be staked off immediately. The City shall be notified immediately and a qualified professional archaeologist shall be retained to evaluate the find and report to the City. If the find is determined to be significant, recommendations provided by the archaeologist to mitigate potential impacts on archaeological resources and tribal cultural resources shall be required as conditions of project approval. Individual projects shall follow CEQA and other applicable State laws for mitigating impacts on cultural and tribal cultural resources.

CUL-2 All archaeological resources and cultural resources of Native American origin, and all tribal cultural resources uncovered and recovered during the development of vacant or underutilized land shall be returned to local Native American tribes after the resources have been examined by a qualified archaeologist.

b, c. As described in proposed general plan section 5.7, Tribal and Archaeological Resources, there are no known tribal or archaeological sites within the city limits. There are, however, several tribal sites known to exist within a five-mile radius of the city, and the city is identified as being in a sensitive archaeological resource locale, which includes the potential for presence of native American burial sites.

The archival database search included a record of an isolated piece of Monterey chert. Two chert flakes in a second record were described as possibly being "casually dropped" during food collection and not an indication of a prehistoric settlement. A total of three reports mentioned how locals spoke of a Native American burial ground with human remains and artifacts that was uncovered during agricultural grading, but the site has never been located.

Given that the land within the city limits is considered to be archaeologically sensitive, and that archival records point to the potential presence of unique archaeological resources, new development involving ground disturbing activities such as grading, excavation, and/or trenching could uncover and damage unknown archaeological resources and/or disturb human remains. This would be a significant impact.

Policy COS-1.7 in the proposed general plan states that development is to avoid tribal and archeological resources whenever possible, and if complete avoidance is not possible, such development will be required to fully mitigate impacts to tribal and archaeological resources.

Implementing policy COS-1.7 and mitigation measures CUL-1 and CUL-2 for new development would reduce potentially significant impacts on archaeological resources and tribal cultural resources, but not to a less-than-significant level. Implementing the following mitigation measure would ensure that impacts would be reduced to less than significant.

Mitigation Measure

CUL-3 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

> If human remains are found during earth-moving, grading, or construction activities, pursuant to Section 7050.5 of the California Health and Safety Code, all construction and excavation activity shall cease. If the remains are of Native American descent, actions must be taken to identify and appropriately treat the remains, including the coroner notifying the Native American Heritage Commission within 24 hours, and notifying a most likely descendent pursuant to Section 5097.98 of the California Public Resources Code.

6. ENERGY

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Comments:

a. The analysis of energy impacts is qualitative. There is no quantified threshold of energy demand for new development above which its demand could be considered wasteful, inefficient or unnecessary, either during construction or operations. Rather, the energy effects of the proposed general plan are examined in light of related development guidance provided in the proposed general plan and in light of the robust suite of plans and regulations promulgated by the state that directly and indirectly result in reduced energy consumption.

The proposed general plan could result in significant wasteful, inefficient, or unnecessary energy consumption if the increase in energy demand it enables through new development is extraordinary relative to common land use types. The proposed general plan allows for new residential, commercial, mixed-use, and industrial development - land use types that are common in urban development contexts and do not inherently represent use types whose energy demand would be considered wasteful or unnecessary.

Regulatory Requirements that Reduce Energy Demand

A multitude of state regulations and legislative acts are aimed at improving vehicle fuel efficiency, energy efficiency, and enhancing energy conservation. For example, the Pavley I standards focus on reducing greenhouse gas emissions by requiring improved transportation fuel efficiency for passenger vehicles model years 2009 to 2016. The subsequent Advanced Clean Cars program incorporated the Pavley standards and further aimed to reduce both smog-causing pollutants and greenhouse gas emissions for vehicles model years 2017-2025. The regulations focus on substantially increasing the number of plug-in hybrid cars and zero-emission vehicles

in the vehicle fleet and on making fuels such as electricity and hydrogen readily available for these vehicle technologies. The gradual increased use of electric cars powered with cleaner electricity will reduce consumption of fossil fuel. Vehicle miles traveled are expected to decline with the continuing implementation of Senate Bill 743 (CEQA Guidelines section 15064.3), resulting in less vehicle travel and less fuel consumption. In the renewable energy use sector, representative legislation for the use of renewable energy includes, but is not limited to, Senate Bill 350 and Executive Order B-16-12. In the building energy use sector, representative legislation and standards for reducing natural gas and electricity consumption include, but are not limited to, Assembly Bill 2021, CALGreen, and the California Building Standards Code.

The California Building Standards Code is enforceable at the project-level. The California Energy Code (California Code of Regulations, Title 24, Part 6), which is incorporated into the California Building Standards Code, was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The California Energy Code is updated every three years by the California Energy Commission as the Building Energy Efficiency Standards to allow consideration and possible incorporation of new energy efficiency technologies and construction methods. The Green Building Standards Code (also known as CALGreen), which requires all new buildings in the state to be more energy efficient and environmentally responsible, was most recently updated in July 2019. These comprehensive regulations are intended to achieve major reductions in interior and exterior building energy consumption.

From a land use perspective, the proposed general plan focus on meeting new growth needs through infill development results in lower vehicle miles travelled and less fuel energy consumption. Reduced vehicle fuel consumption is also promoted by proposed general plan policies whose implementation promotes non-vehicular modes of travel, reduced vehicle miles travelled, and reduced energy demand through reducing greenhouse gas emissions. Examples include proposed policies CIR-1.1 and CIR-1.4, which promote maintaining existing and creating expanded pedestrian and bicycle routes and policy CIR-1.6, which supports investments in public transit, and associated implementation measures CIR-1.1.1 through CIR 1.1.10. Policy COS-1.6 encourages compact development and infill development to reduce greenhouse gas emissions (with the result of reducing transportation fuel consumption); program COS-1.1.1 implements this policy by requiring the City to prepare a climate action plan. Implementing mitigation measures GHG-1 and GHG-2 as described in Section 8, Greenhouse Gas Emissions, would eliminate consumption of natural gas and reduce consumption of transportation fuel.

The proposed general plan does not include policies or programs that might otherwise interfere with requirements for new development to comply with Title 24 of the current California Building Code or other energy efficiency regulations (program COS-1.1.5 requires the City to ensure that new development is energy efficient through annual review of the building code).

New development as guided by the proposed general plan would consume energy, but such energy demand would not be inefficient, wasteful, or unnecessary. Therefore, the impact would be less than significant.

b. The proposed general plan does not include land use direction or policies which could interfere with required implementation of renewable energy or efficiency regulations or plans. New, qualifying residential development must comply with California Building Standards Code, which practically means that it must include sources of renewable energy. As these standards change over time, qualifying commercial and office development will be required to do the same. By incorporating energy efficiency measures per the Building Energy Efficiency Standards, future development as directed by the proposed general plan would comply with existing state and local energy standards and would not conflict with or obstruct a state plan for energy efficiency. There are no local plans for renewable energy or energy efficient in effect with which future development within the City must comply. No impact from conflict with energy conservation or renewable energy plans would occur.

7. GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
(1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
(2) Strong seismic ground shaking?	☐	☐	☒	☐
(3) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
(4) Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Comments:

This analysis is presented against the backdrop of CEQA case law addressing the scope of analysis required for potential impacts resulting from existing environmental hazards with the potential to affect planned development. In California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, 377, the California Supreme Court held that agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on the future users or residents of planned projects. The court determined that CEQA analysis is concerned with the impact of new development on the environment, rather than with the environment's impact on future development. The court did, however, determine that CEQA may apply when a proposed project risks exacerbating environmental hazards or conditions that already exist, in which case an agency must analyze the potential impact of such hazards on future residents or users.

Most potential impacts related to geology and soils are due to existing environmental hazards conditions for which new development made possible by the proposed general plan would not exacerbate. Consequently, the following evaluation of geology and soils impacts is presented primarily for informational purposes. Most hazards and environmental effects related to geology and soils are mitigated through required implementation of uniformly applied regulations and standards promulgated by the state and implemented by local jurisdictions, including the City, through the development review and building permit process. The City requires that developers prepare and submit a geotechnical evaluation as part of its building permit process which identifies site-specific geologic and soils conditions and hazards, and which identifies how individual projects should be designed to ensure compliance with the California Building Code regulations.

a. Issues related to fault rupture, seismic ground shaking, liquefaction, and landslide hazards are summarized below.

Fault Rupture

The city is not within a currently established State of California Earthquake Fault Zone for surface rupture hazards and is not within an Alquist-Priolo Special Studies Zone. No active faults with the potential for surface fault rupture are known to pass directly beneath the city. Therefore, the potential for surface rupture due to faulting occurring beneath the city is considered low and no impact is expected.

Seismic Ground Shaking

While no faults have been mapped across the project site, seismic events caused by active and potentially active faults in the region, as with anywhere in California, could result in seismic ground shaking on-site. The City of Guadalupe is located in Seismic Zone 4, which is the highest potential status for earthquake activity in the

state of California. A seismic hazard cannot be completely avoided; however, its effect can be minimized by implementing the uniformly applied development standards in the California Building Code, and applicable uniformly applied City standards for earthquake resistant construction. This would ensure that hazards from seismic ground shaking are less than significant.

Liquefaction

Liquefaction is a condition that occurs when unconsolidated, saturated soils change to a near-liquid state during ground shaking. Liquefaction requires three conditions: 1) strong earthquake shaking, 2) poorly compacted soils that will undergo additional compaction with shaking (usually fine sands), and 3) shallow groundwater (usually less than 30 feet). The approximate western half of the city has been mapped as within a high liquefaction potential zone, with the remaining approximately one-half mapped as within a moderate liquefaction zone. Future development within the city must comply with the California Building Code, including the Uniform Building Code, which includes standards for construction in areas prone to liquefaction. This would ensure that hazards from liquefaction are less than significant.

Landslides

The area within the city limits is largely topographically level. There are no known areas of landslide hazard within the city limits and none are currently mapped by the California Department of Conservation. Therefore, the landslides are not considered to be a hazard to future development as guided by the proposed general plan. No impacts from landslides are expected.

b. Development within the city is subject to uniformly applied development standards for controlling erosion and the water quality impacts that result from soil erosion, including the regulations contained in the General Construction Activity Stormwater Permit adopted by the State Water Resources Control Board. The City follows erosion control best management practices to ensure compliance with state standards. Where future individual projects would disturb more than one acre of soil, the project applicant is required to prepare a storm water pollution control plan that must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of sediment and erosion control measures, maintenance responsibilities, and non-stormwater management control. City requirements are identified in Municipal Code Section 15.10, Stormwater Constructure and Post-Construction Management. The City requires that individual development prepare an erosion control plan for review prior to issuing a grading permit. City standards and specifications for

erosion control must be implemented. Compliance with the noted uniformly applied standards would ensure that soil erosion impacts of new development as guided by the proposed general plan would be less than significant.

c. Refer to the discussion for item "a" above. Hazards related to the presence of unstable geologic units would be investigated as part of the geotechnical analyses prepared for individual future projects, with design recommendations made to avoid or minimize such hazards, consistent with California Building Code regulations. Potential impacts would be less than significant.

d. Hazards related to expansive soils would be investigated as part of the geotechnical analyses prepared for individual future projects, with design recommendations made to avoid or minimize such hazards, consistent with California Building Code regulations. Potential impacts would be less than significant.

e. Future individual developments as guided by the proposed general plan would connect to the City's wastewater collection and treatment system. No septic systems would be allowed. Implementing the proposed general plan would have no impact.

f. Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, uncommon, and diagnostically or stratigraphically important, and those that add to an existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally. They include fossil remains of large to very small aquatic and terrestrial vertebrates, remains of plants and animals previously not represented in certain portions of the stratigraphy, and assemblages of fossils that might aid stratigraphic correlations—particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, paleoclimatology, and the relationships of aquatic and terrestrial species.

Based on review of United States Geological Survey geologic map of the Guadalupe area, the city is located is Quaternary Alluvium. This geologic unit is considered to have low sensitivity for paleontological resources where excavations in it are at depths typical for the types of future development that would be made possible as guided by the proposed general plan. However, it is possible that unknown buried paleontological could be uncovered during development site excavations. Therefore, the potential impact from implementing the proposed general plan is considered to be potentially significant. The impact can be reduced to less than significant within implementation of the following mitigation measure.

Mitigation Measure

GEO-1 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

> In the event that evidence of paleontological resources is uncovered during ground disturbing activities, all work shall stop in the immediate area and the Planning Director shall be notified. A qualified paleontologist shall be retained to assess the scientific significance of the paleontological resources. If found to be significant, an appropriate data recovery program shall be developed and implemented by the paleontologist.

8. GREENHOUSE GAS EMISSIONS

Would the project:

	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Comments:

a. New development commonly generates GHG emissions from several sources: vehicle travel (mobile sources), electricity consumption (GHG emissions generated at the source of electricity production – commonly fossil fuel powered generating plants), natural gas consumption, waste generation and disposal, and water use and treatment.

For informational purposes, GHG emissions that would be generated at buildout of the proposed general plan have been estimated. A memo with a summary of the modeling methodology and modeling results is included in Appendix A. Table 6, General Plan Buildout GHG Emissions Projection, summarizes the results. This information is taken from section 2.2, Overall Operational, in the CalEEMod results in Appendix A.

Table 6 General Plan Buildout GHG Emissions Projection

Emissions Source	Emissions Volume ($MT CO_2e$)[1]
Area	7.56
Energy	3,509.26
Mobile	10,869.91
Waste	287.30
Water	346.87
Total	15,020.92

SOURCE: EMC Planning Group 2022
NOTE:
[1]MT CO2e – metric tons of carbon dioxide equivalent

Like many local jurisdictions, the City of Guadalupe has not yet adopted a plan for reducing GHG emissions, nor has the City adopted a threshold of significance for GHGs. Such a plan or thresholds, if available, would be the basis for determining the significance of GHG emissions that would be generated by new development as guided by the proposed general plan.

In the absence of a local GHG reduction plan or thresholds of significance, local lead agencies commonly turn to GHG impact analysis guidance provide their regional air district. The Santa Barbara County Air Pollution Control District has not developed or adopted a threshold of significance for GHGs from individual land use projects or plan projects such as a general plan. The adjacent San Luis Obispo Air Pollution Control District has recently provided updated GHG evaluation guidance for individual land use projects, but has not identified a uniform approach to assessing GHG impacts. Options include: 1) assessing consistency with a GHG reduction plan; 2) assuring no net increase in GHG emissions; 3) lead agency adopted GHG thresholds, with reference to the *2020 Greenhouse Gas Thresholds for Sacramento County* prepared by the Sacramento Metropolitan Air Quality Management District (SMAQMD); and 4) GHG bright-line and efficiency thresholds based on the Senate Bill 32 GHG reduction target. Since the City does not have a GHG reduction plan, this option is not applicable. The no net increase in emissions option commonly applies to individual development projects. Neither the City, nor most local agencies, have adopted bright-line or GHG efficiency thresholds. The SMAQMD guidance applies only to individual land use projects, not plan level projects such as a general plan.

The SMAQMD guidance indicates that individual land use projects within that air district which meet the following best management practice standards would have a less-than-significant GHG impact: 1) use no natural gas (electricity only); 2) install EV support infrastructure consistent with Tier 2 voluntary measures contained in the California Green Building Standards Code; and 3) have a less-than-significant VMT impact. Smaller projects which incorporate standards 1 and 2 and that generate less than 110 vehicle trips per day or would emit less than 1,100 tons per year of carbon dioxide equivalent before reductions from standards 1 and 2 are applied would be also be found to have less-than significant GHG impacts. In cases where a project cannot meet one or more of these standards, other emissions reduction options and analysis methodologies are provided. Large land use projects must meet all three standards. These standards are based on SMAQMD's intent that land use development contributes its fair share to achieving the state's 2045 carbon neutrality goal as identified in California Executive Order B-55-18.

The Bay Area Air Quality Management District (BAAQMD) recently released its *Draft Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects*. For individual projects, the standards are essentially the same as the SMAQMD guidance. However, in addition to the common no natural gas, EV infrastructure, and VMT standards of both districts, the BAAQMD guidance also includes a best management standard to address GHG impacts of plans such as general plans. The standard for a general plan is: 1) meet the state's goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045; or 2) be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b). The BAAQMD guidance is expected to be adopted by the District Board of Directors in spring 2022.

Because the SMAQMD and BAAQMD guidance is recent and is based on the state's most current long-term GHG reduction target of achieving carbon neutrality by 2045, it is used as reference for assessing GHG impacts of the proposed general plan under buildout conditions.

A range of guidance in the proposed general plan would support reducing GHGs. A fundamental underpinning of the land use approach is to intensify development within the existing city limits. The land use approach is vital for reducing VMT produced at buildout by reducing vehicle trip volume and trip lengths relative to proposing new growth outside the city limits. The value of the approach is validated in Section 17, Transportation, where discussion and evidence are provided that the VMT impacts of the proposed general plan will be less than significant. GHG emissions from mobile sources typically dominate the emissions profile of a project or plan (as illustrated in Table 6). Therefore, the mobile source GHG emissions from implementing the proposed general plan would be substantially reduced.

In addition to the land use approach, the proposed general plan includes a number of policies that directly or indirectly address climate change. Policy EJ-1.1 states that the City will support preparing a climate action plan. Program COS-1.1.1 requires that within three years of adopting the proposed general plan, the City will initiate a process to develop and adopt a qualified climate action plan. Numerous other policies address actions whose implementation would indirectly reduce VMT. Examples include policies CIR-1.1 and CIR-1.4, which promote maintaining existing and creating expanded pedestrian and bicycle routes, and policy CIR-1.6, which supports investments in public transit, and associated implementation measures CIR-1.1.1 through CIR 1.1.10. Policy COS-1.6 encourages compact development and infill development to reduce GHGs. Policy S-1.1 requires new nonresidential developments with 10 or more parking spaces to install electric vehicle capable infrastructure.

As a plan project, the proposed general plan does not meet the BAAQMD plan project performance standard described above. Policy EJ-1.1 and program COS-1.1.1 collectively direct the City to start preparing a climate action plan within one year of adopting the proposed general plan. Because the climate action plan is not already in place, the proposed general plan would not meet this element of the BAAQMD plan standard. However, provided the climate action plan includes measures designed to meet the 2030 emission reduction target of 40 percent below 1990 levels and meet the 2045 carbon neutrality goals of the state, implementation of the climate action plan with these targets would reduce GHG impacts to less than significant. A mitigation below is proposed to ensure that policy EJ-1.1 incorporates these goals.

Until the City adopts a climate action plan, GHG emissions produced by new individual development projects should be reduced consistent with guidance standards for individual projects described above. This would ensure that GHG emissions produced in the city are less than significant. A mitigation below is proposed to ensure that such standards are implemented.

Mitigation Measures

GHG-1 Modify proposed general plan policy EJ-1.1 as follows:

> The City will ~~support the preparation of~~ prepare a climate action plan to identify ways to reduce citywide greenhouse gas emissions and minimize the impacts of climate change on Guadalupe residents. The climate action plan will incorporate the goals of reducing emissions within the city to 40 percent below 1990 levels by 2030 and achieving carbon neutrality by 2045.

GHG-2 Add the following new policy to the Conservation and Open Space Element of the proposed general plan:

> Until such time as the City adopts a qualified action plan consistent with mitigation measure GHG-1, individual development projects shall be constructed to use no natural gas and to meet California Green Building Standards Code Tier 2 requirements for electric vehicle charging infrastructure. Where such projects also generate less than 110 vehicle trips per day or produce less than 1,100 metric tons per year of carbon dioxide equivalent, no further action is required. Where such projects do not meet either the daily trip volume or mass emissions criteria, a VMT analysis must be conducted. If the VMT impact is less than significant, no further action is required. If the proposed project cannot meet one or more of the three required best

management practices (no natural gas, electric vehicle support infrastructure, and less-than-significant VMT impact), the project applicant shall: 1) identify and implement other GHG reduction measures, with a priority on on-site measures; and/or 2) purchase and retire carbon offsets from a qualified registry that are real, permanent, quantifiable, verifiable, enforceable, and additional. The emission reductions and/or offsets must be equivalent to reductions that would otherwise be realized from the best management practice(s) that cannot be implemented.

b. Mitigation measures GHG-1 and GHG-2 above are designed to ensure that future development within the City contributes its fair share towards the applicable state GHG reduction goals identified in Senate Bill 32 (2030 statewide GHG reduction target of 40 percent below 1990 levels by 2030) and in Executive Order B-55-18, which requires the state to achieve carbon neutrality by 2045. Therefore, the proposed general plan would have no impact from conflict with applicable GHG reduction plans and regulations.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, create a significant hazard to the public or the environment?	☐	☐	☒	☐
e.	For a project located within an airport land-use plan or, where such a plan has not been adopted, within two miles of a public airport or a public-use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Comments:

a,b. The primary risks to public health and safety and the environment from routine transport, use, or disposal of hazardous materials, and from accidental release of hazardous materials are associated with new commercial and industrial development

that would be made possible with the proposed general plan update. Residential development is not typically associated with significant hazardous materials risks relative to industrial uses. Common hazardous materials include, but not be limited to: lubricants, solvents, industrial process materials inputs, gasoline, diesel, propane, and other types of fuel. In Guadalupe, anhydrous ammonia is also a common hazardous material that is used and stored on industrial sites where agricultural coolers are in operation. The potential exists that such materials could be accidentally released into the environment, thereby causing risks to public health and safety.

The potential for such activities to result in a significant hazard to the public or the environment would be effectively managed through adherence to existing regulations and compliance with the safety procedures mandated by applicable federal, state, and local laws and regulations. New development must comply with myriad uniformly applied federal and state regulations designed to minimize risks to public health and safety and to the environment from hazardous materials. At the federal level, examples include, but are not limited to: U.S. Environmental Protection Agency regulations as administered by the state and local agencies; Resource Conservation and Recovery Act regulations regarding hazardous waste programs as implemented in California by the California Environmental Protection Agency and the California Department of Toxic Substances Control, which regulate activities that generate, transport, treat, store, and dispose of hazardous waste. The California Environmental Protection Agency coordinates the activities of the California Air Resources Board, State Water Resources Control Board, Regional Water Quality Control Boards, CalRecycle, Department of Toxic Substance Control, Office of Environmental Health Hazard Assessment, and the Department of Pesticide Regulation to protect human health and the environment. Further, the California Office of Emergency Services is responsible for establishing and managing statewide standards for business and area plans related to transporting, storage (above and below ground), handling and release, or threatened release, of hazardous materials. These agencies enforce federal regulations as well as hazardous materials related regulations promulgated solely by the state.

At the local level, the Santa Barbara County Department of Environmental Health is designated by the California Environmental Protection Agency as a Certified Unified Program Agency. As such, it is responsible for the administrative requirements, permits, inspections, and enforcement activities of the state level environmental and emergency response programs, including those that relate specifically to public safety and hazardous materials. The programs include, but are not limited to the following:

- Hazardous Material Business Plan and Inventory Program;
- Hazardous Waste Generator Program;
- Hazardous Waste Onsite Treatment: Tiered Permitting Program;
- Underground Storage Tank Program;
- California Accidental Release Prevention Program; and
- Aboveground Petroleum Storage Tank Program.

The *Santa Barbara County 2017Multi-Jurisdictional Hazard Mitigation Plan Update* evaluates various hazards in the county and in local cities, including: agricultural emergencies, coastal erosion, flooding, dam failure, drought, earthquakes, landslides, sea level rise, tsunami, wildland fire, windstorms, and hazardous materials. Chapter 12 of the plan contains the City of Guadalupe's hazard assessment and mitigation plan. It addresses actions to be taken in the event of a hazardous materials release, and includes a mitigation action matrix that identifies actions the City is and/or will take to reduce and mitigate identified and potential hazard conditions.

The proposed general plan includes policies and programs designed to reduce safety and environmental risks from hazardous material releases and accidents. Policy S-1.2 requires all new construction and renovation to be designed and constructed to mitigate the effects of hazardous materials. Policy S-1.3 requires the Emergency Preparation coordinator to develop response procedures for potential hazardous materials releases within the city. Program S-1.1.6 requires the Emergency Preparation Coordinator and Police and Fire Departments to conduct emergency drills to test the effectiveness of the City's emergency response procedures.

Given the rigorous uniform standards and regulations regarding hazardous materials management that apply to new development projects, the plans in place to coordinate/respond to hazardous materials release incidents, and general plan policies and programs that reinforce the City's hazardous materials incidence response preparedness, impacts from routine transport, use, or disposal of hazardous materials, and from accidental release of hazardous materials would be less than significant.

c. The proposed general plan allows for increased industrial development capacity within one-quarter mile of the existing Mary Buren Elementary school. Future industrial uses are assumed to have the greatest potential to handle, store, and use hazardous materials. It is unknown whether, when or what type of new industrial development within this distance of the school would occur, nor whether such development could be the source of accidental potential acute hazardous materials releases. All new industrial development within this area would be required to

comply with federal, state, and local standards and regulations described in item "a,b" above that apply to managing hazardous materials. Consequently, the risk of such releases and impacts related to them would be less than significant.

d. Table 8-2 in the proposed general plan includes a list of six open cases of hazardous material contamination sites within the city limits and one site outside the city limits Betteravia Road. These sites were identified from the State Water Resources Control Board's Geotracker website. These sites are all associated with existing businesses on sites with leaking underground storage tanks. Since new development enabled by the proposed general plan would be located on existing vacant sites within the city limits and/or above existing commercial buildings, there is little potential for such development to be located on a site with known hazardous materials. This potential impact is less than significant.

e. The city is not within the boundaries of an airport land use plan. The proposed general plan would have no related noise or safety impacts.

f. The City's emergency response plan is contained in the *Santa Barbara County 2017Multi-Jurisdictional Hazard Mitigation Plan Update* identified in item "a,b" above. The City of Guadalupe Fire Department coordinates emergency response within the city and with adjacent and regional agencies. The plan is regularly updated to account for changing conditions. The proposed general plan does not include policy or development direction that would interfere with the City's ability to implement emergency response plans. The proposed general plan would have no related impact.

g. Figure 8-2 in the general plan update illustrates fire hazard severity zones. There are no fire hazard zones designated within the city limits. A high fire hazard severity zone is mapped adjacent to the northern edge of the city. The proposed general plan directs new development capacity primarily to vacant land within the city limits. Consequently, the proposed general plan would not result in new development within the high fire hazard severity zone. Further, there are no vacant parcels within the city limits that are directly adjacent to this hazard zone. Hazards and emergency response/public safety protection measures related to fire hazards are address in the emergency response plans described in items "a,b" and "f" above. The proposed project would have a less-than-significant impact from wildland fire hazards.

10. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? ()	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(1) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
(3) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(4) Impede or redirect flood flows?	☐	☐	☐	☒
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Comments:

a. Soil disturbance associated with site preparation, grading and construction activities; delivery, handling and storage of construction materials and wastes; refueling; and parked construction equipment can result in spills of oil, grease, or related pollutants. Improper handling, storage, or disposal of fuels and materials or improper cleaning of machinery also are potential sources of water pollution associated with construction activities. These activities have potential to cause water quality degradation if eroded soil or other pollutants are carried by storm water into the existing storm drainage system, drainage channels, and/or directly into downstream water bodies. Construction phase water quality degradation can damage aquatic ecosystem health, and deposition of sediment within surface water and creek channels can adversely modify their function while causing additional erosion that exacerbates water quality degradation. Future development on vacant parcels within the city limits would involve many, if not all, of these activities.

The City is required to enroll as a permittee under the National Pollutant Discharge Elimination System General Permit No. CAS000004 as promulgated by the California Regional Water Quality Control Board. Under the permit provisions, the City is required to implement appropriate procedures to regulate the entry of pollutants and non-storm water discharges into the storm drain system and implement mandatory site design measures to minimize the adverse effects of urbanization and development on watershed processes and beneficial uses resulting from changes in storm water runoff conditions, and where possible, maintain and/or restore receiving water beneficial uses. Pursuant to these requirements, developers of new projects must prepare and implement a storm water pollution prevention plan. The plan must identify all of the activities and conditions at a development site that could cause water pollution, and identify the management practices and control measures, including erosion control, that will be implemented during construction to prevent water pollution.

The City is also required to enroll in the State of California's Waste Discharge Requirements for Small Municipal Separate Storm Sewer Systems (Order No. 2013-0001-DWQ), which in part guide storm water quality control requirements under post-development conditions. Per these requirements, development projects that create or replace 2,500 square feet or more of impervious surface (roofs or pavement) must incorporate specified measures to reduce storm water runoff. Larger qualifying projects require a more comprehensive stormwater control plan. Storm water control plans must include low impact development features and control measures. The measures are designed to treat runoff prior to discharge from the site and to retain storm water on the site such that the rate of storm water discharge from the

developed site does not exceed pre-development levels (to prevent off-site flooding and downstream erosion). The City utilizes post-construction stormwater design guidance produced by Santa Barbara County as a basis for conditioning new development to comply with the post-construction requirements.

The proposed general plan contains several policies and programs that reinforce the City's commitment and obligation to address water quality issues associated with new development. Policies PF-1.7 and 1.8 reaffirm requirements to meet National Pollutant Discharge Elimination System stormwater quality requirements. Polices PF-1.9 through 1.13 provide specific direction for how new development is to meets its stormwater management obligations. Required conformance of new development with the uniformly applied regulations summarized above and proposed general plan policies would ensure that this impact is less than significant.

b. Chapter 9.3, Potable Water Service, in the proposed general plan includes an analysis of existing water demand and projected water supply and demand.

The City obtains water from groundwater and from surface water supplied through the State Water Project. Groundwater is extracted from the Santa Maria Valley Groundwater Basin. The City can pump 1,300 acre-feet per year (AFY) from the basin due to prior adjudication. However, as an overlying landowner, the City can legally pump additional water as needed. The California Department of Water Resources allocates up to 550 AFY, plus a drought buffer of 55 AFY to the City. However, prior to the start of each calendar year, the Department of Water Resources evaluates the availability of State Water Project supply and determines the year's initial allocation for each recipient. The allocation is adjusted each month as water availability conditions become known. The City received 478 acre-feet from the State Water Project in 2019, an amount reduced from the full potential allocation due to the effect of California's long-term drought. The Department of Water Resources has stated that Guadalupe will receive five percent of its annual allocation this calendar year, or approximately 30 acre-feet.

In 2019, the City prepared a water evaluation which identified existing demand, estimated new demand with the increase in population capacity that would be possible with buildout of the proposed general plan, and compared the latter to the City's projected water supply availability. The water evaluation is included in Appendix C. Table 7, Water Supply Availability, shows projected water supply available to serve the city, as derived from the water evaluation. While water supply from the State Water Project can be variable due to potential for drought conditions, this variability is already factored into the supply assumption. Only an average of 52 percent of the total State Water Project allocation of 605 AFY (or 315 AFY) is assumed

to be available on an annual basis as shown in Table 7, per direction provided by the Department of Water Resources for 2019. When the allocation exceeds this amount, as was the case in 2019 for example, the volume of groundwater extracted can decrease while still meeting total demand needs. And as noted previously, when the allocation is below 315 acre-feet, the City has the ability to pump groundwater to make up the difference if needed or to reduce groundwater pumping when the allocation is above 315 acre-feet.

Table 7 Water Supply Availability

Water Supply (Acre-Feet Per Year)	
State Water Project[1]	315
Groundwater	1,300
Additional Groundwater	27
Groundwater Appropriative Rights[2]	299
Total Water Supply	1,941

Source: City of Guadalupe 2019
Notes:
1. State Water Project allocation is 605 AFY. Available supply is assumed to be 52 percent of the total allocation, or 315 AFY.
2. Surplus native groundwater from storm water percolation.

Table 8, Projected Water Demand – General Plan Buildout Conditions, summarizes projected demand at general plan buildout. This information is also taken from the City's water evaluation. The proposed general plan identifies the projected population at general plan buildout to be 11,506 (8,081 existing + 3,425 additional). The water evaluation includes demand projections for various projected future population levels. The residential demand projection in the water evaluation for a population of 12,000 is 1,344 AFY. This is approximately four percent higher than would occur with a buildout population of 11,506. The residential demand value shown in Table 8 is based on the projected population of 11,506.

Table 8 Projected Water Demand – General Plan Buildout

Water Demand (Acre-Feet Per Year)	
Land Use	Projected Water Demand
Industrial Uses	401
Residential[1]	1,288
Commercial	173
Total Demand	1,862

Source: City of Guadalupe 2019
Notes:
1. Based on 11,506 population at proposed general plan buildout and demand rate of 100 gallons per day per capita.

As can be seen from Tables 7 and 8, the average annual available water supply of 1,941 AFY exceeds the projected demand of 1,862 AFY by 79 AFY under conditions described herein. Therefore, it is expected that over the general plan buildout period, water supply would be sufficient to meet projected water demand on an annual average basis without the need to increase the supply of groundwater pumped from the groundwater basin. Consequently, the proposed general plan would not impede efforts to manage groundwater in the basin to promote groundwater sustainability.

Future development of vacant sites in the city could potentially interfere with groundwater recharge by increasing the area covered by impervious surfaces (e.g., existing vacant land replaced with pavement, buildings, etc.). However, as described in item "a" above, new development must comply with storm water control standards. These include requirements to provide water quality treatment on-site, commonly in the form of storm water detention/percolation facilities or other water quality features that facilitate groundwater recharge. Therefore, creating new impervious surfaces through new development as guided by the proposed general plan project would not result in substantially reduced groundwater recharge.

Given the discussion above, impacts of the proposed general plan on groundwater basin sustainability would be less-than-significant.

c. New development will substantially change existing drainage patterns and have potential to violate surface water quality standards by indirectly discharging polluted storm water runoff into receiving surface water. New development must be designed consistent with the City's National Pollutant Discharge Elimination System and post-construction water quality requirements, the main objectives of which are to protect water quality in waters which receive discharge from the City's municipal storm water system. As described in item "a" above, required conformance with National Pollutant Discharge Elimination System requirements will minimize potential for soil erosion on individual development sites that could otherwise degrade water quality.

The post-construction water quality control criteria limit post-development storm water peak flow rates to pre-existing levels and limit storm water discharge durations and flow volumes to pre-existing conditions or better under a variety of design storm conditions. New development would not generate a higher peak storm water discharge rate from a site, or generate a higher volume of storm water volume than occurs under pre-existing conditions on individual development parcels. Thus, potential to contribute to on- or off-site flooding would be minimized, as would potential for runoff volumes to exceed the capacity of existing or planned storm

water infrastructure. If improvements to existing storm water infrastructure are needed to accommodate new development, improvements will be designed in anticipation of compliance with the post-development runoff regulations.

Future development on vacant parcels as guided by the proposed general plan would have less-than-significant impacts resulting from soil erosion, contributing to on- or off-site flooding, or exceeding capacity of storm water facilities.

As illustrated in Figure 9, Flood Hazard Zone, which is included in the proposed general plan as Figure 8-1, none of the area within the city limits is within a flood hazard zone. Therefore, the proposed general plan would have no impact from impeding or redirecting flood flows.

d. As illustrated in Figure 9, none of the area within the city limits is within a flood hazard zone. The city limits are not within a tsunami hazard area, nor is seiche risk a hazard given the absence of local, confined water bodies in the vicinity. Therefore, no impact would occur regarding potential release of pollutants from new development during a flood, tsunami, or seiche event.

Proposed general plan policy S-1.4 reinforces the City's commitment to avoid potential water quality impacts resulting from flood events. It requires the City to avoid locating essential public facilities outside the flood hazard zone when feasible.

e. The *Water Quality Control Plan for the Central Coastal Basin* is the Central Coast Regional Water Quality Control Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. The Regional Board implements the Basin Plan by issuing and enforcing waste discharge requirements to individuals, communities, or businesses whose waste discharges can affect water quality. These requirements include federally delegated National Pollutant Discharge Elimination System permits for discharges to surface water as described in item "a" above. When such discharges are managed so that: 1) they meet these requirements; 2) water quality objectives are met; and, 3) beneficial uses are protected, water quality is controlled. As stated in items "a" and "c" above, new development within the city will be required to comply with water quality control standards pursuant to the National Pollutant Discharge Elimination System during construction and under post-construction conditions. This will assure that the proposed general plan has no impact from conflict with the applicable water quality control plan.

0 1950 feet

Project Boundary
(City Limits and Sphere of Influence)

Zone A
(1-Percent Annual Chance of Flood)

Source: Santa Barbara County GIS 2021, FEMA NFHL 2021, Google Earth 2021

Figure 9

Flood Hazard Zone Map

Guadalupe 2021 General Plan Initial Study

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The Sustainable Groundwater Management Act, passed in 2014, defines sustainable groundwater management as the "management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results." The Act requires formation of groundwater sustainability agencies to manage groundwater within high- and medium-priority basins subject to critical conditions of overdraft. The agencies must prepare and submit groundwater sustainability plans for this purpose. Following state approval of the plans, the basins would thereafter be managed under the groundwater sustainability plans.

In Santa Barbara County, basins that are subject to the Sustainable Groundwater Management Act include all medium and high priority basins as defined by the State Department of Water Resources that have not previously been adjudicated. As described in item "b" above, the City extracts groundwater supply from the Santa Maria Groundwater Basin. Water supply from this basin is adjudicated. Therefore, a groundwater sustainability plan for it has not been prepared. Implementation of the proposed general plan would not result in the City exceeding its legally allocated volume of groundwater from the basin as has been established through the adjudication process. The proposed general plan would have no impact from conflict with a groundwater management plan.

11. LAND USE AND PLANNING

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Physically divide an established community?	☐	☐	☐	☒
b.	Cause any significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Comments:

a. The proposed general plan provides guidance for development within the city limits, primarily on vacant infill parcels. Such future development would have no impact from physically dividing the community.

b. Policies, plans and regulations that serve to mitigate environment effects are described throughout this initial study and summarized below.

A number of policies and programs in the proposed general plan serve to reduce environmental effects that would result from implementing the proposed general plan. As part of the development review process for future individual projects that comprise the program of actions related to implementing the proposed general plan, the City must find the individual projects consistent with proposed general plan policies, including those that serve to mitigate environmental effects. Where this initial study concludes that significant impacts from general plan implementation could occur, mitigation measures are proposed in the form of recommended policies to be added to the proposed general plan. This augments the proposed general plan's function as a land use plan designed to reduce environmental effects.

Conformance of the proposed general plan with the clean air plan (ozone plan) is described in Section 3, Air Quality. Conformance with GHG reduction plans is evaluated in Section 8, Greenhouse Gas Emissions. Conformance with the applicable water quality plan is discussed in Section 10, Hydrology and Water Quality.

The proposed project, would not conflict with land use plans, policies, or regulations provided mitigation measures included in this initial study are incorporated into the proposed general plan as new policies.

12. MINERAL RESOURCES

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Result in loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated in a local general plan, specific plan, or other land-use plan?	☐	☐	☐	☒

Comments:

a,b. All new development capacity identified in the proposed general plan is located within the existing city limits on infill parcels. Nether the existing general plan, nor proposed general plan delineate locally important mineral resource recovery sites within the city limits. No impacts would occur since there is no potential to access or extract mineral resources within the city limits.

13. NOISE

Would the project result in:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in applicable standards of other agencies?	☐	☒	☐	☐
b.	Generation of excessive ground-borne vibration or ground borne noise levels?	☐	☒	☐	☐
c.	For a project located within the vicinity of a private airstrip or an airport land-use plan or, where such a plan has not been adopted, within two miles of a public airport or public-use airport, expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Comments:

a. The Noise Element identifies that traffic noise, particularly along State Route 1 and State Route 166, noise from train travel on the Union Pacific Railroad tracks that run through the city, and noise from existing industrial operations along the south end of Guadalupe Street is of significant concern from a community well-being and land use planning perspective. Noise from these sources is evaluated in the *Technical Noise Study – City of Guadalupe General Plan* (hereinafter "noise study") which is included in Appendix D. The noise study identifies existing ambient noise levels for these sources, and includes forecasts of future traffic noise levels along major roadways within the city resulting from increased traffic that would occur under proposed general plan buildout conditions. Please refer to the noise study for information on noise metrics, noise analysis terms, analysis methodology and analysis results.

Noise Exposure Standards

Vehicle traffic, railroad operations noise, and industrial operations are considered to be permanent noise sources. Table 10-1 in the Noise Element identifies community noise exposure standards that are the basis for identifying potential noise impacts

from implementing the proposed general plan. These are illustrated in Figure 10, Community Noise Exposure. Where outdoor noise levels are within the "normally acceptable" range for the respective representative land use categories, noise exposure impacts are considered to be less than significant. Acceptable outdoor noise exposure levels are generally lower for noise sensitive land uses, of which residential uses are the most common. Where exterior noise levels are "conditionally acceptable", detailed project-specific noise assessments are needed to identify measures to reduce noise exposure to levels that are normally acceptable. Exterior noise levels are typically measured at the center of outdoor activity areas associated with noise sensitive uses (e.g., backyards/common areas of residential uses).

Note that planned new residential development would almost entirely consist of medium- and high-density uses, densities at which residential development projects are expected to be multiple-family dwellings of up to three stories. Figure 10 shows that the acceptable outdoor noise level at outdoor activities areas of multiple-family residential uses is up to 65 dB.

Impacts from Rail and Stationary Industrial Noise

The noise study includes analysis of existing noise levels from operations of the Union Pacific Railroad and the two primary industrial stationary sources of noise in the city. The results are shown in Tables II and IV of the noise study, respectively. However, exposure of new noise sensitive development to these existing noise sources is not subject to analysis as part of the CEQA process. In 2015, in California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, 377, the California Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents". The court stated that "ordinary CEQA analysis is concerned with a project's impact on the environment, rather than with the environment's impact on a project and its users or residents". The court did not hold, however, that CEQA never requires consideration of the effects of existing environmental conditions on the future occupants or users of a proposed project. But the circumstances in which such conditions may be considered are narrow: "when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment, and not the environment's impact on the project, that compels an evaluation of how future residents or users could be affected by exacerbated conditions".

The proposed general plan would result in increased population and employment through development of vacant land with residential, mixed use, commercial and industrial uses and potentially from residential development above existing commercial buildings. Such new growth would not exacerbate existing rail noise conditions, as it would not contribute to increased use of the Union Pacific Railroad. Further, this growth would not exacerbate noise conditions at the noted stationary industrial uses because such growth would not directly cause increased production/operational activity at the existing uses. Therefore, no analysis of noise exposure impacts to future new development from these noise sources is required.

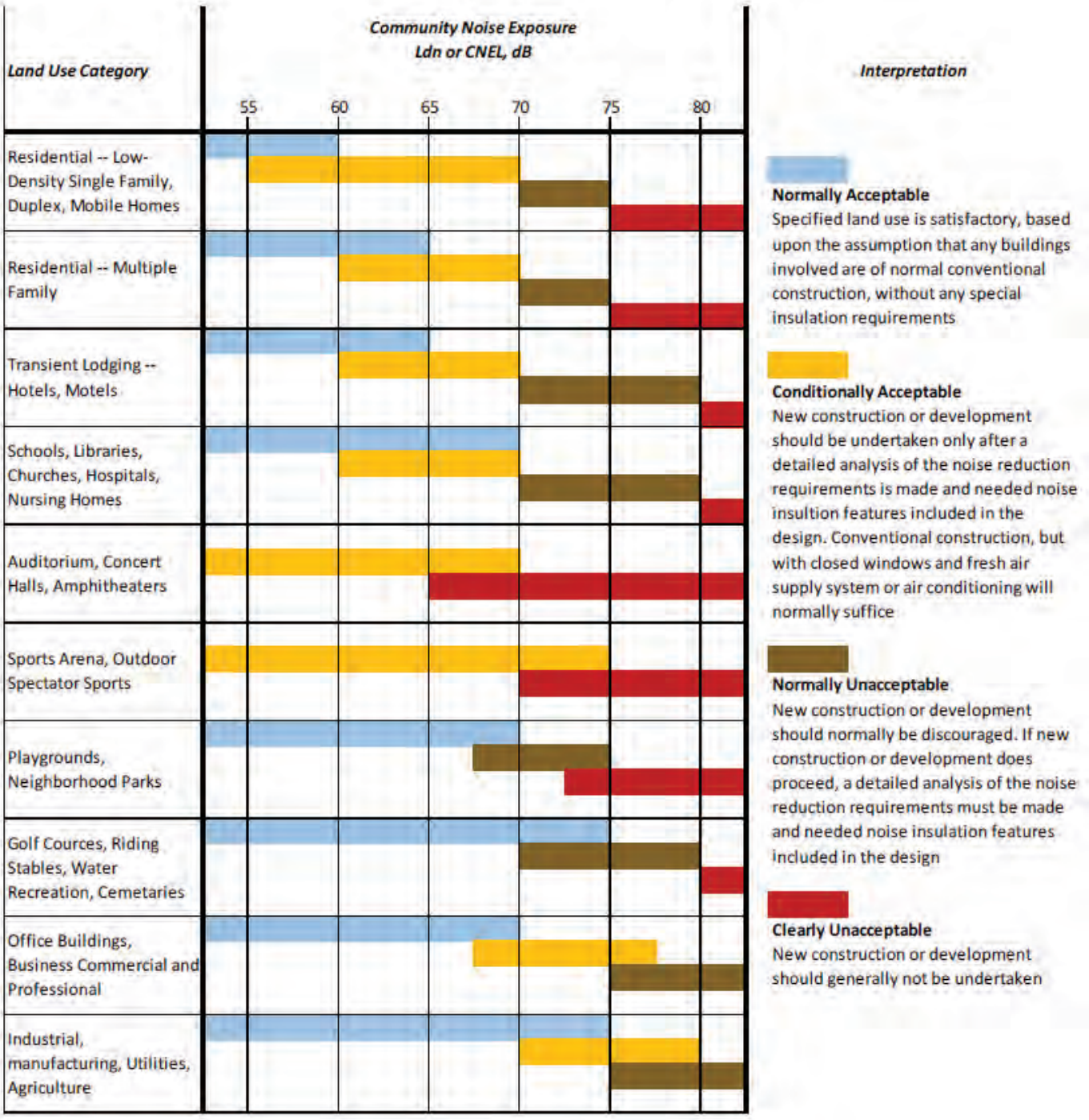
Impacts from Permanent Increase in Traffic Noise

Traffic Noise Impacts on Future Noise-Sensitive Development/Receptors

Table III on page 7 of the noise study in Appendix D identifies the modeled distance from the centerline of seven primary roadways in the city at which existing traffic noise is projected to reach 60 DB L_{dn} and 65 dB L_{dn}. Refer to the noise study for the definition of "dB L_{dn}". These two noise level intensities are used as reference because they correspond to noise compatibility levels shown in Figure 10 for noise-sensitive residential uses. Table V on page 9 of the noise study in Appendix D identifies this same information for proposed general plan buildout conditions where traffic noise levels on the roadways would increase due to increased traffic generation. Table 9, Existing and Future Traffic Noise Contours, replicates the information in the two noted noise study tables. As can be seen, with increased traffic volumes in the future, higher noise levels would occur at greater distances from the centerlines of the roadways. As would be expected, the greatest noise level increases would occur on roadways with the highest existing and future traffic volumes – Guadalupe Street and Main Street.

The noise levels reported here and in the discussions which follow were modeled with the assumption that there are no natural or artificial barriers between the noise source and the noise receptor.

As shown on Figure 5, new noise sensitive high-density residential and mixed-use development could occur on several vacant parcels that front primarily on State Route 1 and above existing commercial buildings located along the highway. Noise exposure at the rear yards of new noise-sensitive, multiple-family residential uses where those rear yards or other outside activity areas (e.g., balconies of residential uses built above existing commercial uses) are within 87 feet of the centerline of the highway could be exposed to exterior noise levels of 65 dB or greater, thereby exceeding the noise compatibility standard for such uses as shown on Figure 10.



0 300 feet

Source: EMC Planning Group 2021

Figure 10

Community Noise Exposure

Guadalupe 2021 General Plan Initial Study

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Table 9 Existing and Future Traffic Noise Contours

Roadway	Segment	Existing Conditions[1]		General Plan Buildout Conditions[1]	
		60 dB Ldn	65 dB Ldn	60 dB Ldn	65 dB Ldn
Obispo Street	North of W. Main Street (SR 166)	45	21	88	41
Simas Road	North of W. Main Street (SR 166)	36	17	54	25
Eleventh Street	East of Guadalupe Street (SR 1)	40	19	50	23
Fifth Street	West of Guadalupe Street (SR 1)	22	10	24	11
Pioneer Street	North of W. Main Street (SR 166)	30	14	32	15
Guadalupe St (SR 1)	West of Guadalupe Street (SR 1)	106	49	187	87
Main Street (SR 166)	North of W. Main Street (SR 166)	213	99	286	133

SOURCE: WJV Acoustics 2022
NOTE:
1. Distances are in feet as measured from the centerline of the respective roadways

A significant impact would occur where this case may occur. This impact determination is conservative. Outdoor activity areas of new residential uses are not likely to front on State Route 1 or on other road segments in the city, but rather be located on the back side of fronting buildings. The fronting buildings would shield traffic noise from the rear yards. Therefore, in general, traffic noise levels are likely to be lower than 65 dB at the distances from the centerline of roadways listed in Table 9.

Figure 5 shows that no new noise-sensitive uses are planned within 133 feet of the centerline of SR 166; the increase in traffic noise along this road would have a less-than-significant impact on new, noise-sensitive development.

The distance to the future 65 dB noise contour along the other studied roadways would generally be within or very close to the edge of the existing right-of-way widths of these roadways, which generally range from 60 to 66 feet as reported in the proposed general plan. Therefore, where new higher-density noise-sensitive residential development may occur on lots that front on these streets, future traffic noise volumes are not expected to exceed 65 dB and traffic noise impacts would be less than significant.

The Noise Element contains several policies and programs that would serve as mitigation for the potentially significant impact of future traffic noise on new multiple-family development. Policy N-1.1 reiterates the function of Figure 10-1 in the proposed general plan (included as Figure 10 in this initial study) as identifying acceptable exterior noise levels at various land uses and states that development of new noise sensitive uses will not be permitted where noise levels exceed those levels. Policy N-1.4 states that acoustical analyses will be required for new development

where exterior noise levels may exceed acceptable levels. As described above, the potential may exist for new residential development along State Route 1. The analysis must identify noise mitigation as needed to reduce noise exposure to acceptable levels. Implementation of this policy would reduce traffic noise related impacts to less than significant.

Traffic Noise Impacts on Existing Noise Sensitive Development/Receptors

Existing noise sensitive uses, particularly residential uses, located along the roadway segments evaluated will be exposed to increased traffic noise over time. Traffic volumes on State Route 1 and State Route 166 would increase independent of new development enabled by the proposed general plan. Potential traffic noise impacts at existing sensitive uses are a function of whether noise levels could exceed compatibility standards identified in Figure 10. For the purpose of this analysis, a significant impact is also assumed to occur if traffic noise levels created by buildout of the proposed general plan were to increase by 3 dB at sensitive receptor locations where future traffic noise levels without the proposed general plan would already exceed the noise compatibility criteria. The threshold of 3 dB is used because it generally represents the threshold at which noise increases are perceptible. Increases in noise level that are below 3 dB are generally not perceptible.

Table IX on page 15 of the noise study in Appendix D identifies traffic noise levels at a 75-foot reference setback distance from the centerline of the subject roadways. That information is replicated in Table 10, Future Traffic Noise Exposure Levels at 75-Foot Setback. As can be seen, future noise volumes with the proposed general plan do not exceed the most noise conservative compatibility standard of 60 dB along four of the seven study segments. The standard is exceeded along three road segments where projected traffic noise levels without the proposed general plan would already exceed 60 dB. Along these segments, the proposed general plan would not add traffic noise that exceeds 3 dB above the "without" condition. Therefore, the proposed general plan would have a less-than-significant impact from generating traffic noise that exceeds the reference standard.

Impacts from Permanent Noise Increases from New Stationary Sources

Future new industrial uses could include stationary sources of noise. If noise generated from those sources were to exceed the acceptable noise levels at nearby existing land uses as shown in Figure 10, a significant noise impact would occur. The potential for such impacts would be largely contingent on the noise intensity of those sources, the locations of noise generating equipment/activities within each project site relative to adjacent land uses, and site design features or other noise control measures included in the proposed projects.

Table 10 Future Traffic Noise Exposure Levels at 75-Foot Setback

Roadway	Segment	Without General Plan[1,2]	With General Plan[1,3]	Change (dB)	Impact
Obispo Street	North of W. Main Street (SR 166)	60	61	1	No
Simas Road	North of W. Main Street (SR 166)	57	58	1	No
Eleventh Street	East of Guadalupe Street (SR 1)	56	57	1	No
Fifth Street	West of Guadalupe Street (SR 1)	52	53	1	No
Pioneer Street	North of W. Main Street (SR 166)	54	54	0	No
Guadalupe St (SR 1)	West of Guadalupe Street (SR 1)	65	66	1	No
Main Street (SR 166)	North of W. Main Street (SR 166)	68	69	1	No

SOURCE: WJV Acoustics 2022
NOTE:
1. Reference setback is from the roadway centerline
2. Without proposed general plan condition is the projected noise level for 2050
3. With proposed general plan condition is the projected noise level for 2040 at general plan buildout

Proposed general plan policy N-1.4 requires that new public and private development proposals be reviewed to determine if they could result in noise levels that exceed standards in Figure 10. Where this may be possible, an acoustical analysis will be required to identify whether standards are exceeded and if so, to identify appropriate mitigation. The City would implement this policy as part of its development review process and require individual projects to implement noise mitigation measures. This would reduce the impact to less than significant.

Impacts from Temporary Construction Noise

Constructing new residential, mixed-use, commercial and industrial development as guided by the proposed general plan will create temporary noise. Construction activities typically include site preparation, excavation, grading, trenching, building construction, paving, and architectural coating. A different mix of equipment types is typically used during each stage of a construction process, and noise levels typically vary by and within each stage based on the type, number and the location of equipment being used. The duration of construction and distance between construction noise sources and noise-sensitive areas are additional key variables. Construction-generated noise levels drop off at a rate of about 6 dB per doubling of the distance between the source and receptor. Shielding by buildings or terrain can provide an additional 5 to 10 dB noise reduction at distant receptors.

Sensitivity to construction is highest when construction occurs during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours) and/or when the construction occurs in areas immediately adjoining noise-sensitive land uses.

Neither the proposed general plan nor the municipal code includes standards for construction noise to reduce its temporary effects on nearby receptors. However, best practice performance standards for avoiding and/or reducing the intensity of construction noise and limiting construction noise duration are commonly employed to reduce construction noise effects. In the absence of such standards, temporary construction noise impacts are considered to be potentially significant. Implementation of the following mitigation measure would reduce this impact to less than significant.

Mitigation Measure

Add the following new policy to the Noise Element of the proposed general plan:

N-1 Construction activities at new development sites shall be managed to reduce noise generation. Construction contractors will implement the following construction noise reduction measures, or equivalent measures that achieve the same noise reduction:

- Restrict noise-generating activities at construction sites or in areas adjacent to construction sites to the hours between 7:00 a.m. and 6:00 p.m., Monday through Saturday. Construction shall be prohibited on Sundays and Federal holidays unless prior written approval is granted by the building official.
- Where feasible, construct temporary noise barriers between the noise source and receiver, where feasible.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers.
- Prohibit unnecessary engine idling.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from receivers as possible. Adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Route all construction traffic via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible.

- Signs shall be posted at the construction site and near adjacent sensitive receptors displaying hours of construction activities and providing the contact phone number of a designated noise disturbance coordinator to whom complaints can be directed and issues resolved.

b. Common sources of man-made vibration include sonic booms, blasting, pile driving, pavement breaking, soil compaction, structure demolition, diesel locomotives, and rail-car coupling. None of these activities are anticipated to occur with construction or operation of new development within the city. However, it is possible that vibration from construction activities would be detected at adjacent sensitive land uses, especially during movements by heavy equipment or loaded trucks and during some paving activities (if they were to occur). Tables VI and VII on page 11 of the noise study in Appendix D identify guidelines for vibration levels at which annoyance could occur and at which damage to nearby structures could occur. The building damage criteria are particularly important for Guadalupe as development on infill parcels, particularly parcels in downtown, may occur adjacent to older structures.

Table VIII on page 12 of the noise study in Appendix D identifies typical vibration levels from common construction equipment types. Only one piece of equipment is listed (vibratory roller) that could cause strongly perceptible vibration and meet the most conservative criteria for vibration exposure at buildings that could cause damage (at fragile buildings located 25 feet or closer to the vibration source). While it is not generally expected that construction activities would involve use of equipment that generates vibration with potential to be strongly perceptible/cause annoyance and/or cause structural damage, given that all new development would occur on infill parcels adjacent to existing development, this potential must be evaluated on a project-by-project basis. Implementing the following mitigation measure would reduce this potential impact to less than significant.

Mitigation Measure

Add to the following new policy to the Noise Element of the proposed general plan:

N-2 The City will review new public and private development proposals to determine whether their construction has potential to cause vibration at levels that could cause strongly perceptible annoyance to nearby sensitive receptors and existing structures or could result in structure damage to adjacent buildings or infrastructure. Where this potential exists, the City will require a vibration analysis to determine whether

such impacts may occur and if so, identify mitigation measures that shall be implemented during the construction process to reduce vibration annoyance and damage potential to acceptable levels.

c. There are no private air strips in the vicinity of the city and no public-use airports for which airport land use plans have been prepared. The proposed general plan would have no impact.

14. POPULATION AND HOUSING

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐
b.	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Comments:

a. A key driver for the proposed general plan was to update the City's growth strategy and to plan for accommodating projected new growth. The proposed general plan will generate new population growth, but that growth is logically planned. The policies and programs in the proposed general plan are designed to guide new growth to address key issues identified by the community. The environmental effects of new population growth are described in other sections of this initial study. Where uniformly applied policies and/or regulations are insufficient to mitigate impacts identified as potentially significant, mitigation measures are identified to reduce the impacts to less than significant.

b. The proposed general plan will not displace people or existing housing. New development would occur in locations and under conditions that would not inherently require existing housing to be demolished.

15. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a. Fire protection?	☐	☐	☒	☐
b. Police protection?	☐	☐	☒	☐
c. Schools?	☐	☐	☒	☐
d. Parks?	☐	☐	☒	☐
e. Other public facilities?	☐	☐	☒	☐

Comments:

a,b,e. The proposed general plan states that staffing and response time for the fire and police departments is currently adequate. Given that the proposed general plan calls for new development only within the existing city limits, response times should not be impacted relative to existing conditions. The proposed general plan identifies the potential future need to construct a new public safety operations center to house the joint functions of the police, fire, and emergency operations departments. There is no timeframe or design for constructing the new facility, nor is there adequate funding for doing so. Funding would be generated, at least in part, by the City adopting and implementing a new public safety impact fee.

The types of physical resource impacts that could result from constructing a new public safety operations center would be similar to those associated with constructing new residential, mixed-use, and industrial development as generally identified in this initial study. These effects could include, but may not be limited to: air quality degradation, loss of protected biological resources, damage to cultural resources, increased GHGs, water quality degradation, temporary noise impacts on sensitive receptors, increased vehicle miles traveled, etc. These effects are discussed in the other individual environmental topic sections of this initial study. Where uniformly applied policies and/or regulations are insufficient to mitigate impacts identified as potentially significant, mitigation measures are identified to reduce the impacts to less than significant. Therefore, the potential impacts would be less than significant.

Were a new public safety operations center project proposed in the future, it would likely be considered a "project" under CEQA. Such a project would undergo CEQA review at the time it is proposed. Its environmental effects would be reduced by required conformance with uniformly applied proposed general plan policies and programs identified in this initial study that reduce environment effects; uniformly applied local, state, and federal regulations that reduce environmental effects; and mitigation measures identified in this initial study to be included in the general plan update as additional uniformly applied policies.

c. The Guadalupe Union School District operates an elementary school and a middle school in the city. High school students must travel to Orcutt to attend class. Both the elementary and middle schools are over capacity. The Guadalupe Union School District is planning a new junior high school facility in the DJ Farms/Pasadera area, which should help alleviate overcrowded conditions. The district anticipates that this facility will open in 2023 and allow the conversion of the middle school back into an elementary school. The Guadalupe Union School District has no current plans to build a high school, so Guadalupe high school students will continue to attend high schools in neighboring Orcutt for the foreseeable future.

The types of physical resource impacts that could result from constructing a new middle school would be similar to those associated with constructing new residential, mixed-use, and industrial development as generally identified in this initial study. These effects could include, but may not be limited to: air quality degradation, loss of protected biological resources, damage to cultural resources, increased GHGs, water quality degradation, noise impacts on sensitive receptors, increased vehicle miles traveled, etc.

The planned school site is within the boundary of the DJ Farms specific plan. An EIR which evaluated the effects of developing the specific plan area identified that a school site was being reserved within the specific plan boundary. The new middle school would be considered a "project" under CEQA. Such a project would undergo independent CEQA review, with the Guadalupe Union School District acting as lead agency (as referenced in the specific plan EIR). Its environmental effects would be reduced by required conformance with uniformly applied development standards for new schools as promulgated by the state (e.g., California Department of Education School Facilities Planning Division); additional uniformly applied state, and federal regulations that reduce environmental effects; and additional mitigation measures that may be identified through the project-specific CEQA process.

d. The proposed general plan identifies that the City is underserved by park and recreation resources, and that new park and recreation resources are needed to improve the ratio of parkland to population. Policy COS-1.9 requires that parks be provided at a ratio of four acres per thousand residents to coincide with City growth. Policy COS-1.10 identifies the City's priority that park land be dedicated versus paying fees in lieu of park dedication. These policies would facilitate developing new park and recreation resources over time. Programs COS-1.1.2 and 1.1.3 call for expanding joint use of school facilities, expanding park and recreation programming, and increased maintenance at existing parks. These policies and programs would increase park and recreation opportunities.

The precise locations or features of future parks are not known. The types of physical resource impacts that could result from constructing new parks would be similar to those from constructing new residential, mixed-use, commercial and industrial development as generally identified in this initial study. These effects could include, but may not be limited to: air quality degradation, loss of protected biological resources, damage to cultural resources, increased GHGs, water quality degradation, noise impacts on sensitive receptors, increased vehicle miles traveled, etc.

Individual new park projects that may be proposed in the future would likely be considered "projects" under CEQA. Such projects would undergo CEQA review at the time they are proposed. The environmental effects of constructing and operating individual parks would be reduced by required conformance with uniformly applied proposed general plan policies and programs identified in this initial study that reduce environment effects; uniformly applied local, state, and federal regulations that reduce environmental effects; mitigation measures identified in this initial study to be included in the general plan update as additional uniformly applied policies; and mitigation measures, if any, identified through the CEQA process for individual park projects. Therefore, the potential impacts would be less than significant.

16. RECREATION

	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Comments:

a,b. The proposed general plan would create increased demand for existing and new park and recreation facilities. However, no specific new park construction or existing park maintenance projects are identified in the proposed general plan as individual projects. Refer to the discussion under item "d" in Section 16, Public Services above regarding potential impacts of and mitigation for constructing and operating new parks, and for maintaining existing parks. Potential impacts would be less than significant.

17. TRANSPORTATION

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b.	Conflict or be inconsistent with CEQA guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d.	Result in inadequate emergency access?	☐	☐	☒	☐

Comments:

a. The *City of Guadalupe Transportation Study for the 2021 General Plan Update* (hereinafter "transportation study"), included in Appendix E, provides an overview of the City's circulation system and plans and general plan implementation related to transit, roadways, bicycle, and pedestrian facilities. Much of the information in this section is summarized from the transportation study.

The *City of Guadalupe Short Range Transit Plan* includes analysis of transit resources, facilities and needs for the City. Proposed general plan policy CIR-1.6 identifies that the City will support improvements to the public transit system through the short-range transit planning process and encourage the use of commuter rail transit. The transit plan and proposed policy are complimentary; no conflict with the applicable transit plan would occur.

The City does not have a policy, plan or ordinance in place which defines a minimum acceptable performance standard for its roadway network (e.g., level of service). No such standard exists at the congestion management plan level, as the Santa Barbara County Association of Governments, which serves as the applicable congestion management agency, has obtained an exemption from state congestion management program statues. For informational purposes, the transportation study includes an evaluation of whether traffic generated at buildout of the proposed general plan

would exceed the traffic volume design capacity of major roadways in the city. Table 10-1 in the transportation study shows that all street segments evaluated would remain under their design capacity at general plan buildout; no improvements to increase the capacity of the roadways would be needed.

The transportation study identifies the *City of Guadalupe Pedestrian and Bicycle Master Plan*, the *Guadalupe Mobility & Revitalization Plan,* and Santa Barbara County Association of Governments' *Regional Bicycle and Pedestrian Plan* as the three relevant plans for promoting bicycle and/or pedestrian connectivity within the city and to regional facilities. The transportation study includes relevant policy and program excerpts from these plans. The Circulation Element in the proposed general plan includes a range of policies and programs whose implementation would support improved and safe bicycle and pedestrian mobility. Policy CIR-1.1 commits the City to create and maintain a continuous system of sidewalks, crosswalks, and bike routes that safely connect residential neighborhoods to each other, to schools, and to retail centers. Policy CIR-1.2 states the City will work with federal, state, and regional agencies to plan and fund circulation system improvements. Policy CIR-1.4 supports creating a Class I bike route to connect the city to regional bicycle facilities. Programs CIR-1.1.1 through CIR 1.1.8, and program CIR 1.1.10 all describe specific actions the City will take to improve bicycle and pedestrian mobility consistent with the intent of the noted bicycle and pedestrian plans. The proposed general plan policies and programs are complementary to and support the noted bicycle and pedestrian plan objectives; no conflict between the two would occur.

b. With the adoption of SB 743 legislation and the updated CEQA Guidelines (Section 15064.3, November 2017), beginning July 1, 2020, the use of intersection level of service as a metric for determining impacts of development growth on the transportation system is no longer permitted. Therefore, in adherence to SB 743, transportation impacts as the result of buildout of the proposed general plan were evaluated based on vehicle miles traveled (VMT) as reported in the transportation study in Appendix E. VMT is a measure of the use and efficiency of the transportation network. VMT is calculated based on individual vehicle trips generated and their associated trip lengths. VMT accounts for two-way (round trip) travel.

   The transportation study includes a technical memo which summarizes the methodology and analysis used to evaluate the change in VMT between existing and general plan buildout conditions. It also discusses the VMT thresholds of significance and how they were derived. Table 11, VMT Analysis Results, shows the outcome of the VMT analysis. The information is taken directly from Table 9-1 in the

transportation study. The information shows that the proposed general plan would have a less-than-significant VMT impact based both on VMT generated by residential uses and VMT generated by employment generating (non-residential) uses.

Table 11 VMT Analysis Results

Land Use Type	Regional VMT Average	Significance Threshold[1]	Proposed General Pan VMT	Significant Impact?
Residential	15.16 VMT/Capita	12.89 VMT/Capita	12.07 VMT/Capita	No
Non-Residential[2]	20.25 VMT/Employee	17.21 VMT/Employee	3.01 VMT/Employee	No

SOURCE: Linscott, Law & Greenspan Engineers 2022
NOTE:
[1]The significance threshold is calculated as 15% below the regional average.
[2]Includes, commercial, retail, and industrial uses.

The VMT results for general plan buildout are based in part on VMT reductions that accrue from two intended features of the proposed general plan and from one existing transportation asset. The first two reductions relate to increased residential density and increased employment density. The proposed general plan intentionally focuses new growth on infill parcels and intentionally increases development intensity on those parcels. The third owes to the availability of rail service to city residents and employees. These reductions are described in the technical memo to the transportation study.

c,d. As described in item "a" above, buildout of the proposed general plan would not result in the need for circulation capacity improvements to the existing road network. Circulation improvements for individual future projects would be required to conform to uniformly applied standards for vehicular access, including emergency access, turning radii, sight distance, geometrics, etc., that are identified in the municipal code and state building codes. These standards are designed to enhance circulation safety. As also summarized in item "a", the City is and will continue to promote transportation safety and enhance pedestrian and bicycle connectivity by implementing related plans throughout the proposed general plan planning horizon. This effort is designed, in part, to address existing bicycle and pedestrian access deficiencies, but new development projects would, where necessary, be required to contribute to implementing projects to improve bicycle and pedestrian safety. The proposed general plan would have a less-than-significant impact.

18. TRIBAL CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
(1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources code section 5020.1(k), or	☐	☒	☐	☐
(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Comments:

a. There are no known tribal cultural resources recorded within the city limits. There are archaeological resources, specifically isolates recorded within the city limits as described in Section 3, Cultural Resources. Three reports for locations within the city limit mentioned how locals spoke of a Native American burial ground with human remains and artifacts that was uncovered during agricultural grading, with the site never having been relocated. It is unknown if the site exists subsurface or has been completely destroyed by agricultural practices.

It is unknown if there are subsurface tribal cultural resources located on any vacant parcels or elsewhere within the city. Developing vacant parcels or disturbing surface soils or subsurface conditions in other locations could result in disturbing or destroying subsurface tribal cultural resources if resources were to be uncovered.

This is a potentially significant impact. However, implementation of mitigation measures CUL-1 and CUL-2 set forth in Section 5, Cultural Resources, would ensure potential impacts are less than significant.

19. UTILITIES AND SERVICES SYSTEMS

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development?	☐	☐	☒	☐
c.	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d.	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Comments:

a. The *City of Guadalupe 2021 Water Master Plan Update* includes analysis of water supply, storage, and distribution system improvement needs based on a future projected future population of about 10,624, slightly less than projected under buildout of the proposed general plan. The precise locations and types of improvements needed would be determined through additional analysis.

The *City of Guadalupe Wastewater Collection System & Treatment Plant Master Plan* was prepared in 2014. This master plan evaluated the City's system as of that date and included a capital improvements program that identified existing and projected improvements needed to meet demands from a city buildout population of about

11,029 – slightly fewer than projected under buildout conditions for the proposed general plan. The wastewater collection and treatment master plan includes a range of recommended wastewater collection, distribution and treatment plant improvements. Locations for several improvements are identified, while specific locations for others are subject to further analysis. Improvements needed to expand wastewater treatment capacity would occur at the existing plant site. Treatment plant operations are subject to regulatory permitting through the California Regional Water Quality Control Board though the separate waste discharge requirements process and expansion of treatment plant capacity would be subject to CEQA review.

Regulations related to meeting storm water quality control requirements are reviewed in Section 10, Hydrology and Water Quality. As the city builds out, future individual development projects will be required to install storm water control facilities that limit discharge of storm water to pre-project runoff rates. This will reduce the need to construct new wastewater collection or disposal facilities whose construction could otherwise have potential to result in environmental impacts.

The types of physical resource impacts that could result from constructing new water supply, wastewater and storm drainage infrastructure improvements would be similar to those associated with constructing new residential, mixed-use, and industrial development as generally identified in this initial study. These effects could include, but may not be limited to: air quality degradation, loss of protected biological resources, damage to cultural resources, increased GHGs, water quality degradation, noise impacts on sensitive receptors, etc.

Certain types of individual new infrastructure projects that may be proposed in the future would likely be considered "projects" under CEQA. Such projects would undergo CEQA review at the time they are proposed. Once possible example is future improvements at the wastewater treatment plant, which could include constructing a new aeration basin.

The environmental effects of constructing and operating individual improvements would be reduced by required conformance with uniformly applied proposed general plan policies and programs identified in this initial study that reduce environment effects; uniformly applied local, state, and federal regulations that reduce environmental effects; mitigation measures identified in this initial study to be included in the general plan update as additional uniformly applied policies; and mitigation measures, if any, identified through the CEQA process for individual park projects. This would ensure that impacts of such construction are reduced to less than significant.

b. Please refer to the discussion for item "b" in Section 10, Hydrology and Water Quality. As referenced in that section, the proposed general plan would have a less-than-significant impact, as water supply is projected to be sufficient to meet projected demand.

c. As described in item "a" above, the City has prepared a wastewater master plan. It identifies improvements needed to expand the wastewater treatment plan to meet a planned future population of about 11,029, or about 477 fewer than projected at buildout of the proposed general plan. While the wastewater master plan may require modification over time to reflect changes in regulatory and city needs conditions, it does provide a detailed framework for how capacity can be expanded over time to meet the City's needs. Policy PF-1.5 in the proposed general plan reiterates the City's commitment to implementing the wastewater master plan and to update it over time as needed.

Through its development review process, the City will ensure that adequate wastewater treatment capacity will be available prior to approving building permits for new development projects. This will ensure that potential impacts associated with wastewater treatment capacity will be less than significant.

d,e. According to California Department of Resources Recycling and Recovery, the City's total solid waste tonnage has been declining since about 2014. Similarly, average disposal rates per day per capita and per day per employee have been declining over the same period.

Solid waste is transported to the Santa Maria Transfer Station in Nipomo, California, and from there it is distributed to Chicago Grade Landfill, to the Santa Maria Regional Landfill, and other facilities, including the Kettleman Hills Landfill. The proposed general plan includes a statement that facilities to which solid waste from the city is delivered have up to 40 years of service life remaining.

At this time, there is no evidence to suggest that solid waste capacity demand of new development within the city would trigger the need for developing additional landfill capacity. New landfill capacity/disposal projects proposed by the owner of the Chicago Grade Landfill, the operator of the Santa Maria Regional Landfill or the owners/operator of other solid waste disposal/transfer facilities would undergo separate CEQA review at the time such projects are proposed in response to regional needs for solid waste disposal capacity.

Like all cities in California, the City of Guadalupe must meet a multitude of regulatory requirements for minimizing solid waste generation and maximizing solid waste diversion and reuse. The City is currently implementing a variety of programs to meet regulatory standards that pertain to the actions of local agencies. Policy

PF-1.14 in the proposed general plan reaffirms the City's commitment to solid waste management by supporting programs to compost yard waste and to recycle a variety of materials. Program COS-1.1.4 requires the Public Works Department to continue its waste reduction and recycling program to reduce landfill waste.

With the City's requirement compliance with solid waste regulatory requirements and continued effort to implement programs designed to meet those requirements, solid waste impacts from implementing the proposed general plan would be less than significant.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Comments:

a. The city limits are within a Local Responsibility Area. Figure 8-2, Fire Hazard Severity Zones, in the proposed general plan shows that there are no very high fire hazard safety zones within the city, but one is located direct adjacent to the northern edge of the city limits within a State Responsibility Area.

The Santa Barbara County *2017 Multi-Jurisdictional Hazard Mitigation Plan Update* evaluates various hazards in the county and in local cities, including Guadalupe. The hazards addressed include: agricultural emergencies, coastal erosion, flooding, dam failure, drought, earthquakes, landslides, sea level rise, tsunami, wildland fire, windstorms, and hazardous materials. Chapter 12 of the hazard mitigation plan contains the City of Guadalupe's hazard assessment and mitigation plan. It addresses actions the City is and/or will take to reduce and mitigate identified and potential hazards, including emergency response plans. The City of Guadalupe Fire

Department coordinates emergency response within the city and with adjacent and regional agencies. The plans are regularly updated to account for changing conditions. The proposed general plan does not include policy or development direction that would interfere with the City's ability to implement emergency response planning. Therefore, it would have no related impact.

b. The proposed general plan would not affect slope or other local environmental conditions that could exacerbate fire hazard risk; no new development is proposed within the fire hazard risk zone. Therefore, the proposed project would not create enhanced potential for fires that could adversely affect existing or future residents of the city and would have no related impacts.

c. New development would be supported by typical urban infrastructure that would not be required specifically to address fire hazard risk, nor would such infrastructure exacerbate fire hazard risk. The proposed project would have no related impact.

d. The high fire hazard severity zone correlates to an area of riparian vegetation along the Santa Maria River. The city is located upslope of this riparian area; post-fire slope instability hazards are not expected.

Flood hazards associated with the Santa Maria River are identified and evaluated in Section 10, Hydrology and Water Quality. The city is not within the associated flood hazard zone. A fire within the Santa Maria River riparian area could affect runoff and drainage conditions adjacent to the city limits. The precise extent to which this could occur is unknown, but based on review of Google Earth imagery, the density of riparian vegetation is not substantial. Loss of that vegetation to fire would not be expected to result in a significant change in flood elevation such that increased flood hazards within the city limits would occur.

The project would have no impact from exposing people to these wildfire related hazards.

21. MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Does the project have the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☐	☒	☐
c.	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Comments:

a. As described in Section 4, Biological Resources, development that could occur under the proposed general plan has minimal potential to adversely affect special status species. Where such potential is identified, mitigation measures are included to reduce the impact to less than significant.

New development would largely be limited to vacant, infill parcels. This fact limits potential for direct impacts on historic structures. It is possible that direct impacts on historic resources could occur if new residential development above existing commercial structures is proposed in areas designated mixed use. Potential indirect and direct impacts on historic structures are described in Section 5 of this initial study and would be mitigated to less than significant by implementing policies included in the proposed general plan. Potential impacts on unknown subsurface historic

resources that may be located on vacant parcels or elsewhere where excavation/ground disturbance may occur are mitigated to less than significant by mitigation measures included in Section 5, Cultural Resources.

b. Development that could be enabled by the proposed general plan would contribute to a range of existing environmental effects of past and existing development and to foreseeable environmental effects from future development. These effects are largely population and employment growth related. Proposed project impacts that contribute to cumulative project impacts would be lessened through required conformance with uniformly applied policies and programs in the proposed general plan, uniformly applied regulations and standards, and mitigation measures included in this initial study. The proposed general plan contribution to cumulative impacts would not be considerable.

c. Based on the analysis provided in this initial study, implementing the proposed general plan could indirectly cause substantial adverse effects to human beings by exposing sensitive receptors to air emissions, hazardous materials conditions, contributing to climate change and its associated effects, and increasing exposure to increased traffic noise. However, with required compliance of new development to uniformly applied policies and implementation measures in the proposed general plan, uniformly applied regulations and standards, and mitigation measures presented in this initial study, the proposed project would not result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

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All documents in **bold** are available for review at the **City of Guadalupe, 918 Obispo Street, 805-287-9494** during normal business hours.

Emissions Modeling Memorandum and Modeling Results

A

APPENDIX

EMC PLANNING GROUP INC.
A LAND USE PLANNING & DESIGN FIRM

301 Lighthouse Avenue Suite C Monterey California 93940
Tel 831·649·1799 Fax 831·649·8399 www.emcplanning.com

To: **Ron Sissem MRP, Senior Principal and Project Manager**

From: **Sally Rideout EMPA, Principal**

Cc: **File**

Date: **February 28, 2022**

Re: **Guadalupe 2021 General Plan Update - Emissions Modeling Methodology and Assumptions**

PROJECT DESCRIPTION AND SETTING

This memorandum describes the methodology and assumptions used in the emissions modeling prepared for the proposed *Guadalupe 2021 General Plan* (proposed general plan). The proposed general plan provides land use and policy guidance which focuses on new development opportunities on existing, vacant infill parcels within the existing city limits.

There are approximately 149 acres of vacant land within the city limits. According to the proposed general plan, about 33 percent (49 acres) of all vacant land is designated for residential use. Vacant land designated for commercial use accounts for about 17 percent (25 acres) of the total, and vacant land designated for industrial land accounts for 27 percent (40 acres) of the total. Table 2-2 in the proposed general plan land use Element identifies that projected new development capacity is 874 dwelling units, including 35 mixed use dwelling units, and 1,365,280 square feet of commercial and industrial uses.

The city is located within the South Central Coast Air Basin, whose air quality is managed by three air districts. The city is located within the jurisdictional boundary of the Santa Barbara County Air Pollution Control District (air district).

SCOPE OF ASSESSMENT

This assessment describes the, methodology and assumptions used, and an estimate of the proposed project's operational criteria air pollutant emissions and greenhouse gas (GHG) emissions resulting from new projected development described above using the California Emissions Estimator Model (CalEEMod) version 2020.4 software, a modeling platform recommended by the California Air Resources Board (CARB) and accepted by the air district. The model results will inform the evaluations of air quality and GHGs impacts of implementing the proposed general plan. Model results are attached to this assessment.

METHODOLOGY

Emissions Model

CalEEMod Version 2020.4 software, developed by Breeze Software, was used to estimate the proposed project's operational criteria air pollutant and GHG emissions. The CalEEMod software utilizes emissions models USEPA AP-42 emission factors, CARB vehicle emission models studies and studies commissioned by other California agencies such as the California Energy Commission and CalRecycle. The CalEEMod platform allows calculations of criteria air pollutant and GHG emissions from land use projects.

Data inputs to the model are based on a comparison of proposed land uses with CalEEMod default land uses while utilizing the size metrics provided in Table 2-2 of the proposed general plan. Construction emissions are not analyzed. Analysis of site- and project-specific construction and operational emissions of future individual development projects within the city may be required as part of the associated future individual project application processes.

Assumptions

Unless otherwise noted, the CalEEMod data inputs are based on or derived from information provided in the land use element of the general plan update. The following primary assumptions were made:

1. The operational year for the proposed project is 2042, which reflects an assumed 20-year buildout time horizon. CalEEMod uses the operational year to determine the

appropriate emission factors for operational model calculations; however, the current version of CalEEMod can accommodate future operational years of 2021-2035, 2040, 2045, and 2050 only. Since emission factors decline with time, by selecting an operational year as 2040 rather than 2045, the calculations will yield a conservative, slight overestimate of emissions that would actually be expected by 2045. Therefore, 2040 was selected as the operational year for modeling purposes.

Proposed Emissions Sources

The proposed general plan land use types and development capacities, along with their CalEEMod land use default categories are presented in Table 1, Project Characteristics.

Table 1 Project Characteristics

Project Components	CalEEMod Land Use[1]	Proposed
Low Density Residential[2]	Single Family Housing	391 units
Medium Density Residential[3]	Apartments Low Rise	112 units
High Density Residential[4]	Apartments Mid Rise	168 units
	Condo/Townhouse	168 units
Mixed Use Residential[5]	Apartments Mid Rise	18 units
	Condo/Townhouse	17 units
Mixed Use Commercial[6, 7]	Strip Mall	59,338 square feet
Specific Plan Commercial	Strip Mall	436,820 square feet
General Commercial[6, 7, 8]	Regional Shopping Center	5,254 square feet
General Industrial[9]	General Heavy Industry[10]	863,868 square feet

SOURCE: Breeze Software 2021, EMC Planning Group 2021.
NOTES:

1. CalEEMod default land use subtype. Descriptions of the model default land use categories and subtypes are found in the User's Guide for CalEEMod Version 2020.4 available online at: http://www.aqmd.gov/caleemod/user's-guide
2. Low Density Residential is assumed to be detached single-family homes and includes 377 planned but not yet built residential units within the approved DJ Farms Specific Plan area.
3. Allowed Medium Density Residential use types include single-family homes, duplexes, triplexes, fourplexes, and townhouses. Multi-family residential products are assumed.
4. Allowed residential uses in the High Density Residential land use designation are 2-3-story apartments and townhouses. Three-story construction is assumed. For modeling purposes, a 50 percent split was assumed for the number of units in these CalEEMod land use categories.
5. Mixed use residential uses consist of apartments and/or townhomes on the second floors of buildings. For modeling purposes, a 50 percent split was assumed for the number of units in these CalEEMod land use categories
6. Mixed use commercial uses are assumed to include office and professional services uses on the first floor of buildings.
7. Commercial square footage allowances are based on a maximum 0.50 Floor Area Ratio factor.

8. Uses allowed in the General Commercial land use designation include highway commercial, regional retail centers, gas stations, big-box retail, fast-food restaurants, lumber yards, motels, auto malls, building contractor storage yards, and other uses that serve local and regional needs for goods and services.
9. The CalEEMod description of General Light Industry would closely approximate the uses allowed in the General Industrial land use designation. However, CalEEMod version 2020.4 has an upper limit of 50,000 square feet for the General Light Industry category and recommends the use of another land use category for larger projects. The General Heavy Industry category was used and represents a worst-case emissions scenario. Uses allowed in the General Industrial land use designation include industrial parks, light manufacturing, warehousing, wineries, auto and farm equipment sales or repair establishments, feed stores, lumberyards, construction supply companies, and similar uses.

Model Scenario

Operational emissions based on future development consistent with the above-referenced land uses were modeled. One model scenario was used to reflect emissions reduced through compliance with proposed general plan policies and VMT reduction measures as identified in the project CEQA document.

Unmitigated Emissions Scenario

The "unmitigated" emissions scenario shows modeled emissions that would be generated by buildout of the proposed land uses in compliance with proposed uniformly applied general plan policies and programs, uniformly applied regulatory measures that reduce emissions, and land use design features of the proposed project that reduce GHG emissions and have criteria air emission reduction co-benefits. The latter design features are California Pollution Control Officers Association (CAPCOA) emissions reduction measures found in the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* that are referenced here parenthetically. Compliance with the following regulations is assumed:

- Current Title 24 Residential Building Energy Efficiency Standards (BEES) require 100 percent of electrical energy demand from renewable sources for certain low-rise residential uses including single-family and multi-family residential uses. The model's operational energy emission factors for energy demand Title 24 and non-Title 24 (plug ins) are adjusted to reflect the BEES for modeled Apartment Low-rise and Single-Family Housing uses;
- State Model Water Efficient Landscape Ordinance (MWELO) (CAPCOA WUW-4);

- Landscaping equipment is set to electric only to reflect phasing out of gas-powered landscaping tools potentially by 2024 (AB 1346). It is assumed that these or similar requirements will be in effect at buildout (CAPCOA A-1); and
- Solid waste diversion of 75 percent is applied consistent with waste diversion targets identified in AB 341. It is assumed that these or similar requirements will be in effect at buildout (CAPCOA SW-1).

The proposed general plan includes numerous policies whose implementation promotes non-vehicular modes of travel and reduced vehicle miles traveled (VMT) that would have co-benefit of reducing mobile-source ROC, NOx and PM_{10} emissions. Not all policies are quantifiable using CalEEMod. Several policies are consistent with CAPCOA emissions reductions measures that can be incorporated into the model. The following CAPCOA measures are activated in the model based upon general plan policies and programs:

- CAPCOA SDT-1: Proposed general plan policies CIR-1.1, CIR-1.4, EJ-1.10, and EJ-1.11, promote maintaining existing and creating expanded pedestrian and bicycle routes and implementation programs CIR-1.1.1, CIR-1.1.2, CIR-1.1.3 would promote complete streets and bicycle and pedestrian connectivity; and
- CAPCOA LUT-1 and LUT-3: general plan policy COS-1.6 encourages compact development and infill, policy ED-1.4 promotes mixed uses and improvements for non-vehicle modes of transportation in the downtown, implemented through programs ED-1.11 and ED-1.14.

RESULTS

Detailed modeling results are attached to this memorandum. Criteria air pollutant emissions are reported in pounds per day. GHG emissions are reported in metric tons carbon dioxide equivalent (MT CO_2e) per year.

Unmitigated Emissions

Criteria Air Pollutants

The modeling results for the unmitigated project emissions scenario are summarized in Table 2, Unmitigated Operational Criteria Air Pollutant Emissions and Table 3, Unmitigated Operational GHG Emissions.

Table 2 Unmitigated Operational Criteria Air Pollutant Emissions

Emissions Sources	Volatile Organic Compounds (VOC)[1,2]	Nitrogen Oxides (NO_X)[1,2]	Exhaust Particulate Matter (PM_{10})[1,2]	Total Particulate Matter (PM_{10})[1,2,3]
Area	66.98	0.66	0.30	0.30
Energy	1.18	10.50	0.82	0.82
Mobile[4]	43.07	41.64	0.34	93.36
Winter Emissions Total	**111.22**	**53.86**	**1.46**	**94.48**
Summer				
Area	66.98	0.66	0.30	0.30
Energy	1.18	10.50	0.82	0.82
Mobile[3]	45.32	38.22	0.34	93.36
Summer Emissions Total	**113.47**	**49.38**	**1.46**	**94.48**

SOURCE: EMC Planning Group 2022
NOTES:
1. Results have been rounded, and may, therefore, vary slightly.
2. Expressed in pounds per day.
3. Total particulates are fugitive dust and engine exhaust combined.
4. For Santa Barbara County, CalEEMod version 2020.4 operational mobile-source defaults assume all roadways will be paved.

Greenhouse Gas Emissions

The model results for unmitigated greenhouse gas emissions resulting from future development of land uses consistent with the general plan update are summarized in Table 3, Unmitigated Greenhouse Gas Emissions

Table 3 Unmitigated Operational GHG Emissions[1,2]

Source Category	GHG Emissions (MT CO_2e)
Area	7.56
Energy[3]	3,509.26
Mobile	10,869.92
Waste	287.31
Water	346.88
Total Project Emissions	**15,020.92**

SOURCE: EMC Planning Group 2022
NOTES:
1. Results have been rounded, and may; therefore, vary slightly.
2. Expressed in MT CO_2e per year.
3. The CalEEMod electrical demand defaults for Title 24 and Non-Title 24 (plug in electric) for single-family housing and low-rise apartments are zeroed because compliance with current building energy efficiency standards (BEES) for low-rise residential uses require the use of renewable energy sources for electrical consumption (California Energy Commission 2022).

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Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Guadalupe Proposed General Plan

Winter Emissions Projections for Future Development Consistent with General Plan Land Use Designations At Buildout Horizon

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	863.87	1000sqft	39.66	863,868.00	0
Apartments Low Rise	112.00	Dwelling Unit	6.82	112,000.00	439
Apartments Mid Rise	168.00	Dwelling Unit	6.59	168,000.00	659
Apartments Mid Rise	18.00	Dwelling Unit	0.00	18,000.00	68
Condo/Townhouse	17.00	Dwelling Unit	0.00	17,000.00	68
Condo/Townhouse	168.00	Dwelling Unit	6.59	168,000.00	658
Single Family Housing	391.00	Dwelling Unit	33.16	703,800.00	1588
Regional Shopping Center	5.25	1000sqft	0.24	5,254.00	0
Strip Mall	59.34	1000sqft	2.72	59,338.00	0
Strip Mall	436.82	1000sqft	20.06	436,820.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2040
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

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Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use - Table 2-2 GPU

Vehicle Trips - Trip rates adjusted per Traffic Engineer information.Passby/diverted trips derived from Traffic Engineer Information Trip Type default percentages applied to adjusted primary/passby/diverted trips (provided by Traffic Engineer)

Energy Use - Adjusted: Current Title 24 Building Energy Efficiency Standards require 100% electric demand for low rise and sfd from renewable sources

Mobile Land Use Mitigation -Increased Density and Diversity. Increased pedestrian/bicycle connectivity. From GPU and TIA

Area Mitigation - Regulatory compliance

Water Mitigation - Compliance with MWELO

Waste Mitigation - Compliance with AB 341

Table Name	Column Name	Default Value	New Value
tblEnergyUse	NT24E	3,172.76	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	T24E	77.89	0.00
tblEnergyUse	T24E	68.41	0.00
tblLandUse	LandUseSquareFeet	863,870.00	863,868.00
tblLandUse	LandUseSquareFeet	5,250.00	5,254.00
tblLandUse	LandUseSquareFeet	59,340.00	59,338.00
tblLandUse	LotAcreage	19.83	39.66
tblLandUse	LotAcreage	7.00	6.82
tblLandUse	LotAcreage	4.42	6.59
tblLandUse	LotAcreage	0.47	0.00
tblLandUse	LotAcreage	1.06	0.00
tblLandUse	LotAcreage	10.50	6.59
tblLandUse	LotAcreage	126.95	33.16
tblLandUse	LotAcreage	0.12	0.24
tblLandUse	LotAcreage	1.36	2.72
tblLandUse	LotAcreage	10.03	20.06
tblLandUse	Population	305.00	439.00

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	Population	457.00	659.00
tblLandUse	Population	49.00	68.00
tblLandUse	Population	46.00	68.00
tblLandUse	Population	457.00	658.00
tblLandUse	Population	1,064.00	1,588.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	5.00	39.00
tblVehicleTrips	DV_TP	35.00	44.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	40.00	42.00
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	PB_TP	3.00	12.00
tblVehicleTrips	PB_TP	3.00	12.00
tblVehicleTrips	PB_TP	3.00	12.00

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	PB_TP	3.00	19.00
tblVehicleTrips	PB_TP	11.00	14.00
tblVehicleTrips	PB_TP	3.00	12.00
tblVehicleTrips	PB_TP	15.00	16.00
tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	92.00	42.00
tblVehicleTrips	PR_TP	54.00	42.00
tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	45.00	42.00
tblVehicleTrips	ST_TR	8.14	6.52
tblVehicleTrips	ST_TR	4.91	3.44
tblVehicleTrips	ST_TR	8.14	6.52
tblVehicleTrips	ST_TR	6.42	4.87
tblVehicleTrips	ST_TR	46.12	37.01
tblVehicleTrips	ST_TR	9.54	9.81
tblVehicleTrips	ST_TR	42.04	54.45
tblVehicleTrips	SU_TR	6.28	6.58
tblVehicleTrips	SU_TR	4.09	3.44
tblVehicleTrips	SU_TR	6.28	6.52
tblVehicleTrips	SU_TR	5.09	4.87
tblVehicleTrips	SU_TR	21.10	37.01
tblVehicleTrips	SU_TR	8.55	9.81
tblVehicleTrips	SU_TR	20.43	54.45
tblVehicleTrips	WD_TR	7.32	6.52
tblVehicleTrips	WD_TR	5.44	3.44

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	WD_TR	7.32	6.52
tblVehicleTrips	WD_TR	3.93	4.87
tblVehicleTrips	WD_TR	37.75	37.01
tblVehicleTrips	WD_TR	9.44	9.81
tblVehicleTrips	WD_TR	44.32	54.45

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	66.9704	0.6600	54.6227	2.4800e-003		0.2985	0.2985		0.2985	0.2985	0.0000	91.0132	91.0132	0.0650	0.0000	92.6383
Energy	1.1836	10.4976	7.1155	0.0646		0.8177	0.8177		0.8177	0.8177		12,911.7593	12,911.7593	0.2475	0.2367	12,988.4874
Mobile	43.0657	41.6388	387.0904	0.6332	93.0198	0.3404	93.3602	24.7975	0.3179	25.1153		64,591.4699	64,591.4699	5.3715	4.0576	65,934.9225
Total	**111.2197**	**52.7964**	**448.8286**	**0.7002**	**93.0198**	**1.4567**	**94.4765**	**24.7975**	**1.4341**	**26.2316**	**0.0000**	**77,594.2424**	**77,594.2424**	**5.6839**	**4.2943**	**79,016.0481**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	43.0657	41.6388	387.0904	0.6332	93.0198	0.3404	93.3602	24.7975	0.3179	25.1153		64,591.4699	64,591.4690	5.3715	4.0576	65,934.9225

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.2 Trip Summary Information

	Average Daily Trip Rate				Mitigated
Land Use	Weekday	Saturday	Sunday		Annual VMT
Apartments Low Rise	730.24	730.24	736.96		1,252,997
Apartments Mid Rise	577.92	577.92	577.92		990,334
Apartments Mid Rise	61.92	61.92	61.92		106,107
Condo/Townhouse	110.84	110.84	110.84		189,937
Condo/Townhouse	1,095.36	1,095.36	1095.36		1,877,028
General Heavy Industry	4,207.05	4,207.05	4207.05		4,650,144
Regional Shopping Center	194.30	194.30	194.30		205,088
Single Family Housing	3,835.71	3,835.71	3835.71		6,572,939
Strip Mall	3,231.06	3,231.06	3231.06		3,382,471
Strip Mall	23,784.85	23,784.85	23784.85		24,899,410
Total	37,829.25	37,829.25	37,835.97		44,126,456

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Apartments Mid Rise	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Apartments Mid Rise	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Condo/Townhouse	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Condo/Townhouse	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
General Heavy Industry	6.60	5.50	6.40	59.00	28.00	13.00	42	39	19
Regional Shopping Center	6.60	5.50	6.40	16.30	64.70	19.00	42	44	14
Single Family Housing	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	42	42	16
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	42	42	16

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Apartments Mid Rise	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Condo/Townhouse	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
General Heavy Industry	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Regional Shopping Center	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Single Family Housing	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Strip Mall	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338

5.0 Energy Detail

Historical Energy Use: N

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Unmitigated	1.1836	10.4976	7.1155	0.0646		0.8177	0.8177		0.8177	0.8177		12,911.7593	12,911.7593	0.2475	0.2367	12,988.4874

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	3.02792	0.0327	0.2790	0.1187	1.7800e-003		0.0226	0.0226		0.0226	0.0226		356.2264	356.2264	6.8300e-003	6.5300e-003	358.3433
Apartments Mid Rise	0.413343	4.4600e-003	0.0381	0.0162	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003		48.6286	48.6286	9.3000e-004	8.9000e-004	48.9176
Apartments Mid Rise	3.85787	0.0416	0.3555	0.1513	2.2700e-003		0.0287	0.0287		0.0287	0.0287		453.8670	453.8670	8.7000e-003	8.3200e-003	456.5641
Condo/Townhouse	0.803873	8.6700e-003	0.0741	0.0315	4.7000e-004		5.9900e-003	5.9900e-003		5.9900e-003	5.9900e-003		94.5733	94.5733	1.8100e-003	1.7300e-003	95.1353
Condo/Townhouse	7.94415	0.0857	0.7321	0.3115	4.6700e-003		0.0592	0.0592		0.0592	0.0592		934.6063	934.6063	0.0179	0.0171	940.1602
General Heavy Industry	61.9618	0.6682	6.0747	5.1027	0.0365		0.4617	0.4617		0.4617	0.4617		7,289.6259	7,289.6259	0.1397	0.1336	7,332.9445
Regional Shopping Center	0.0336832	3.6000e-004	3.3000e-003	2.7700e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		3.9627	3.9627	8.0000e-005	7.0000e-005	3.9863

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Single Family Housing	28.5264	0.3076	2.6289	1.1187	0.0168		0.2126	0.2126		0.2126	0.2126		3,356.0516	3,356.0516	0.0643	0.0615	3,375.9950
Strip Mall	0.380413	4.1000e-003	0.0373	0.0313	2.2000e-004		2.8300e-003	2.8300e-003		2.8300e-003	2.8300e-003		44.7545	44.7545	8.6000e-004	8.2000e-004	45.0205
Strip Mall	2.80044	0.0302	0.2746	0.2306	1.6500e-003		0.0209	0.0209		0.0209	0.0209		329.4630	329.4630	6.3100e-003	6.0400e-003	331.4208
Total		**1.1836**	**10.4976**	**7.1154**	**0.0646**		**0.8177**	**0.8177**		**0.8177**	**0.8177**		**12,911.7593**	**12,911.7593**	**0.2475**	**0.2367**	**12,988.4874**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	66.9704	0.6600	54.6227	2.4800e-003		0.2985	0.2985		0.2985	0.2985	0.0000	91.0132	91.0132	0.0650	0.0000	92.6383

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.2118					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	54.6145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1442	0.6600	54.6227	2.4800e-003		0.2985	0.2985		0.2985	0.2985		91.0132	91.0132	0.0650		92.6383

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**66.9704**	**0.6600**	**54.6227**	**2.4800e-003**		**0.2985**	**0.2985**		**0.2985**	**0.2985**	**0.0000**	**91.0132**	**91.0132**	**0.0650**	**0.0000**	**92.6383**

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Guadalupe Proposed General Plan

Summer Emissions Projections for Future Development Consistent with General Plan Land Use Designations At Buildout Horizon

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	863.87	1000sqft	39.66	863,868.00	0
Apartments Low Rise	112.00	Dwelling Unit	6.82	112,000.00	439
Apartments Mid Rise	168.00	Dwelling Unit	6.59	168,000.00	659
Apartments Mid Rise	18.00	Dwelling Unit	0.00	18,000.00	68
Condo/Townhouse	17.00	Dwelling Unit	0.00	17,000.00	68
Condo/Townhouse	168.00	Dwelling Unit	6.59	168,000.00	658
Single Family Housing	391.00	Dwelling Unit	33.16	703,800.00	1588
Regional Shopping Center	5.25	1000sqft	0.24	5,254.00	0
Strip Mall	59.34	1000sqft	2.72	59,338.00	0
Strip Mall	436.82	1000sqft	20.06	436,820.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2040
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

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Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use - Table 2-2 GPU

Vehicle Trips - Trip rates adjusted per Traffic Engineer information.Passby/diverted trips derived from Traffic Engineer Information Trip Type default percentages applied to adjusted primary/passby/diverted trips (provided by Traffic Engineer)
Primary trips per Traffic Engineer information

Energy Use - Adjusted: Current Title 24 Building Energy Efficiency Standards require 100% electric demand for low rise and sfd from renewable sources

Mobile Land Use Mitigation - Increased Density and Diversity. Increased pedestrian/bicycle connectivity. From GPU and TIA

Area Mitigation - Regulatory compliance

Water Mitigation - Compliance with MWELO

Waste Mitigation - Compliance with AB 341

Table Name	Column Name	Default Value	New Value
tblEnergyUse	NT24E	3,172.76	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	T24E	77.89	0.00
tblEnergyUse	T24E	68.41	0.00
tblLandUse	LandUseSquareFeet	863,870.00	863,868.00
tblLandUse	LandUseSquareFeet	5,250.00	5,254.00
tblLandUse	LandUseSquareFeet	59,340.00	59,338.00
tblLandUse	LotAcreage	19.83	39.66
tblLandUse	LotAcreage	7.00	6.82
tblLandUse	LotAcreage	4.42	6.59
tblLandUse	LotAcreage	0.47	0.00
tblLandUse	LotAcreage	1.06	0.00
tblLandUse	LotAcreage	10.50	6.59
tblLandUse	LotAcreage	126.95	33.16
tblLandUse	LotAcreage	0.12	0.24
tblLandUse	LotAcreage	1.36	2.72
tblLandUse	LotAcreage	10.03	20.06
tblLandUse	Population	305.00	439.00

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	Population	457.00	659.00
tblLandUse	Population	49.00	68.00
tblLandUse	Population	46.00	68.00
tblLandUse	Population	457.00	658.00
tblLandUse	Population	1,064.00	1,588.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	5.00	39.00
tblVehicleTrips	DV_TP	35.00	44.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	40.00	42.00
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	PB_TP	3.00	12.00
tblVehicleTrips	PB_TP	3.00	12.00
tblVehicleTrips	PB_TP	3.00	12.00

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	PB_TP	3.00	19.00
tblVehicleTrips	PB_TP	11.00	14.00
tblVehicleTrips	PB_TP	3.00	12.00
tblVehicleTrips	PB_TP	15.00	16.00
tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	92.00	42.00
tblVehicleTrips	PR_TP	54.00	42.00
tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	45.00	42.00
tblVehicleTrips	ST_TR	8.14	6.52
tblVehicleTrips	ST_TR	4.91	3.44
tblVehicleTrips	ST_TR	8.14	6.52
tblVehicleTrips	ST_TR	6.42	4.87
tblVehicleTrips	ST_TR	46.12	37.01
tblVehicleTrips	ST_TR	9.54	9.81
tblVehicleTrips	ST_TR	42.04	54.45
tblVehicleTrips	SU_TR	6.28	6.58
tblVehicleTrips	SU_TR	4.09	3.44
tblVehicleTrips	SU_TR	6.28	6.52
tblVehicleTrips	SU_TR	5.09	4.87
tblVehicleTrips	SU_TR	21.10	37.01
tblVehicleTrips	SU_TR	8.55	9.81
tblVehicleTrips	SU_TR	20.43	54.45
tblVehicleTrips	WD_TR	7.32	6.52
tblVehicleTrips	WD_TR	5.44	3.44

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	WD_TR	7.32	6.52
tblVehicleTrips	WD_TR	3.93	4.87
tblVehicleTrips	WD_TR	37.75	37.01
tblVehicleTrips	WD_TR	9.44	9.81
tblVehicleTrips	WD_TR	44.32	54.45

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	66.9704	0.6600	54.6227	2.4800e-003		0.2985	0.2985		0.2985	0.2985	0.0000	91.0132	91.0132	0.0650	0.0000	92.6383
Energy	1.1836	10.4976	7.1155	0.0646		0.8177	0.8177		0.8177	0.8177		12,911.7593	12,911.7593	0.2475	0.2367	12,988.4874
Mobile	45.3195	38.2190	341.4227	0.6423	93.0198	0.3401	93.3599	24.7975	0.3176	25.1151		65,508.1648	65,508.1648	4.8949	3.8093	66,765.7028
Total	**113.4735**	**49.3766**	**403.1609**	**0.7094**	**93.0198**	**1.4564**	**94.4762**	**24.7975**	**1.4338**	**26.2313**	**0.0000**	**78,510.9373**	**78,510.9373**	**5.2073**	**4.0460**	**79,846.8285**

4.0 Operational Detail - Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	45.3195	38.2190	341.4227	0.6423	93.0198	0.3401	93.3599	24.7975	0.3176	25.1151		65,508.1648	65,508.1648	4.8949	3.8093	66,765.7028

4.2 Trip Summary Information

	Average Daily Trips				Unmitigated
Land Use	Weekday	Saturday	Sunday		Annual VMT
Apartments Low Rise	730.24	730.24	736.96		1,252,997

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Apartments Mid Rise	577.92	577.92	577.92		990,334
Apartments Mid Rise	61.92	61.92	61.92		106,107
Condo/Townhouse	110.84	110.84	110.84		189,937
Condo/Townhouse	1,095.36	1,095.36	1095.36		1,877,028
General Heavy Industry	4,207.05	4,207.05	4207.05		4,650,144
Regional Shopping Center	194.30	194.30	194.30		205,088
Single Family Housing	3,835.71	3,835.71	3835.71		6,572,939
Strip Mall	3,231.06	3,231.06	3231.06		3,382,471
Strip Mall	23,784.85	23,784.85	23784.85		24,899,410
Total	37,829.25	37,829.25	37,835.97		44,126,456

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Apartments Mid Rise	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Apartments Mid Rise	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Condo/Townhouse	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Condo/Townhouse	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
General Heavy Industry	6.60	5.50	6.40	59.00	28.00	13.00	42	39	19
Regional Shopping Center	6.60	5.50	6.40	16.30	64.70	19.00	42	44	14
Single Family Housing	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	42	42	16
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	42	42	16

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Apartments Mid Rise	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Condo/Townhouse	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
General Heavy Industry	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Regional Shopping Center	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Single Family Housing	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Strip Mall	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338

5.0 Energy Detail

Historical Energy Use: N

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Unmitigated	1.1836	10.4976	7.1155	0.0646		0.8177	0.8177		0.8177	0.8177		12,911.7593	12,911.7593	0.2475	0.2367	12,988.4874

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	3.02792	0.0327	0.2790	0.1187	1.7800e-003		0.0226	0.0226		0.0226	0.0226		356.2264	356.2264	6.8300e-003	6.5300e-003	358.3433
Apartments Mid Rise	0.413343	4.4600e-003	0.0381	0.0162	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003		48.6286	48.6286	9.3000e-004	8.9000e-004	48.9176
Apartments Mid Rise	3.85787	0.0416	0.3555	0.1513	2.2700e-003		0.0287	0.0287		0.0287	0.0287		453.8670	453.8670	8.7000e-003	8.3200e-003	456.5641
Condo/Townhouse	0.803873	8.6700e-003	0.0741	0.0315	4.7000e-004		5.9900e-003	5.9900e-003		5.9900e-003	5.9900e-003		94.5733	94.5733	1.8100e-003	1.7300e-003	95.1353
Condo/Townhouse	7.94415	0.0857	0.7321	0.3115	4.6700e-003		0.0592	0.0592		0.0592	0.0592		934.6063	934.6063	0.0179	0.0171	940.1602
General Heavy Industry	61.9618	0.6682	6.0747	5.1027	0.0365		0.4617	0.4617		0.4617	0.4617		7,289.6259	7,289.6259	0.1397	0.1336	7,332.9445
Regional Shopping Center	0.0336832	3.6000e-004	3.3000e-003	2.7700e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		3.9627	3.9627	8.0000e-005	7.0000e-005	3.9863
Single Family Housing	28.5264	0.3076	2.6289	1.1187	0.0168		0.2126	0.2126		0.2126	0.2126		3,356.0516	3,356.0516	0.0643	0.0615	3,375.9950
Strip Mall	0.380413	4.1000e-003	0.0373	0.0313	2.2000e-004		2.8300e-003	2.8300e-003		2.8300e-003	2.8300e-003		44.7545	44.7545	8.6000e-004	8.2000e-004	45.0205
Strip Mall	2.80044	0.0302	0.2746	0.2306	1.6500e-003		0.0209	0.0209		0.0209	0.0209		329.4630	329.4630	6.3100e-003	6.0400e-003	331.4208

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total		**1.1836**	**10.4976**	**7.1154**	**0.0646**		**0.8177**	**0.8177**		**0.8177**	**0.8177**		**12,911.7593**	**12,911.7593**	**0.2475**	**0.2367**	**12,988.4874**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	66.9704	0.6600	54.6227	2.4800e-003		0.2985	0.2985		0.2985	0.2985	0.0000	91.0132	91.0132	0.0650	0.0000	92.6383

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.2118					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	54.6145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1442	0.6600	54.6227	2.4800e-003		0.2985	0.2985		0.2985	0.2985		91.0132	91.0132	0.0650		92.6383
Total	**66.9704**	**0.6600**	**54.6227**	**2.4800e-003**		**0.2985**	**0.2985**		**0.2985**	**0.2985**	**0.0000**	**91.0132**	**91.0132**	**0.0650**	**0.0000**	**92.6383**

Date: 2/15/2022 12:50 PM

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Guadalupe Proposed General Plan

Annual GHG Emissions Projections for Future Development Consistent with General Plan Land Use Designations At Buildout Horizon

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	863.87	1000sqft	39.66	863,868.00	0
Apartments Low Rise	112.00	Dwelling Unit	6.82	112,000.00	439
Apartments Mid Rise	168.00	Dwelling Unit	6.59	168,000.00	659
Apartments Mid Rise	18.00	Dwelling Unit	0.00	18,000.00	68
Condo/Townhouse	17.00	Dwelling Unit	0.00	17,000.00	68
Condo/Townhouse	168.00	Dwelling Unit	6.59	168,000.00	658
Single Family Housing	391.00	Dwelling Unit	33.16	703,800.00	1588
Regional Shopping Center	5.25	1000sqft	0.24	5,254.00	0
Strip Mall	59.34	1000sqft	2.72	59,338.00	0
Strip Mall	436.82	1000sqft	20.06	436,820.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2040
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Table 2-2 GPU

Date: 2/15/2022 12:50 PM

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Vehicle Trips - Trip rates adjusted per Traffic Engineer information.Passby/diverted trips derived from Traffic Engineer Information Trip Type default percentages applied to adjusted primary/passby/diverted trips (provided by Traffic Engineer)

Energy Use - Adjusted: Current Title 24 Building Energy Efficiency Standards require 100% electric demand for low rise and sfd from renewable sources

Mobile Land Use Mitigation - Increased Density and Diversity. Increased pedestrian/bicycle connectivity. From GPU and TIA

Area Mitigation - Regulatory compliance

Water Mitigation - Compliance with MWELO

Waste Mitigation - Compliance with AB 341

Table Name	Column Name	Default Value	New Value
tblEnergyUse	NT24E	3,172.76	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	T24E	77.89	0.00
tblEnergyUse	T24E	68.41	0.00
tblLandUse	LandUseSquareFeet	863,870.00	863,868.00
tblLandUse	LandUseSquareFeet	5,250.00	5,254.00
tblLandUse	LandUseSquareFeet	59,340.00	59,338.00
tblLandUse	LotAcreage	19.83	39.66
tblLandUse	LotAcreage	7.00	6.82
tblLandUse	LotAcreage	4.42	6.59
tblLandUse	LotAcreage	0.47	0.00
tblLandUse	LotAcreage	1.06	0.00
tblLandUse	LotAcreage	10.50	6.59
tblLandUse	LotAcreage	126.95	33.16
tblLandUse	LotAcreage	0.12	0.24
tblLandUse	LotAcreage	1.36	2.72
tblLandUse	LotAcreage	10.03	20.06
tblLandUse	Population	305.00	439.00
tblLandUse	Population	457.00	659.00
tblLandUse	Population	49.00	68.00

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	Population	46.00	68.00
tblLandUse	Population	457.00	658.00
tblLandUse	Population	1,064.00	1,588.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	5.00	39.00
tblVehicleTrips	DV_TP	35.00	44.00
tblVehicleTrips	DV_TP	11.00	46.00
tblVehicleTrips	DV_TP	40.00	42.00
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HO_TL	4.90	13.92
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HS_TL	4.50	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	HW_TL	8.30	1.27
tblVehicleTrips	PB_TP	3.00	12.00
tblVehicleTrips	PB_TP	3.00	12.00
tblVehicleTrips	PB_TP	3.00	12.00
tblVehicleTrips	PB_TP	3.00	19.00
tblVehicleTrips	PB_TP	11.00	14.00
tblVehicleTrips	PB_TP	3.00	12.00
tblVehicleTrips	PB_TP	15.00	16.00

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	92.00	42.00
tblVehicleTrips	PR_TP	54.00	42.00
tblVehicleTrips	PR_TP	86.00	42.00
tblVehicleTrips	PR_TP	45.00	42.00
tblVehicleTrips	ST_TR	8.14	6.52
tblVehicleTrips	ST_TR	4.91	3.44
tblVehicleTrips	ST_TR	8.14	6.52
tblVehicleTrips	ST_TR	6.42	4.87
tblVehicleTrips	ST_TR	46.12	37.01
tblVehicleTrips	ST_TR	9.54	9.81
tblVehicleTrips	ST_TR	42.04	54.45
tblVehicleTrips	SU_TR	6.28	6.58
tblVehicleTrips	SU_TR	4.09	3.44
tblVehicleTrips	SU_TR	6.28	6.52
tblVehicleTrips	SU_TR	5.09	4.87
tblVehicleTrips	SU_TR	21.10	37.01
tblVehicleTrips	SU_TR	8.55	9.81
tblVehicleTrips	SU_TR	20.43	54.45
tblVehicleTrips	WD_TR	7.32	6.52
tblVehicleTrips	WD_TR	5.44	3.44
tblVehicleTrips	WD_TR	7.32	6.52
tblVehicleTrips	WD_TR	3.93	4.87
tblVehicleTrips	WD_TR	37.75	37.01
tblVehicleTrips	WD_TR	9.44	9.81
tblVehicleTrips	WD_TR	44.32	54.45

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	12.1163	0.0594	4.9160	2.2000e-004		0.0269	0.0269		0.0269	0.0269	0.0000	7.4309	7.4309	5.3100e-003	0.0000	7.5636
Energy	0.2160	1.9158	1.2986	0.0118		0.1492	0.1492		0.1492	0.1492	0.0000	3,483.2543	3,483.2543	0.2587	0.0656	3,509.2628
Mobile	7.8680	7.4469	66.9557	0.1151	16.5562	0.0618	16.6180	4.4214	0.0577	4.4792	0.0000	10,652.5183	10,652.5183	0.8563	0.6577	10,869.9175
Waste						0.0000	0.0000		0.0000	0.0000	128.2809	0.0000	128.2809	6.3610	0.0000	287.3069
Water						0.0000	0.0000		0.0000	0.0000	103.9665	164.9559	268.9223	0.3845	0.2293	346.8752
Total	**20.2003**	**9.4221**	**73.1703**	**0.1271**	**16.5562**	**0.2380**	**16.7941**	**4.4214**	**0.2339**	**4.6553**	**232.2474**	**14,308.1595**	**14,540.4068**	**7.8658**	**0.9526**	**15,020.9260**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	7.8680	7.4469	66.9557	0.1151	16.5562	0.0618	16.6180	4.4214	0.0577	4.4792	0.0000	10,652.5183	10,652.5183	0.8563	0.6577	10,869.9175

4.2 Trip Summary Information

	Average Daily Trip Rate				Unmitigated
Land Use	Weekday	Saturday	Sunday		Annual VMT
Apartments Low Rise	730.24	730.24	736.96		1,252,997

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Apartments Mid Rise	577.92	577.92	577.92		990,334
Apartments Mid Rise	61.92	61.92	61.92		106,107
Condo/Townhouse	110.84	110.84	110.84		189,937
Condo/Townhouse	1,095.36	1,095.36	1095.36		1,877,028
General Heavy Industry	4,207.05	4,207.05	4207.05		4,650,144
Regional Shopping Center	194.30	194.30	194.30		205,088
Single Family Housing	3,835.71	3,835.71	3835.71		6,572,939
Strip Mall	3,231.06	3,231.06	3231.06		3,382,471
Strip Mall	23,784.85	23,784.85	23784.85		24,899,410
Total	37,829.25	37,829.25	37,835.97		44,126,456

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Apartments Mid Rise	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Apartments Mid Rise	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Condo/Townhouse	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Condo/Townhouse	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
General Heavy Industry	6.60	5.50	6.40	59.00	28.00	13.00	42	39	19
Regional Shopping Center	6.60	5.50	6.40	16.30	64.70	19.00	42	44	14
Single Family Housing	1.27	1.27	13.92	25.60	9.90	64.50	42	46	12
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	42	42	16
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	42	42	16

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Apartments Mid Rise	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Condo/Townhouse	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
General Heavy Industry	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Regional Shopping Center	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Single Family Housing	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338
Strip Mall	0.527587	0.061241	0.205005	0.133048	0.020141	0.005268	0.010238	0.005825	0.000895	0.000474	0.026022	0.001918	0.002338

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,345.5678	1,345.5678	0.2177	0.0264	1,358.8730
NaturalGas Unmitigated	0.2160	1.9158	1.2986	0.0118		0.1492	0.1492		0.1492	0.1492	0.0000	2,137.6866	2,137.6866	0.0410	0.0392	2,150.3898

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.10519e+006	5.9600e-003	0.0509	0.0217	3.3000e-004		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	58.9773	58.9773	1.1300e-003	1.0800e-003	59.3278
Apartments Mid Rise	1.40812e+006	7.5900e-003	0.0649	0.0276	4.1000e-004		5.2500e-003	5.2500e-003		5.2500e-003	5.2500e-003	0.0000	75.1428	75.1428	1.4400e-003	1.3800e-003	75.5893
Apartments Mid Rise	150870	8.1000e-004	6.9500e-003	2.9600e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0510	8.0510	1.5000e-004	1.5000e-004	8.0989
Condo/Townhouse	2.89962e+006	0.0156	0.1336	0.0569	8.5000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	154.7346	154.7346	2.9700e-003	2.8400e-003	155.6541
Condo/Townhouse	293414	1.5800e-003	0.0135	5.7500e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	15.6577	15.6577	3.0000e-004	2.9000e-004	15.7507
General Heavy Industry	2.26161e+007	0.1220	1.1086	0.9313	6.6500e-003		0.0843	0.0843		0.0843	0.0843	0.0000	1,206.8793	1,206.8793	0.0231	0.0221	1,214.0512
Regional Shopping Center	12294.4	7.0000e-005	6.0000e-004	5.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6561	0.6561	1.0000e-005	1.0000e-005	0.6600
Single Family Housing	1.04122e+007	0.0561	0.4798	0.2042	3.0600e-003		0.0388	0.0388		0.0388	0.0388	0.0000	555.6320	555.6320	0.0107	0.0102	558.9338
Strip Mall	1.02216e+006	5.5100e-003	0.0501	0.0421	3.0000e-004		3.8100e-003	3.8100e-003		3.8100e-003	3.8100e-003	0.0000	54.5463	54.5463	1.0500e-003	1.0000e-003	54.8704
Strip Mall	138851	7.5000e-004	6.8100e-003	5.7200e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4096	7.4096	1.4000e-004	1.4000e-004	7.4537

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total		**0.2160**	**1.9158**	**1.2986**	**0.0118**		**0.1493**	**0.1493**		**0.1493**	**0.1493**	**0.0000**	**2,137.6866**	**2,137.6866**	**0.0410**	**0.0392**	**2,150.3898**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	90760.3	8.3975	1.3600e-003	1.6000e-004	8.4805
Apartments Mid Rise	649560	60.0998	9.7200e-003	1.1800e-003	60.6940
Apartments Mid Rise	69595.7	6.4393	1.0400e-003	1.3000e-004	6.5029
Condo/Townhouse	814543	75.3646	0.0122	1.4800e-003	76.1098
Condo/Townhouse	82424	7.6262	1.2300e-003	1.5000e-004	7.7016
General Heavy Industry	6.99733e+006	647.4194	0.1047	0.0127	653.8213
Regional Shopping Center	54589.1	5.0508	8.2000e-004	1.0000e-004	5.1007
Single Family Housing	629056	58.2027	9.4200e-003	1.1400e-003	58.7782
Strip Mall	4.53856e+006	419.9247	0.0679	8.2300e-003	424.0770
Strip Mall	616522	57.0429	9.2300e-003	1.1200e-003	57.6070
Total		**1,345.5678**	**0.2177**	**0.0264**	**1,358.8731**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use only Natural Gas Hearths

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	12.1163	0.0594	4.9160	2.2000e-004		0.0269	0.0269		0.0269	0.0269	0.0000	7.4309	7.4309	5.3100e-003	0.0000	7.5636

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.0462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.9672					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1030	0.0594	4.9160	2.2000e-004		0.0269	0.0269		0.0269	0.0269	0.0000	7.4309	7.4309	5.3100e-003	0.0000	7.5636
Total	**12.1163**	**0.0594**	**4.9160**	**2.2000e-004**		**0.0269**	**0.0269**		**0.0269**	**0.0269**	**0.0000**	**7.4309**	**7.4309**	**5.3100e-003**	**0.0000**	**7.5636**

7.0 Water Detail

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	268.9223	0.3845	0.2293	346.8752

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	Mgal	MT/yr			
Apartments Low Rise	7.29725 / 4.31981	7.6340	9.7000e-003	5.7100e-003	9.5793
Apartments Mid Rise	12.1186 / 7.17398	12.6779	0.0161	9.4900e-003	15.9084
Condo/Townhouse	12.0535 / 7.13541	12.6098	0.0160	9.4400e-003	15.8229
General Heavy Industry	199.77 / 0	170.6930	0.2595	0.1557	223.5673
Regional Shopping Center	0.388881 / 0.223807	0.4048	5.2000e-004	3.0000e-004	0.5084
Single Family Housing	25.4752 / 15.0808	26.6509	0.0339	0.0200	33.4419
Strip Mall	36.7518 / 21.1513	38.2520	0.0488	0.0288	48.0471
Total		**268.9223**	**0.3845**	**0.2293**	**346.8752**

8.0 Waste Detail

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	128.2809	6.3610	0.0000	287.3069

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	12.88	2.6747	0.1326	0.0000	5.9905
Apartments Mid Rise	21.39	4.4419	0.2203	0.0000	9.9484

Guadalupe Proposed General Plan - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Condo/Townhouse	21.275	4.4180	0.2191	0.0000	9.8950
General Heavy Industry	267.8	55.6123	2.7576	0.0000	124.5531
Regional Shopping Center	1.3775	0.2861	0.0142	0.0000	0.6407
Single Family Housing	162.77	33.8014	1.6761	0.0000	75.7039
Strip Mall	130.243	27.0466	1.3412	0.0000	60.5754
Total		**128.2810**	**6.3610**	**0.0000**	**287.3069**

Special-Status Plant and Wildlife Species List

B

APPENDIX

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Guadalupe (3412085) OR Nipomo (3512014) OR Santa Maria (3412084) OR Orcutt (3412074) OR Casmalia (3412075) OR Point Sal (3412086) OR Oceano (3512015))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
American peregrine falcon *Falco peregrinus anatum*	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
aphanisma *Aphanisma blitoides*	PDCHE02010	None	None	G3G4	S2	1B.2
arroyo chub *Gila orcuttii*	AFCJB13120	None	None	G2	S2	SSC
beach layia *Layia carnosa*	PDAST5N010	Endangered	Endangered	G2	S2	1B.1
beach spectaclepod *Dithyrea maritima*	PDBRA10020	None	Threatened	G1	S1	1B.1
black-flowered figwort *Scrophularia atrata*	PDSCR1S010	None	None	G2?	S2?	1B.2
Blochman's dudleya *Dudleya blochmaniae ssp. blochmaniae*	PDCRA04051	None	None	G3T2	S2	1B.1
Blochman's leafy daisy *Erigeron blochmaniae*	PDAST3M5J0	None	None	G2	S2	1B.2
Bolander's water-hemlock *Cicuta maculata var. bolanderi*	PDAPI0M051	None	None	G5T4T5	S2?	2B.1
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
California black rail *Laterallus jamaicensis coturniculus*	ABNME03041	None	Threatened	G3G4T1	S1	FP
California least tern *Sternula antillarum browni*	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
California red-legged frog *Rana draytonii*	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California saw-grass *Cladium californicum*	PMCYP04010	None	None	G4	S2	2B.2
California tiger salamander - Santa Barbara County DPS *Ambystoma californiense pop. 2*	AAAAA01182	Endangered	Threatened	G2G3	S2	WL
Central Dune Scrub *Central Dune Scrub*	CTT21320CA	None	None	G2	S2.2	
Central Foredunes *Central Foredunes*	CTT21220CA	None	None	G1	S1.2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Central Maritime Chaparral *Central Maritime Chaparral*	CTT37C20CA	None	None	G2	S2.2	
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G3G4	S3S4	SSC
coast woolly-heads *Nemacaulis denudata var. denudata*	PDPGN0G011	None	None	G3G4T2	S2	1B.2
Coastal and Valley Freshwater Marsh *Coastal and Valley Freshwater Marsh*	CTT52410CA	None	None	G3	S2.1	
coastal goosefoot *Chenopodium littoreum*	PDCHE091Z0	None	None	G1	S1	1B.2
compact cobwebby thistle *Cirsium occidentale var. compactum*	PDAST2E1Z1	None	None	G3G4T2	S2	1B.2
crisp monardella *Monardella undulata ssp. crispa*	PDLAM18070	None	None	G3T2	S2	1B.2
Davidson's saltscale *Atriplex serenana var. davidsonii*	PDCHE041T1	None	None	G5T1	S1	1B.2
dune larkspur *Delphinium parryi ssp. blochmaniae*	PDRAN0B1B1	None	None	G4T2	S2	1B.2
Gambel's water cress *Nasturtium gambelii*	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Gaviota tarplant *Deinandra increscens ssp. villosa*	PDAST4R0U3	Endangered	Endangered	G4G5T2	S2	1B.1
globose dune beetle *Coelus globosus*	IICOL4A010	None	None	G1G2	S1S2	
hoary bat *Lasiurus cinereus*	AMACC05030	None	None	G3G4	S4	
Hoover's bent grass *Agrostis hooveri*	PMPOA040M0	None	None	G2	S2	1B.2
Kellogg's horkelia *Horkelia cuneata var. sericea*	PDROS0W043	None	None	G4T1?	S1?	1B.1
La Graciosa thistle *Cirsium scariosum var. loncholepis*	PDAST2E1N0	Endangered	Threatened	G5T1	S1	1B.1
La Purisima manzanita *Arctostaphylos purissima*	PDERI041A0	None	None	G2	S2	1B.1
Lompoc grasshopper *Trimerotropis occulens*	IIORT36310	None	None	G1G2	S1S2	
Lompoc yerba santa *Eriodictyon capitatum*	PDHYD04040	Endangered	Rare	G2	S2	1B.2
marsh sandwort *Arenaria paludicola*	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
mesa horkelia *Horkelia cuneata var. puberula*	PDROS0W045	None	None	G4T1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
mimic tryonia (=California brackishwater snail) *Tryonia imitator*	IMGASJ7040	None	None	G2	S2	
monarch - California overwintering population *Danaus plexippus pop. 1*	IILEPP2012	Candidate	None	G4T2T3	S2S3	
Morro Bay blue butterfly *Plebejus icarioides moroensis*	IILEPG801B	None	None	G5T2	S2	
Nipomo Mesa ceanothus *Ceanothus impressus var. nipomensis*	PDRHA040L2	None	None	G3T2	S2	1B.2
Nipomo Mesa lupine *Lupinus nipomensis*	PDFAB2B550	Endangered	Endangered	G1	S1	1B.1
Northern California legless lizard *Anniella pulchra*	ARACC01020	None	None	G3	S3	SSC
obscure bumble bee *Bombus caliginosus*	IIHYM24380	None	None	G4?	S1S2	
Oso Flaco flightless moth *Areniscythris brachypteris*	IILEG49010	None	None	G1	S1	
Oso Flaco patch butterfly *Chlosyne leanira elegans*	IILEPJA051	None	None	G4G5T1T2	S1S2	
Oso Flaco robber fly *Ablautus schlingeri*	IIDIP42010	None	None	G1	S1	
pale-yellow layia *Layia heterotricha*	PDAST5N070	None	None	G2	S2	1B.1
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
Pismo clarkia *Clarkia speciosa ssp. immaculata*	PDONA05111	Endangered	Rare	G4T1	S1	1B.1
San Bernardino aster *Symphyotrichum defoliatum*	PDASTE80C0	None	None	G2	S2	1B.2
San Luis Obispo County lupine *Lupinus ludovicianus*	PDFAB2B2G0	None	None	G1	S1	1B.2
San Luis Obispo monardella *Monardella undulata ssp. undulata*	PDLAM180X0	None	None	G2	S2	1B.2
San Luis Obispo owl's-clover *Castilleja densiflora var. obispoensis*	PDSCR0D453	None	None	G5T2	S2	1B.2
sand mesa manzanita *Arctostaphylos rudis*	PDERI041E0	None	None	G2	S2	1B.2
sandy beach tiger beetle *Cicindela hirticollis gravida*	IICOL02101	None	None	G5T2	S2	
Santa Barbara ceanothus *Ceanothus impressus var. impressus*	PDRHA040L1	None	None	G3T3	S3	1B.2
Santa Margarita manzanita *Arctostaphylos pilosula*	PDERI042Z0	None	None	G2?	S2?	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
seaside bird's-beak *Cordylanthus rigidus ssp. littoralis*	PDSCR0J0P2	None	Endangered	G5T2	S2	1B.1
sharp-shinned hawk *Accipiter striatus*	ABNKC12020	None	None	G5	S4	WL
short-lobed broomrape *Orobanche parishii ssp. brachyloba*	PDORO040A2	None	None	G4?T4	S3	4.2
silver-haired bat *Lasionycteris noctivagans*	AMACC02010	None	None	G3G4	S3S4	
Southern California Threespine Stickleback Stream *Southern California Threespine Stickleback Stream*	CARE2320CA	None	None	GNR	SNR	
southern curly-leaved monardella *Monardella sinuata ssp. sinuata*	PDLAM18161	None	None	G3T2	S2	1B.2
Southern Vernal Pool *Southern Vernal Pool*	CTT44300CA	None	None	GNR	SNR	
steelhead - south-central California coast DPS *Oncorhynchus mykiss irideus pop. 9*	AFCHA0209H	Threatened	None	G5T2Q	S2	
straight-awned spineflower *Chorizanthe rectispina*	PDPGN040N0	None	None	G2	S2	1B.3
surf thistle *Cirsium rhothophilum*	PDAST2E2J0	None	Threatened	G1	S1	1B.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S3	
tidewater goby *Eucyclogobius newberryi*	AFCQN04010	Endangered	None	G3	S3	
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	None	G4	S2	SSC
two-striped gartersnake *Thamnophis hammondii*	ARADB36160	None	None	G4	S3S4	SSC
unarmored threespine stickleback *Gasterosteus aculeatus williamsoni*	AFCPA03011	Endangered	Endangered	G5T1	S1	FP
Valley Needlegrass Grassland *Valley Needlegrass Grassland*	CTT42110CA	None	None	G3	S3.1	
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western red bat *Lasiurus blossevillii*	AMACC05060	None	None	G4	S3	SSC
western snowy plover *Charadrius nivosus nivosus*	ABNNB03031	Threatened	None	G3T3	S2	SSC
western spadefoot *Spea hammondii*	AAABF02020	None	None	G2G3	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
white sand bear scarab beetle *Lichnanthe albipilosa*	IICOL67010	None	None	G1	S1	
Yuma myotis *Myotis yumanensis*	AMACC01020	None	None	G5	S4	

Record Count: 83

Water Evaluation

C

APPENDIX

City of Guadalupe General Plan Water Demand and Supply Evaluation (2019)

Water Availability **assumed variables**

Legal

Source	Amount AF	Long term Reliability	Annual AF	Comments
State Water	605	52%	315	2019 final DWR delivery capability report
Twitchell Yield, orig	1,300	1	1,300	Stipulation, exhibit F
Twitchell Yield, DJ Farms	24.82	1	25	approved for transfer
GW Appropriative rights		1	299	see table
Total			1,939	

surplus native groundwater from stormwater percolation
Avg rain =17 inches. Assume 25% permeable, 1.32 sq mi.

Calculated GW appropriative rights

Size	1.32	sq mi
Size	36,799,488	sq ft
Rain	17	in
Rain	1.4	ft
Permeability	25%	
GW	299	AF

Production capacity

Source	Capacity gpm	Availability	Annual AF
Obispo Well	1,000	0.8	1,290
Pasadera Well	1,000	0.8	1,290
State Water			315
Total			2,896

Extrapolated demand, water supply

Current Population	Estimated Demand		Comments
7,783	1,045	AF	2019 water production report
Future Population	**Extrapolated demand**		
14,439	1,939	AF	

Extrapolated wastewater treatment

Current Population	Est. treatment used		Comments
7,783	908	AF	2019 wastewater annual report; current capacity 0.96 MGD
Future Population	**Extrapolated treatment available**		
14,400	1,680	AF	Approved expansion will achieve 1.5 MGD capacity

Water supply needed, calculated from 2014 water master plan

Water User	Use AFY	Comments
Curation	373	341,388 gpd
Beachside Cooler	28	
Residential, 10,000	1,344	120 gpcd assumed
Residential, 11,000	1,479	
Residential, 12,000	1,613	
Residential, 13,000	1,748	
Commercial (-curation, bc)	173	
Total demand	1,918	Residential, 10,000
Total demand	2,053	Residential, 11,000
Total demand	2,187	Residential, 12,000
Total demand	2,322	Residential, 13,000

Water supply needed, calculated with 100 gpcd

Water User	Use AFY	Comments
Curation	373	341,388 gpd
Beachside Cooler	28	
Residential, 10,000	1,120	100 gpcd assumed
Residential, 11,000	1,232	
Residential, 12,000	1,344	
Residential, 13,000	1,456	
Commercial (-curation, bc)	173	
Total demand	1,694	Residential, 10,000
Total demand	1,806	Residential, 11,000
Total demand	1,918	Residential, 12,000
Total demand	2,030	Residential, 13,000

100 gpcd considered reasonable due to impacts of long-term drought, 2016 UPC
And implication of MWELO restrictions on outdoor landscaping

Prepared by the City of Guadalupe, 2019

Noise Study

D

APPENDIX

TECHNICAL NOISE STUDY
CITY OF GUADALUPE GENERAL PLAN

WJVA Project No. 21-57

PREPARED FOR

EMC PLANNING GROUP, INC.
301 LIGHTHOUSE AVENUE, SUITE C
MONTEREY, CALIFORNIA 93940

PREPARED BY

WJV ACOUSTICS, INC.
VISALIA, CALIFORNIA

wjv acoustics

FEBRUARY 22, 2022

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICIES

CHAPTER ONE

INTRODUCTION

1.1 Purpose and Scope

The City of Guadalupe is in the process of preparing a General Plan Update. This document provides data and analysis to support the environmental review process for evaluating the noise impacts of implementing the proposed General Plan.

This analysis also includes a community noise survey which consists of an overview of existing and future noise levels within the City, in respect to both transportation (roadway traffic and railroad) and non-transportation/stationary (industrial) noise sources.

Appendix A provides a description of the acoustical terminology used in this report. Unless otherwise stated, all sound levels reported are in A-weighted decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighting, as it provides a high degree of correlation with human annoyance and health effects. Appendix B provides typical A-weighted sound levels for common noise sources.

CHAPTER TWO

EXISTING AND FUTURE NOISE ENVIRONMENT

2.1 Overview of Sources

There are three (3) potentially significant sources of community noise within the City of Guadalupe. These sources include traffic on major local roadways, commercial/industrial facilities and operations on the Union Pacific Railroad (UPRR) and the Santa Maria Valley Railroad (SMVR). A summary of existing and future (traffic only) generalized noise exposure levels associated with these three major noise sources is provided below.

2.2 Methods Used to Develop Noise Exposure Information

According to the Government Code and ONC Guidelines, noise exposure contours should be developed in terms of the Day-Night Average Level (L_{dn}) or Community Noise Equivalent Level (CNEL) for transportation-related noise sources. Both of these descriptors represent the time-weighted energy noise level for a 24-hour day after inclusion of a 10 dB penalty for noise levels occurring at night between the hours of 10:00 p.m. and 7:00 a.m. The CNEL descriptor also includes a penalty of 4.8 dB for noise levels occurring during the evening hours of 7:00 p.m. and 10:00 p.m. The CNEL descriptor was developed for the quantification of aircraft noise, and its use is required when preparing noise exposure maps for airports within the State of California. The CNEL and L_{dn} descriptors are generally considered to be equivalent to each other for most community noise environments within ±1.0 dB.

Analytical noise modeling techniques were used to develop generalized distances to L_{dn} contours for major transportation noise sources within the City of Guadalupe, for existing and General Plan Buildout conditions. A combination of analytical methods and actual noise measurements was used to develop noise exposure information for stationary noise sources. Since the standards to be applied to stationary noise sources should typically be based upon the equivalent energy sound level (L_{eq}) during any one-hour period, noise exposure information was developed for these sources in terms of both the L_{eq} as well as the L_{dn} noise level metrics.

The noise exposure information developed during the preparation of this analysis does not include all conceivable sources of industrial, commercial or transportation noise within the City, but rather is a representative sampling of typical sources. The noise exposure information developed for the sources identified for study should be used as an indicator of potential noise impacts when other, similar sources are considered.

2.3 Existing Conditions

2.3.1 Community Noise Survey

Existing noise levels throughout the City of Guadalupe are dominated by traffic noise along local roadways (including state routes), railroad noise and noise associated with various industrial, commercial and agricultural activities as well as occasional small aircraft overflights. Measurements of existing ambient noise levels in the project vicinity were conducted between December 1, 2021 and December 2, 2021. Long-term (24-hour) ambient noise level measurements were conducted at four (4) locations (sites LT-1, LT-2, LT-3 and LT-4). Ambient noise levels were measured for a period of 24 continuous hours at each of the four locations. Generally speaking, the locations of the four noise measurements sites were selected as they represent areas where noise sensitive land uses (residential, school) are located in the vicinity of various noise sources, in areas where noise impacts may occur.

Site LT-1 was located near the intersection of Guadalupe Street (State Route 1) and 10th Street, in the northern portion of the main commercial area of the City. Guadalupe Street (SR 1) serves as the main route through the City of Guadalupe. Site LT-2 was located north of 2nd Street, between Campodonico Avenue and Guadalupe Street, in an area where commercial land uses abut residential land uses. Site LT-3 was located near the intersection of Obispo Street and 4th Street, in an area where commercial land uses abut residential land uses. Site LT-4 was located at 10th and Peralta Street, near residential and school land uses. The locations of the community noise survey sites are provided as Figure 2.

Measured hourly energy average noise levels (L_{eq}) at site LT-1 ranged from a low of 44.9 dB between 1:00 a.m. to a high of 64.1 dBA between 4:00 p.m. and 5:00 p.m. Hourly maximum (L_{max}) noise levels at site LT-1 ranged from 65.1 to 91.0 dBA. Residual noise levels at the monitoring site, as defined by the L_{90}, ranged from 30.3 to 52.4 dBA. The L_{90} is a statistical descriptor that defines the noise level exceeded 90% of the time during each hour of the sample period. The L_{90} is generally considered to represent the residual (or background) noise level in the absence of identifiable single noise events from traffic, aircraft and other local noise sources. The measured L_{dn} value at site LT-1 was 62.2 dB L_{dn}. Figure 3 graphically depicts hourly variations in ambient noise levels at site LT-1 and provides a site photograph.

Measured hourly energy average noise levels (L_{eq}) at site LT-2 ranged from a low of 47.9 dB between 11:00 p.m. and midnight to a high of 60.0 dBA between 7:00 a.m. and 8:00 a.m. Hourly maximum (L_{max}) noise levels at site LT-2 ranged from 60.4 to 86.3 dBA. Residual noise levels at the monitoring site, as defined by the L_{90}, ranged from 41.2 to 50.5 dBA. The measured L_{dn} value at site LT-2 was 59.7 dB L_{dn}. Figure 4 graphically depicts hourly variations in ambient noise levels at site LT-2 and provides a site photograph.

Measured hourly energy average noise levels (L_{eq}) at site LT-3 ranged from a low of 39.7 dB between 1:00 a.m. and 2:00 a.m. to a high of 58.3 dBA between 4:00 p.m. and 5:00 p.m. Hourly maximum (L_{max}) noise levels at site LT-3 ranged from 60.3 to 83.6 dBA. Residual noise levels at

the monitoring site, as defined by the L_{90}, ranged from 33.4 to 48.3 dBA. The measured L_{dn} value at site LT-3 was 57.1 dB L_{dn}. Figure 5 graphically depicts hourly variations in ambient noise levels at site LT-3 and provides a site photograph.

Measured hourly energy average noise levels (L_{eq}) at site LT-4 ranged from a low of 29.3 dB between 10:00 p.m. and 11:00 p.m. to a high of 47.6 dBA between noon and 1:00 p.m. Hourly maximum (L_{max}) noise levels at site LT-4 ranged from 38.9 to 75.9 dBA. Residual noise levels at the monitoring site, as defined by the L_{90}, ranged from 25.8 to 32.3 dBA. The measured L_{dn} value at site LT-4 was 44.3 dB L_{dn}. Figure 5 graphically depicts hourly variations in ambient noise levels at site LT-4 and provides a site photograph.

Additionally, short-term (15-minute) ambient noise level measurements were conducted at six (6) locations (Sites ST-1 through ST-6). Two (2) individual measurements were taken at each of the six short-term sites to quantify ambient noise levels in the morning and afternoon hours. The locations of the long-term and short-term noise monitoring sites are shown in Figure 2.

Table I summarizes short-term noise measurement results. The noise measurement data included energy average (L_{eq}) maximum (L_{max}) as well as five individual statistical parameters. Observations were made of the dominant noise sources affecting the measurements. The statistical parameters describe the percent of time a noise level was exceeded during the measurement period. For instance, the L_{90} describes the noise level exceeded 90 percent of the time during the measurement period, and is generally considered to represent the residual (or background) noise level in the absence of identifiable single noise events from traffic, aircraft and other local noise sources.

Short-term noise measurements were conducted for 15-minute periods at each of the six sites. Site ST-1 was located near residential land uses near the intersection of Pacheco Street and 12th Street, in the northern portion of the City. Site ST-2 was located near residential land uses on 11th Street, in the eastern portion of the City. Site ST-3 was located near residential land uses near the intersection of Cedar Street and Obispo Street. ST-4 was located within a residential development in the southern portion of the City. Sites ST-5 and ST-6 were located in the vicinity of residential land uses located within the western portion of the City.

TABLE I

SUMMARY OF SHORT-TERM NOISE MEASUREMENT DATA
GUADALUPE, CALIFORNIA
DECEMBER 1 & DECEMBER 2, 2021

Site	Time	A-Weighted Decibels, dBA							Sources
		L_{eq}	L_{max}	L_2	L_8	L_{25}	L_{50}	L_{90}	
ST-1	8:30 a.m.	56.5	59.6	59.0	58.0	57.2	56.3	54.6	TR,
ST-1	3:35 p.m.	57.1	61.4	59.2	58.3	57.1	56.4	54.5	TR, AC
ST-2	8:55 a.m.	73.3	82.3	80.9	78.6	75.0	68.0	51.2	TR
ST-2	4:10 p.m.	69.4	77.7	76.8	75.2	72.1	66.7	52.4	TR, AC
ST-3	9:15 a.m.	60.6	66.6	65.3	63.5	60.8	59.8	58.3	TR, I, D
ST-3	4:30 p.m.	61.4	69.2	65.8	64.1	60.7	59.5	58.0	TR, I, L
ST-4	9:35 a.m.	52.8	70.0	62.8	54.6	50.7	47.6	42.0	TR, V
ST-4	4:55 p.m.	48.6	62.1	60.1	52.2	48.7	46.6	40.8	TR, V
ST-5	9:55 a.m.	54.4	66.9	63.9	59.3	52.6	47.7	44.4	TR, V, B
ST-5	5:15 p.m.	55.5	67.1	64.2	58.7	53.3	48.2	43.6	TR, V, D
ST-6	10:15 a.m.	46.3	59.4	55.3	48.8	45.1	42.7	40.8	TR, D, L
ST-6	5:35 p.m.	47.8	62.1	56.0	50.0	44.8	42.2	41.0	TR, V

TR: Traffic I: Industrial Activities AC: Aircraft L: Landscaping Activities V: Voices B: Birds D: Barking Dogs
Source: WJV Acoustics, Inc.

2.3.2 Major Stationary Noise Sources

The production of noise is an inherent part of many industrial, commercial and agricultural processes, even when the best available noise control technology is applied. Noise production within industrial or commercial facilities is controlled indirectly by federal and state employee health and safety regulations (OHSA and Cal-OSHA), but exterior noise emissions from such operations have the potential to exceed locally acceptable standards at nearby noise-sensitive land uses.

The following discussion provides generalized information concerning the relative noise impacts of two major industrial noise sources within the City of Guadalupe. The industrial uses identified for study were International Curation Foods (4595 W. Main Street) and Beachside Cooling (1211 Peralta Street). Both industrial facilities are associated with the processing of agricultural goods. Other industrial or commercial noise sources may exist within the City, but such sources were not identified at the time of the study.

Noise measurements were conducted at each of the above-referenced industrial operations on December 2, 2022. Based upon discussion with residents in the vicinity of both facilities, both generally operate 24 hours per day, however, some seasonal variations may exist. Based upon those measurements, worst-case 50 and 55 dBA hourly L_{eq} contours were calculated. Table I summarizes noise level measurements and calculations for each of the identified industries.

TABLE II

SUMMARY OF MEASURED AND CALCULATED NOISE LEVELS
SELECTED CITY OF GUADALUPE STATIONARY NOISE SOURCES
DECEMBER 2, 2022

Industry	Distance	L_{eq}, dBA	L_{max}, dBA	Distance to 50 dBA, L_{eq}	Distance to 55 dBA, L_{eq}	Distance to 60 dBA, L_{dn}	Distance to 65 dB L_{dn}
Curation Foods 4595 W. Main Street	550′	58.0	60.1	1,380′	777′	923	519
Beachside Cooling 1211 Peralta Street	400′	56.5	59.6	845′	475′	556	314

Source: WJV Acoustics, Inc.

Table II shows that the generalized 50 dBA L_{eq} contour can be as far as 1,380 feet from the Curation Foods facility. In practice, it may not be possible to discern plant noise at distances greater than 750-1000 feet during most times of the day because of other community noise sources (traffic, etc.), and the effects of atmospheric conditions and localized acoustical shielding. Additionally, noise levels (and contour distances) described in Table II do not represent the noise levels in every direction around the sources. The generalized contour distances described in Table II should be used as a screening device to determine when potential noise-related land use conflicts may occur, and when site-specific studies should be required to properly evaluate noise at a given noise-sensitive receiver location.

2.3.3 Existing Traffic Noise Exposure

The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model[1] (FHWA-RD-77-108) was used to develop L_{dn} contours for major local roadways. The FHWA Model is an analytical method favored by most state and local agencies, including Caltrans, for highway traffic noise prediction. The FHWA Model is based upon reference energy emission levels for automobiles, medium trucks (2 axles) and heavily trucks (3 or more axles), with consideration given to vehicles volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA Model was developed to predict hourly L_{eq} values for free-flowing traffic conditions, and is generally considered to be accurate within ±1.5 dB. The FHWA Model assumes a clear view of traffic with no shielding at the receiver location.

Annual Average Daily Traffic (AADT) volumes for major local streets was obtained from the project traffic engineer (Linscott, Law & Greenspan Engineers) and Caltrans. The day/night distribution of traffic and the percentage of trucks on major local streets were estimated based upon studies along similar roadways. The percentage of trucks on State Route 1 and State Route 166 was obtained from Caltrans. Appendix C-1 summarizes the noise modeling assumptions used to calculate traffic noise exposure for existing conditions along the analyzed roadway segments.

Table III summarizes distances to L_{dn} contours for existing traffic conditions in tabular form. Traffic noise exposure information is generalized for flat terrain and the absence of acoustical shielding or reflections that may be caused by site-specific conditions.

TABLE III

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO GENERALIZED TRAFFIC NOISE EXPOSURE CONTOURS CITY OF GUADALUPE EXISTING CONDITIONS

Roadway	Segment	60 dB L_{dn}	65 dB L_{dn}
Obispo Street	north of W. Main Street (SR 166)	45	21
Simas Road	north of W. Main Street (SR 166)	36	17
Eleventh Street	east of Guadalupe Street (SR 1)	40	19
Fifth Street	west of Guadalupe Street (SR 1)	22	10
Pioneer Street	north of W. Main Street (SR 166)	30	14
Guadalupe Street (SR 1)	west of Guadalupe Street (SR 1)	106	49
Main Street (SR 166)	north of W. Main Street (SR 166)	213	99

Source: WJV Acoustics, Inc.
Linscott, Law & Greenspan Engineers
Caltrans

2.3.4 Railroad Noise Exposure

The Union Pacific Railroad (UPRR) mainline passes through Guadalupe in a north-south direction, and generally runs along the east side of Guadalupe Avenue (SR 1). The three main operators utilizing the railroad line are UPRR, Amtrak and Santa Maria Valley Railroad (SMVR). The SMVR line splits from the UPRR alignment within the southern portion of the City, and turns toward the east.

According to operations data obtained from The United States Department of Transportation Federal Railroad Administration (FRA), SMVR and Amtrak, the number of average daily train operations passing through Guadalupe are as follows:

- UPRR: 8
- SMVR: 8
- Amtrak: 6

According to the current Amtrak timetable, all six (6) average daily operations occur during daytime hours (7:00 a.m. to 10:00 p.m.), whereas UPRR and SMVRR operations may occur at any time of the 24-hour day. Per information provided by SMVR staff, the number of daily train operations can vary widely depending on demand (generally driven by agricultural harvesting

schedules), and as such daily operations may at times be higher or lower than the estimated average of eight (8) train operations per day.

Noise levels associated with train operations passing through Guadalupe can vary widely as a function of proximity to grade crossings. There are currently three (3) grade crossings in Guadalupe, located at 11th Street, 10th Street, and Main Street (SR 166). Train engineers are required to sound the warning horn for a period 15-20 seconds in advance of all public grade crossing. At the speeds that trains pass through Guadalupe, this would equate to approximately within 500 feet of a grade crossing. Train noise levels are therefore higher at locations near grade crossings.

Railroad noise exposure may be quantified in terms of the L_{dn} using the following formula:

L_{dn} =SEL+ 10 log Neq – 49.4

where,

SEL is the average SEL for a train pass-by, Neq is the equivalent number of pass-bys in a typical 24-hour period determined by adding 10 times the number of nighttime movements (10 p.m.-7 a.m.) to the actual number of daytime movements (7 a.m.-10 p.m.). 49.4 is a time constant equal to 10 times the log of the number of seconds in a day.

WJVA has calculated generalized train noise exposure levels for locations both within proximity to a grade crossing and locations outside of proximity to a grade crossing. Table IV provides the generalized noise contour distances between the center of the railroad tracks and both the 60 dB L_{dn} and 65 dB L_{dn} train noise contours. Furthermore, these generalized contour distances are provided for locations within approximately 1,000 feet of a signalized grade crossing and for locations outside of approximately 1,000 feet of a signalized grade crossing.

TABLE IV

DISTANCE (FEET) TO GENERALIZED RAILROAD NOISE EXPOSURE CONTOURS CITY OF GUADALUPE EXISTING CONDITIONS

Location	60 dB L_{dn}	65 dB L_{dn}
Within 1,000' of Grade Crossing	636	295
Outside of 1,000' Grade Crossing	414	192

Source: WJV Acoustics, Inc.
FRA
SMVR

2.4 Future Conditions

Future traffic noise exposure was calculated based upon the above-described FHWA Model and traffic data obtained from the Linscott, Law & Greenspan Engineers and Caltrans. Traffic noise modeling assumptions for future/buildout conditions are summarized in Appendix C-2. It was not possible to develop future noise exposure information for stationary noise sources or railroad operations since estimates of future activities for these sources were not known to WJVA at the time of the study.

2.4.1 Future Traffic Noise Exposure

Table V summarizes distances to L_{dn} contours for Future General Plan Buildout traffic conditions in tabular form. Future traffic noise exposure information is generalized for flat terrain and the absence of acoustical shielding or reflections that may be caused by site-specific conditions.

TABLE V

DISTANCE (FEET) TO GENERALIZED TRAFFIC NOISE EXPOSURE CONTOURS
CITY OF GUADALUPE GENERAL PLAN BUILDOUT CONDITIONS

Roadway	Segment	60 dB L_{dn}	65 dB L_{dn}
Obispo Street	north of W. Main Street (SR 166)	88	41
Simas Road	north of W. Main Street (SR 166)	54	25
Eleventh Street	east of Guadalupe Street (SR 1)	50	23
Fifth Street	west of Guadalupe Street (SR 1)	24	11
Pioneer Street	north of W. Main Street (SR 166)	32	15
Guadalupe Street (SR 1)	west of Guadalupe Street (SR 1)	187	87
Main Street (SR 166)	north of W. Main Street (SR 166)	286	133

Source: WJV Acoustics, Inc.
Linscott, Law & Greenspan Engineers
Caltrans

CHAPTER THREE

SHORT-TERM INCREASES IN NOISE AND VIBRATION

3.1 OVERVIEW OF SOURCES

Short-term increases in noise and vibration levels throughout the City of Guadalupe would generally be limited to noise associated with construction activities. The implementation of the General Plan could result in new development (and associated construction activities) occurring near existing-noise sensitive land uses and older/historic structures. This section discusses construction noise and vibration levels in general terms and provides a generalized discussion of measures to mitigate construction noise impacts on sensitive land uses.

3.2 RECOMMENDED CONSTRUCTION NOISE MEASURES

Construction noise is generally not considered to be a significant impact if construction is limited to specific allowed hours and construction equipment is adequately maintained and muffled. Construction noise impacts could result in annoyance or sleep disruption for nearby residents if nighttime operations were to occur or if equipment is not properly muffled or maintained. A noise impact could occur if construction activities do not incorporate appropriate measures and best management practices to reduce noise generation and exposure.

WJVA recommends that the language provided below be considered to mitigate construction noise impacts.

Mitigation Measures:
Noise levels associated with construction activities may be effectively mitigated by incorporating noise mitigation measures and appropriate best management practices. The following measures and best management practices should be applied during periods of project construction.

- Construction activities should not occur outside the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday. Construction activities should not occur on Sundays or Holidays.

- All construction equipment shall be properly maintained and muffled as to minimize noise generation at the source.

- Noise-producing equipment shall not be operating, running, or idling while not in immediate use by a construction contractor.

- All noise-producing construction equipment shall be located and operated, to the extent possible, at the greatest possible distance from any noise-sensitive land uses.

- Locate construction staging areas, to the extent possible, at the greatest possible distances from any noise-sensitive land uses.

- Signs shall be posted at the construction site and near adjacent sensitive receptors displaying hours of construction activities and providing the contact phone number of a designated noise disturbance coordinator.

These measures would reduce construction-related noise impacts to less than significant.

3.3 RECOMMENDED CONSTRUCTION VIBRATION MEASURES

There are no local or state vibration level standards. Some guidance is provided by the Caltrans Transportation and Construction Vibration Guidance Manual[2]. The Manual provides guidance for determining annoyance potential criteria and damage potential threshold criteria. These criteria are provided below in Table VI and Table VII, and are presented in terms of peak particle velocity (PPV) in inches per second (in/sec).

TABLE VI

GUIDELINE VIBRATION ANNOYANCE POTENTIAL CRITERIA

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.9	0.1
Severe	2.0	0.4

Source: Caltrans

TABLE VII

GUIDELINE VIBRATION DAMAGE POTENTIAL THRESHOLD CRITERIA

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile, historic buildings, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans

A vibration impact could occur if construction activities utilize equipment known to result in elevated vibration levels, within close proximity to vibration-sensitive receptors (annoyance to humans) or sensitive structures (structural damage to existing buildings).

The dominant sources of man-made vibration are sonic booms, blasting, pile driving, pavement breaking, demolition, diesel locomotives, and rail-car coupling. Such applications are not common, but possible, in most commercial and residential construction activities. Typical vibration levels at distances of 25 feet, 100 feet and 300 feet are summarized by Table VII.

TABLE VIII

TYPICAL VIBRATION LEVELS DURING CONSTRUCTION

	PPV (in/sec)		
Equipment	**@ 25´**	**@ 100´**	**@ 300´**
Bulldozer (Large)	0.09	0.011	0.006
Bulldozer (Small)	0.003	0.0004	0.00019
Loaded Truck	0.08	0.01	0.005
Jackhammer	0.04	0.005	0.002
Vibratory Roller	0.2	.03	0.013
Caisson Drilling	0.08	.01	0.006

Source: *Caltrans*

Mitigation Measures:

Vibration levels associated with construction activities should be assessed when construction activities are occurring within close proximity of existing structures and sensitive receptor locations. The following considerations should be made prior to construction activities.

- Determination of distance between proposed use of construction equipment and existing sensitive receptors and existing structures.

- Determination of proposed types of equipment and associated vibration levels at nearby sensitive receptors and existing structures.

- If determined that vibration levels associated with proposed equipment type(s) may result in human annoyance or structural damage, a site-specific vibration assessment should be conducted.

The incorporation of these (or similar) measures would reduce vibration-related noise impacts to less than significant.

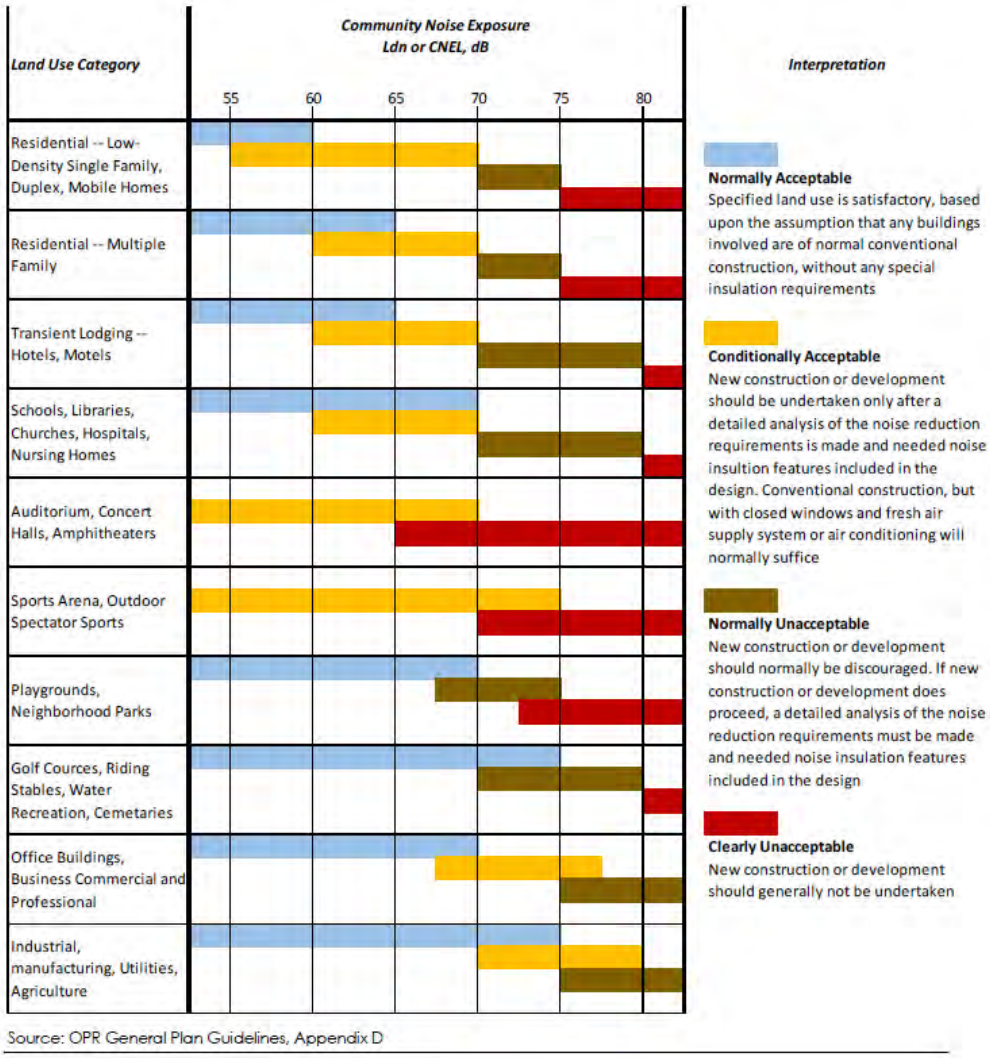
CHAPTER FOUR

ASSESSMENT OF GENERAL PLAN IMPLENTATION IMPACTS AND RECOMMENDED MEASURES TO REDUCE IMPACTS

4.1 OVERVIEW OF GENERAL PLAN NOISE ELEMENT NOISE EXPOSURE CRITERIA

The General Plan Noise Elements provides noise compatibility guidelines and standards, intended to minimize potential noise impacts throughout the City. Figure 10-1 of the Noise Element (provided below) provides applicable standards for community noise exposure and serves as a basis for establishing land use compatibility guidelines for noise exposure.

Figure 10-1 Community Noise Exposure



Source: OPR General Plan Guidelines, Appendix D

Additionally, Table 10-1 of the Noise Element (provided below) summarizes some of these noise exposure standards for specific land uses types. Policy N-1.1 states that the noise standards apply at "outdoor activity areas". While not explicitly stated, outdoor activity areas are considered to be backyards of single-family residential land uses and outdoor common areas (pools, BBQ areas, play areas, picnic areas, etc.) and individual decks and balconies of multi-family residential land uses. While language in the Noise Element above Table 10-1 states "at the property line", these standards are typically applied at outdoor activity areas, and the impact analysis provided below assumes this application.

Use Type	Maximum L_{dn}
Low- and Medium-Density Residential	60
High-Density Residential	65
Transient Lodging	65
Schools, Churches, Hospitals	65
Auditoriums	60
Parks	65
Commercial Uses	70
Industrial Uses	75

Generally speaking, time-weighted energy average noise level metrics (L_{dn}/CNEL) are best applied to transportation noise sources (roadway traffic, railroad, aircraft, etc.). Stationary (non-transportation) noise sources standards are best assessed in terms of average and maximum noise levels. Stationary noise sources are often temporal in nature, and therefore quantifying in terms of a 24-hour energy average time-weighted metric does not provide an adequate enforcement method. Table IX below provides recommended noise standards to be applied to stationary noise sources. As a point of reference, a constant noise source measuring 50 dB over an entire 24-hour period would equate to approximately 56 dB L_{dn}.

TABLE IX

NON-TRANSPORTATION NOISE LEVEL STANDARDS, dBA

Daytime (7 a.m.-10 p.m.)		Nighttime (10 p.m.-7 a.m.)	
L_{eq}	L_{max}	L_{eq}	L_{max}
50	70	45	60

Source: WJVA

4.2 GENERAL PLAN IMPLEMENTATION IMPACT SUMMARY

This section discusses potential noise impacts that could result from the implementation of the General Plan update. These potential impacts are discussed below.

4.2.1 PROJECT-RELATED INCREASES IN TRAFFIC NOISE EXPOSURE

As described above in Table V, traffic noise exposure levels are expected to increase with the General Plan implementation. As such, distances to the 60 dB L_{dn} and 65 dB L_{dn} will increase. This section provides an analysis of potential impacts that could occur as a result of an increase in traffic noise under General Plan buildout conditions.

Project-related significant impacts would occur if an increase in traffic noise associated with the project would result in noise levels exceeding the land use compatibility criteria (Table 10-1 of the General Plan Noise Element) at outdoor activity areas associated with sensitive receptors. For the purpose of this analysis a significant impact is also assumed to occur if traffic noise levels were to increase by 3 dB at sensitive receptor locations where noise levels already exceed the General Plan land use compatibility noise level criteria (without the project), as 3 dB generally represents the threshold of perception in change for the human ear.

Future (2050) modeled traffic volumes, without the implementation of the General Plan, were provided by the project traffic consultants, Linscott, Law & Greenspan Engineers. WJVA modeled traffic noise levels applying the 2050 future volumes (without project contributions) and compared those to modeled 2040 General Plan buildout traffic noise levels. Table X provides the 2050 (no project) and 2040 with project (General Plan buildout) noise exposure levels at a reference setback distance of 75 feet from the centerline of each analyzed roadway segment (typical roadway setback distance).

TABLE X

NOISE EXPOSURE LEVELS AT REFERENCE SETBACK DISTANCE OF 75', dB L_{dn}
CITY OF GUADALUPE GENERAL PLAN BUILDOUT CONDITIONS

Roadway	Segment	2050 without GP	2040 GP BUILDOUT	Increase	Impact? Yes/No
Obispo Street	north of W. Main Street (SR 166)	60	61	1	No
Simas Road	north of W. Main Street (SR 166)	57	58	1	No
Eleventh Street	east of Guadalupe Street (SR 1)	56	57	1	No
Fifth Street	west of Guadalupe Street (SR 1)	52	53	1	No
Pioneer Street	north of W. Main Street (SR 166)	54	54	0	No
Guadalupe Street (SR 1)	west of Guadalupe Street (SR 1)	65	66	1	No
Main Street (SR 166)	north of W. Main Street (SR 166)	68	69	1	No

Source: WJV Acoustics, Inc.
Linscott, Law & Greenspan Engineers
Caltrans

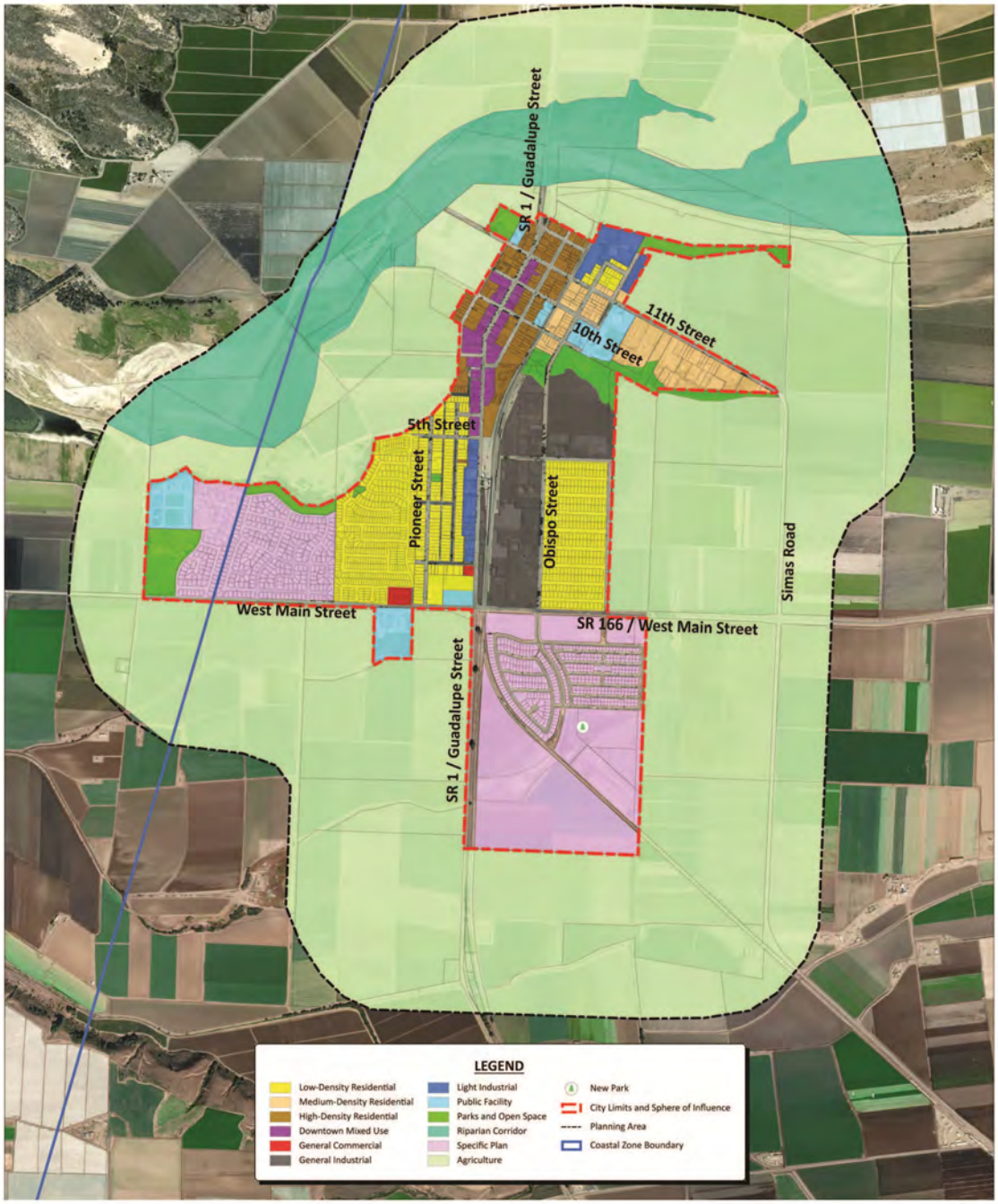
Reference to Table X indicates that project-related noise levels would not be expected to result in noise levels exceeding the noise compatibility criterion of 60 dB L_{dn} or result in an increase of 3 dB at a sensitive receptor location where noise levels already (without project implementation) exceed the 60 dB L_{dn} compatibility criterion. Therefore, it can be determined that project-related increases in traffic noise exposure would not be expected to result in a significant impact at existing noise-sensitive land uses.

5. SOURCES CONSULTED

1. Federal Highway Administration, *Traffic Noise Model, Version 2.5,* April 14, 2004

2. California Department of Transportation, *Transportation and Construction Vibration Guidance Manual,* September 2013.

FIGURE 1: GENERAL PLAN LAND USE DIAGRAM



Source: City of Guadalupe 2021

Figure 2-2

Land Use Diagram

Guadalupe 2021 General Plan

FIGURE 2: LOCATIONS OF COMMUNITY NOISE SURVEY SITES

FIGURE 3: HOURLY NOISE LEVELS, LT-1

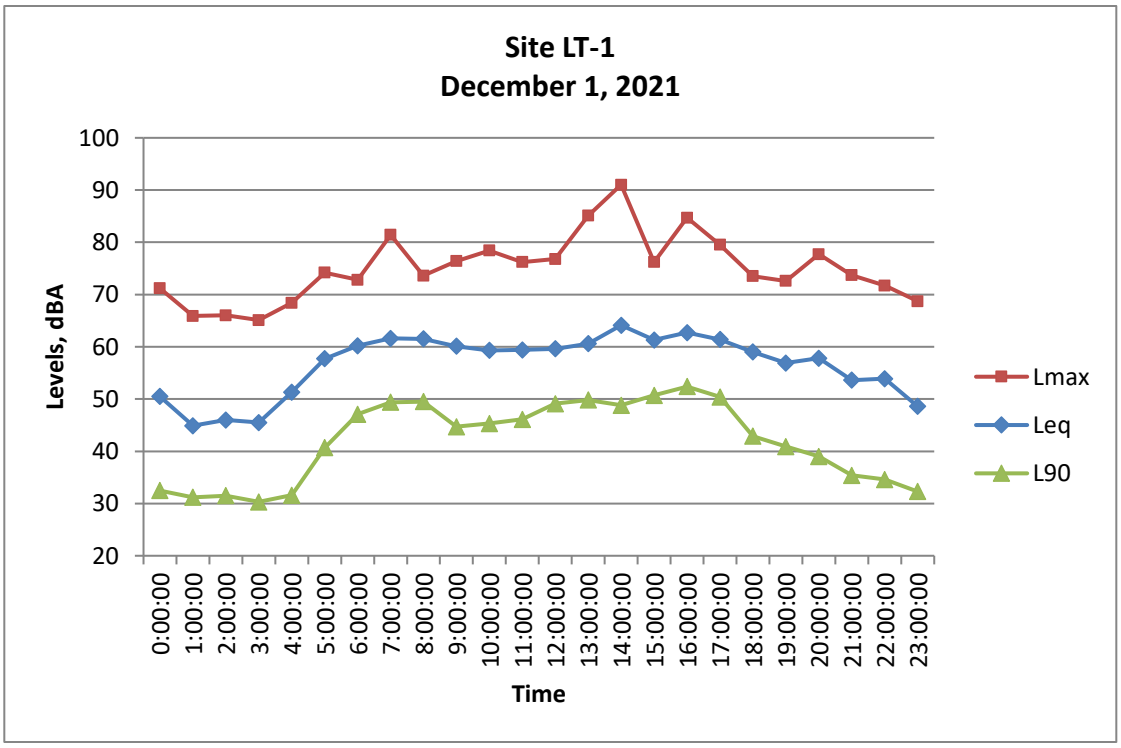


FIGURE 4: HOURLY NOISE LEVELS, LT-2

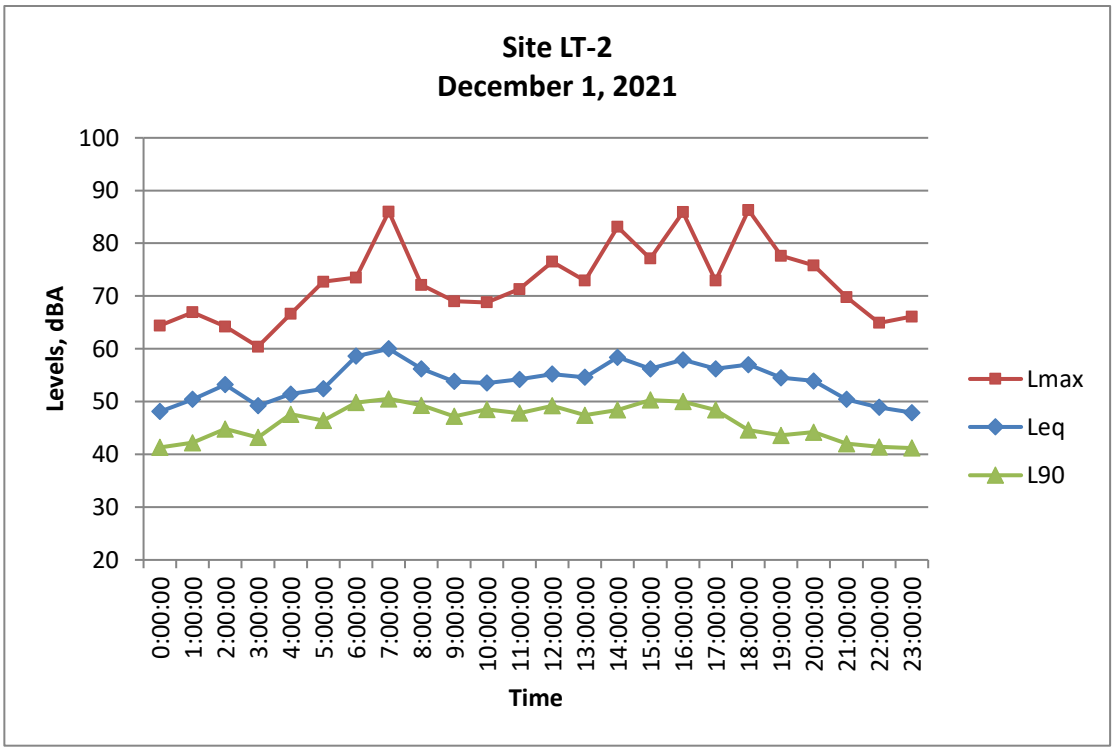


FIGURE 5: HOURLY NOISE LEVELS, LT-3

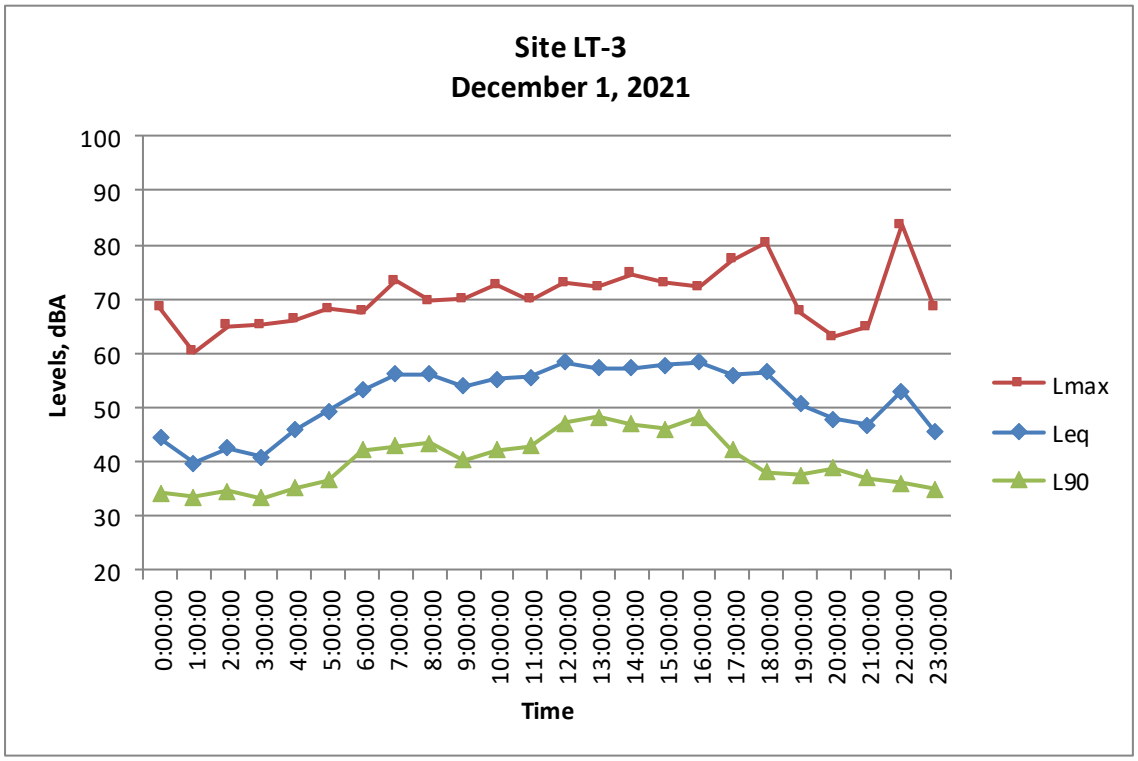
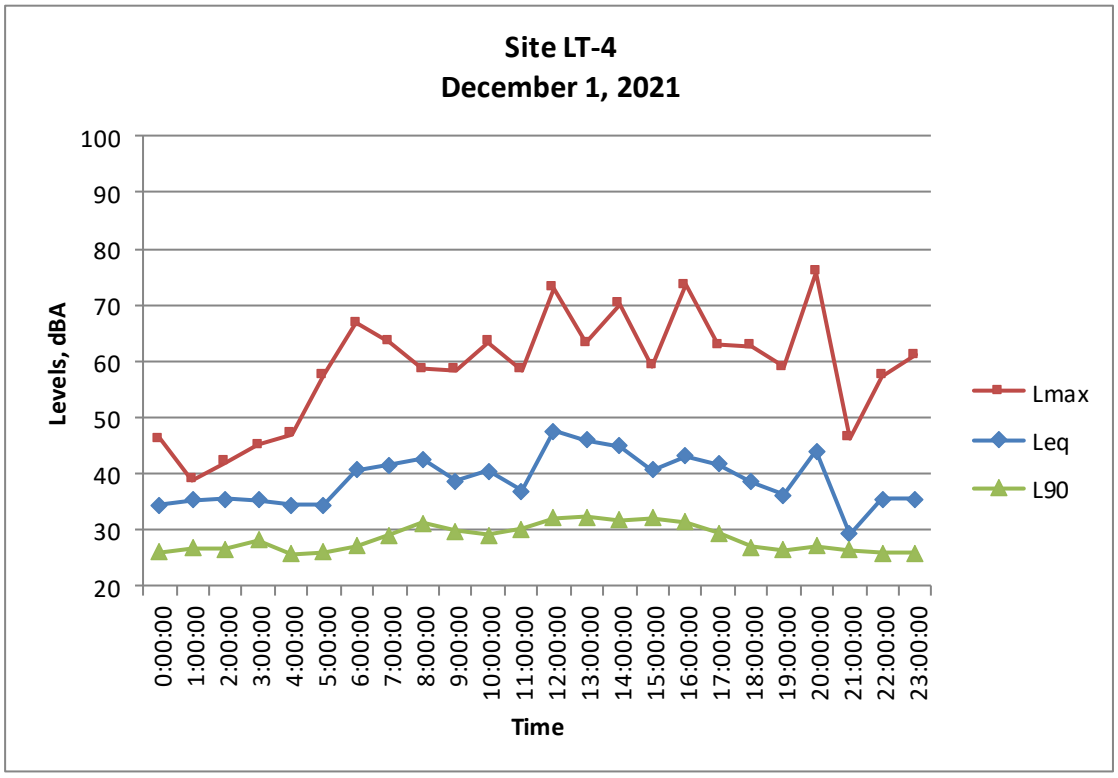


FIGURE 6: HOURLY NOISE LEVELS, LT-4



APPENDIX A
ACOUSTICAL TERMINOLOGY

APPENDIX A

ACOUSTICAL TERMINOLOGY

AMBIENT NOISE LEVEL: The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

CNEL: Community Noise Equivalent Level. The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.

DECIBEL, dB: A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

DNL/L_{dn}: Day/Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.

L_{eq}: Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. L_{eq} is typically computed over 1, 8 and 24-hour sample periods.

NOTE: The CNEL and DNL represent daily levels of noise exposure averaged on an annual basis, while L_{eq} represents the average noise exposure for a shorter time period, typically one hour.

L_{max}: The maximum noise level recorded during a noise event.

L_n: The sound level exceeded "n" percent of the time during a sample interval (L_{90}, L_{50}, L_{10}, etc.). For example, L_{10} equals the level exceeded 10 percent of the time.

A-2

ACOUSTICAL TERMINOLOGY

NOISE EXPOSURE CONTOURS: Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and DNL contours are frequently utilized to describe community exposure to noise.

NOISE LEVEL REDUCTION (NLR): The noise reduction between indoor and outdoor environments or between two rooms that is the numerical difference, in decibels, of the average sound pressure levels in those areas or rooms. A measurement of "noise level reduction" combines the effect of the transmission loss performance of the structure plus the effect of acoustic absorption present in the receiving room.

SEL or SENEL: Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.

SOUND LEVEL: The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

SOUND TRANSMISSION CLASS (STC): The single-number rating of sound transmission loss for a construction element (window, door, etc.) over a frequency range where speech intelligibility largely occurs.

APPENDIX B
EXAMPLES OF SOUND LEVELS

APPENDIX B
EXAMPLES OF SOUND LEVELS

NOISE SOURCE	SOUND LEVEL	SUBJECTIVE DESCRIPTION
AMPLIFIED ROCK 'N ROLL ▸	120 dB	
JET TAKEOFF @ 200 FT ▸		DEAFENING
	100 dB	
BUSY URBAN STREET ▸		VERY LOUD
	80 dB	
FREEWAY TRAFFIC @ 50 FT ▸		LOUD
CONVERSATION @ 6 FT ▸	60 dB	
TYPICAL OFFICE INTERIOR ▸		MODERATE
SOFT RADIO MUSIC ▸	40 dB	
RESIDENTIAL INTERIOR ▸		FAINT
WHISPER @ 6 FT ▸	20 dB	
HUMAN BREATHING ▸		VERY FAINT
	0 dB	

APPENDIX C
TRAFFIC NOISE MODELING ASSUMPTIONS

WJV Acoustics, Inc
FHWA-RD-77-108
Calculation Sheets
February 22, 2022

Project #:	21-57
Description:	Existing
Ldn/Cnel:	Ldn
Site Type:	Soft

Contour Levels (dB)	60	65	70	75					

Segment	Roadway Name	Segment Description	ADT	%Day	%Evening	%Night	%Med	%Heavy	Speed	Distance	Offset
1	Obispo Street	n/o W. Main Street	2915	90		10	3	2	35	75	
2	Simas Road	n/o West Main Street	3932	90		10	3	2	25	75	
3	Elevenths Street	E/o Guadalupe Street	4634	90		10	3	2	25	75	
4	Fifth Street	w/o Guadalupe Street	1851	90		10	3	2	25	75	
5	Pioneer Street	n/o Main Street	2953	90		10	3	2	25	75	
6	SR 1	n/o SR 166	6500	85		15	7.2	4.8	30	75	
7	SR 166	e/o SR 1	9700	85		15	6	4.9	45	75	

WJV Acoustics, Inc
FHWA-RD-77-108
Calculation Sheets
February 22, 2022

Project #:	21-57
Description:	GP Buildout, 2040
Ldn/Cnel:	Ldn
Site Type:	Soft

Contour Levels (dB)	60	65	70	75					

Segment	Roadway Name	Segment Description	ADT	%Day	%Evening	%Night	%Med	%Heavy	Speed	Distance	Offset
1	Obispo Street	n/o W. Main Street	7860	90		10	3	2	35	75	
2	Simas Road	n/o West Main Street	7150	90		10	3	2	25	75	
3	Elevenths Street	E/o Guadalupe Street	6280	90		10	3	2	25	75	
4	Fifth Street	w/o Guadalupe Street	2150	90		10	3	2	25	75	
5	Pioneer Street	n/o Main Street	3250	90		10	3	2	25	75	
6	SR 1	n/o SR 166	15330	85		15	7.2	4.8	30	75	
7	SR 166	e/o SR 1	15030	85		15	6	4.9	45	75	

WJV Acoustics, Inc
FHWA-RD-77-108
Calculation Sheets
February 22, 2022

Project #:	21-57
Description:	2050 No Project
Ldn/Cnel:	Ldn
Site Type:	Soft

Contour Levels (dB)	60	65	70	75					

Segment	Roadway Name	Segment Description	ADT	%Day	%Evening	%Night	%Med	%Heavy	Speed	Distance	Offset
1	Obispo Street	n/o W. Main Street	5653	90		10	3	2	35	75	
2	Simas Road	n/o West Main Street	6415	90		10	3	2	25	75	
3	Elevenths Street	E/o Guadalupe Street	4808	90		10	3	2	25	75	
4	Fifth Street	w/o Guadalupe Street	1015	90		10	3	2	25	75	
5	Pioneer Street	n/o Main Street	3250	90		10	3	2	25	75	
6	SR 1	n/o SR 166	12382	85		15	7.2	4.8	30	75	
7	SR 166	e/o SR 1	12828	85		15	6	4.9	45	75	

Transportation Study

E

APPENDIX

Transportation Study for the

City of Guadalupe

2021 General Plan Update

February 14, 2022

REPORT INFORMATION

Project: **City of Guadalupe Transportation Study for the 2021 General Plan Update**

Date: February 14, 2022

LLG Ref.: 3-21-3463

Prepared By: K.C. Yellapu, PE, TE, PTOE
Principal
and
Erika Carino, PE, RSP
Transportation Engineer III

Linscott, Law & Greenspan, Engineers
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TABLE OF CONTENTS

TABLE OF CONTENTS, CONT'D

APPENDICES

LIST OF FIGURES

LIST OF TABLES

TRANSPORTATION STUDY
CITY OF GUADALUPE
GENERAL 2021 GENERAL PLAN
February 14, 2022

1.0 INTRODUCTION

Linscott, Law & Greenspan, Engineers (LLG) has been retained to prepare a transportation study for the City of Guadalupe. This transportation study has been prepared to support the City of Guadalupe 2021 General Plan Update prepared by EMC Planning.

1.1 Project Location

Guadalupe is located in northern Santa Barbara County, about nine miles west of the City of Santa Maria. The City is situated in the heart of the fertile Santa Maria Valley, an agricultural region of statewide and even national importance. To the west is the Guadalupe Dunes, one of the last remaining coastal dune complexes in California. To the south is the City of Lompoc and Vandenberg Space Force Base. To the north are the Nipomo Mesa, Arroyo Grande, and Nipomo communities in San Luis Obispo County. ***Figure 1–1*** shows a vicinity map.

1.2 Project Description

The Project includes the implementation of an update to the existing City of Guadalupe General Plan, which includes the following:

- Land Use Element
- Housing Element
- Circulation Element
- Conservation and Open Space
- Safety
- Noise
- Environment Justice

The Project identifies infill opportunities on vacant or underutilized land and mixed-use redevelopment opportunities on non-residential properties. ***Table 1–1*** lists the land use increases.

1.3 Purpose of Report

The purpose of this transportation study is to assess any transportation needs and the potential transportation impacts.

TABLE 1–1
PROPOSED PROJECT LAND USE ESTIMATES

Use Type	Potential Dwelling Units (DU) or Square Footage (SF)
Residential	
Low-Density Residential	14 DU
Medium-Density Residential	112 DU
High-Density Residential	336 DU
Specific Plan (Res)	377 DU
Downtown Mixed Use – High-Density Residential	35 DU
Non-Residential	
Downtown Mixed Use – Retail Commercial	59,338 SF
General Commercial	5,254 SF
Specific Plan (Commercial)	436,820 SF
General Industrial	863,868 SF

Source: Table 2–2 of the Guadalupe 2021 General Plan Update

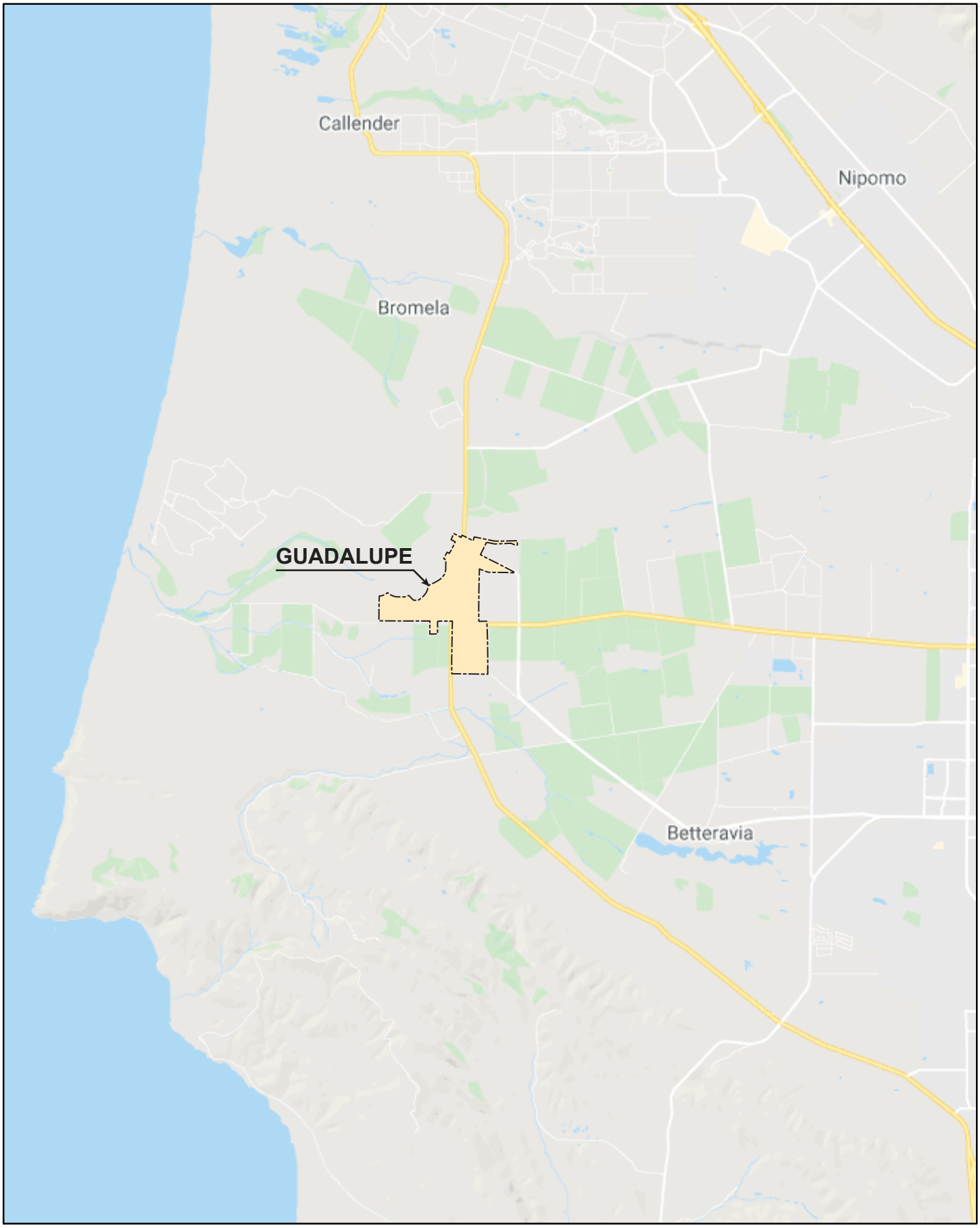

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Figure 1-1

Vicinity Map

Guadalupe GPU Transportation Study

LINSCOTT LAW & GREENSPAN engineers

2.0 REPORT & ORGANIZATION

This report is divided into the following sections:

Existing Conditions

Section 3.0 – Auto Mobility: This section describes the existing and future auto conditions.

Section 4.0 – Pedestrian Mobility: This section describes the existing and future pedestrian conditions.

Section 5.0 – Bicycle Mobility: This section describes the existing and future bicycle conditions.

Section 6.0 – Transit Mobility: This section describes the existing roadways and traffic volumes.

VMT Analysis

Section 7.0 – Vehicle Miles Traveled (VMT): This section presents background on VMT, SB 743, CEQA Guidelines, and OPR's Technical Guidance.

Section 8.0 – VMT Significance Criteria and Methodology: This section presents the VMT Significance Criteria and VMT Methodology to evaluate transportation impacts.

Section 9.0 –VMT Analysis: This section presents the VMT analysis and findings under SB 743.

Roadway Capacity Analysis

Section 10.0 – Segment Level of Service: This section presents a level of service analysis for buildout conditions.

Recommendation

Section 11.0 – Goal and Policy Recommendations: This section presents the goals and policies from the Guadalupe 2021 General Plan Update.

3.0 AUTO MOBILITY

3.1 Existing Roadway Conditions

The following is a description of the existing street network in the area.

Obispo Street is classified as a Collector Street in the City of Guadalupe 2021 General Plan. It is currently constructed as a two-lane undivided roadway that runs north-south. All intersections along Obispo Street are unsignalized (i.e., minor street stop-controlled). Sidewalks are provided on the east side of the roadway and intermittently on the west side of the roadway. Curbside parking is permitted on the east side of the roadway. Bike lanes are not provided. The posted speed limit is 35 mph.

Pioneer Street is classified as a Collector Street in the City of Guadalupe 2021 General Plan. It is currently constructed as a two-lane undivided roadway that runs north-south. Sidewalks are provided on both sides of the roadway. Curbside parking is permitted. Bike lanes are not provided. There is no posted speed limit.

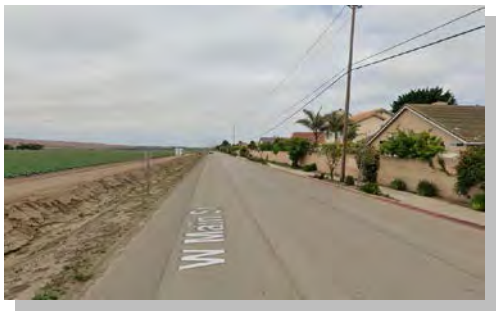
Simas Road is classified as an Arterial in the City of Guadalupe 2021 General Plan. It is currently constructed as a two-lane undivided roadway that runs north-south. Sidewalks are not provided. Curbside parking is not permitted. Bike lanes are not provided. The posted speed limit is 55 mph.

11th Street is classified as an Arterial in the City of Guadalupe 2021 General Plan. It is currently constructed as a two-lane undivided roadway that runs east-west. Sidewalks are provided on both sides of the roadway. Curbside parking is permitted. Bike lanes are not provided. The posted speed limit is 25 mph.

5th Street is classified as a Collector Street in the City of Guadalupe 2021 General Plan. It is currently constructed as a two-lane undivided roadway that runs east-west. Sidewalks are provided on both sides of the roadway. Curbside parking is permitted. Bike lanes are not provided. There is no posted speed limit.

Guadalupe Street (State Route 1) is classified as a State Highway in the City of Guadalupe 2021 General Plan. It is currently constructed as a two-lane undivided roadway that runs north-south. Sidewalks are provided intermittently along the roadway. Curbside parking is permitted. Class II bike lanes are provided on both sides of the roadway. The posted speed limit is 30 mph.

West Main Street (State Route 166) is classified as a State Highway in the City of Guadalupe 2021 General Plan. It is currently constructed as a two-lane undivided roadway with intermittent turning lanes that run east-west. Sidewalks are not provided. Curbside parking is not permitted. Bike lanes are not provided. The posted speed limit is 45 mph.



3.2 Existing Traffic Volumes

Existing weekday daily traffic counts were collected along several street segments within the City of Guadalupe. The counts were conducted on December 15, 2022. ***Figure 3–1*** shows the existing traffic volumes. ***Appendix A*** contains the count sheets.

Based on data obtained from the American Community Survey 2019 Five Year Estimates, 92.17% of Guadalupe residents drive to work. ***Figure 3–2*** depicts the percent range of residents in the City and surrounding areas that drive to work.

3.3 Collision History

Collision data was obtained from SafeTREC's Transportation Injury Mapping System (TIMS), which uses the California Statewide Integrated Traffic Records System (SWITRS) to geocode and map out collisions. The database is a compilation of anonymized collision report information from law enforcement agencies that includes but are not limited to the following collision details:

- Date/Time/Location
- Severity
- CVC Violation
- Roadway Condition
- Weather
- Safety Equipment
- Collision Type
- Party Information
- Victim Information

CASE ID	YEAR	DATE	TIME	DAY OF WEEK
6735593	2015	20150101	840	4
6781275	2015	20150101	1053	4
6782303	2015	20150101	300	4
6782306	2015	20150101	500	4
6785310	2015	20150101	1045	4
6789197	2015	20150101	753	4
6798405	2015	20150101	1735	4
6775159	2015	20150102	1600	5
6782194	2015	20150102	1412	5
6782305	2015	20150102	1540	5
6782550	2015	20150102	2310	5
6799409	2015	20150102	1040	5
6782195	2015	20150103	1358	6

COLLISION_DATE	COLLISION_TIME	DAY_OF_WEEK	CHP_SHIFT	SPECIAL_COND	BEAT_TYPE	CHP_BEAT_TYPE	CHP_BEAT_CLASS	BEAT_NUMBER	
20150101	840	4	1	0	3	5	2	213	RICE CANYON RD
20150101	1053	4	1	0	3	5	1	212	W OAK GLEN RD
20150101	300	4	3	0	2	4	1	96	HIGHLAND VALLE
20150101	500	4	3	0	2	4	1	26	JAMACHA BL
20150101	1045	4	1	0	3	5	2	211	MOUNTAIN LILAC
20150101	753	4	1	0	3	5	2	213	PALA TEMECULA
20150101	1735	4	2	0	2	4	1	12	LAKE JENNINGS
20150102	1600	5	2	0	3	5	2	1	PEPPER DR
20150102	1412	5	2	0	3	5	2	2	ESTRELLA DR
20150102	1540	5	2	0	2	4	1	21	WILLOW GLEN DR
20150102	2310	5	3	0	3	5	2	6	N MAIN ST
20150102	1040	5	1	0	3	5	2	1	PINEHURST RD
20150103	1358	6	1	0	2	4	1	20	CALLE VERDE
20150103	1140	6	1	0	3	5	2	9	BOUNDARY AV
20150103	1639	6	2	0	3	5	2	230	DEL DIOS HWY
20150103	146	6	3	0	3	5	2	211	PARADISE MOUN
20150103	2325	6	3	0	3	5	2	2	HIDDEN MESA RD
20150104	1331	7	1	0	3	5	2	231	BEAR VALLEY PK
20150104	1754	7	2	0	3	5	2	2	PORTOLA AV
20150104	48	7	3	0	3	5	2	211	PARADISE MOUN
20150104	1545	7	2	0	3	5	2	24	BERNARDO CENT
20150104	1409	7	2	0	3	5	2	70	RAMBLA DE LAS
20150105	640	1	1	0	2	4	2	61	EAST MISSION RI
20150105	740	1	1	0	2	4	1	21	WILLOW GLEN DR
20150105	1841	1	2	0	3	5	2	70	EL CAMINIO DEL
20150105	1750	1	2	0	1	1	2	84	OLDE HIGHWAY 8
20150105	1455	1	2	0	3	5	2	6	AMMUNITION RD
20150106	815	2	1	0	3	5	2	170	SOUTH SANTA FE
20150106	1422	2	2	1	3	5	2	230	VIA RANCHO PKW
20150106	1615	2	2	0	3	5	2	3	ARNOLD WY
20150106	215	2	3	0	3	5	2	211	WOODS VALLEY
20150106	1625	2	2	0	2	4	1	20	AVOCADO AV
20150106	1815	2	2	0	2	4	1	95	SAN VICENTE RD
20150106	2210	2	3	0	3	5	2	24	ALVA RD
20150107	1915	3	2	0	2	4	2	63	RECHE RD

The timeline queried is the five-year period from January 1, 2014 to December 31, 2018. It should be noted that 2019-2020 data was available for query; however, it is provisional and subject to change. Therefore, 2019-2020 was not included. ***Figure 3–3*** illustrates the location of the collisions that occurred over a five-year period. ***Appendix B*** contains the anonymized collision data.

3.4 Future Roadway Conditions

According to the City of Guadalupe 2021 General Plan Update, there are several projects that are or will be implemented by the California Department of Transportation (Caltrans). ***Table 3–1*** list these roadway improvements.

TABLE 3–1
ROADWAY IMPROVEMENTS

#	Improvements
1	**Santa Maria River Bridge Replacement**: The bridge will be replaced due to its deteriorating structural integrity.
2	**West Main Street/Guadalupe Street Intersection**: A traffic signal will be installed.
3	**West Main Street**: Traffic signals along West Main Street at Obispo Street and Flower Avenue will be installed.

General Notes:
1. Improvements obtained from the City of Guadalupe 2021 General Plan Update.

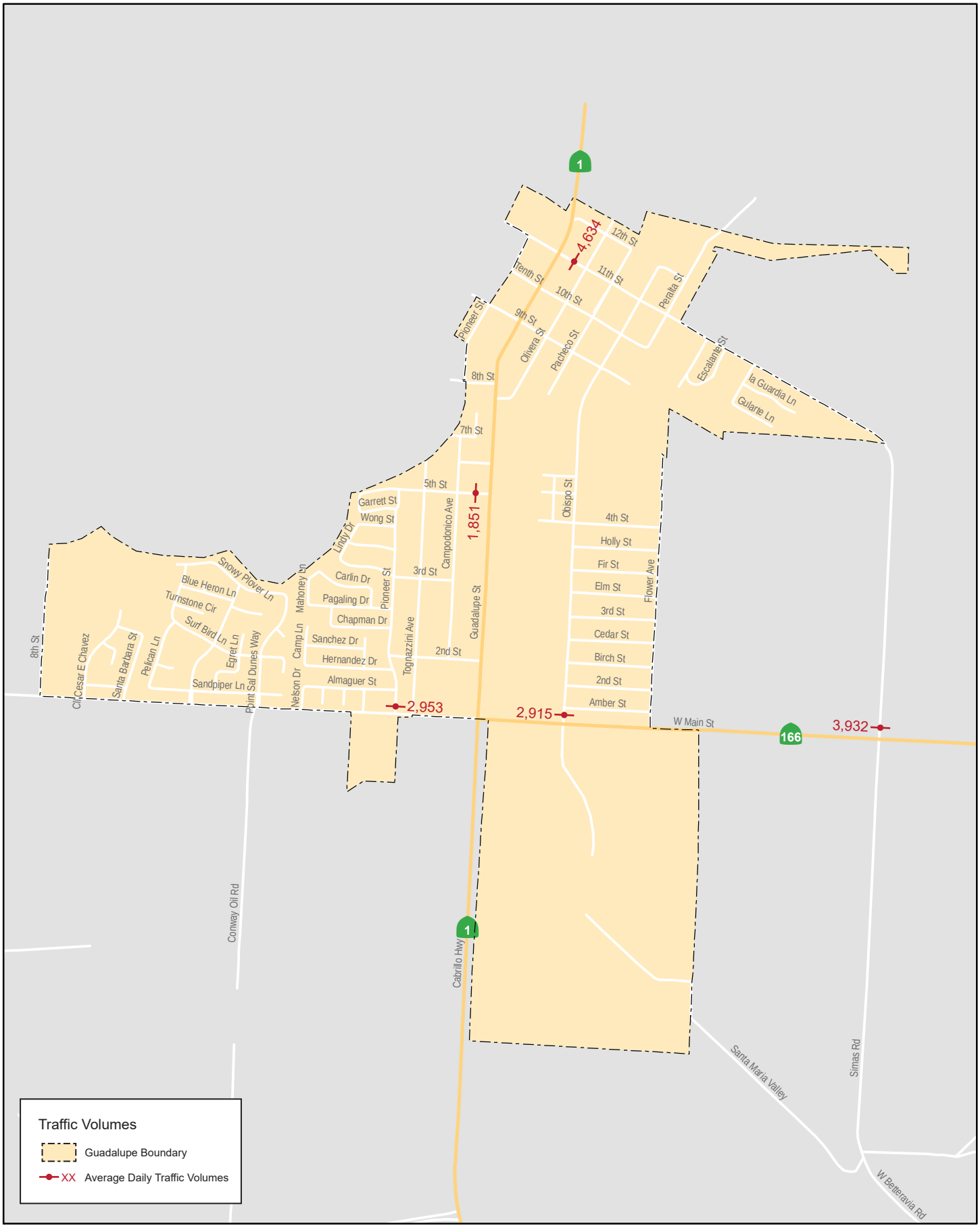


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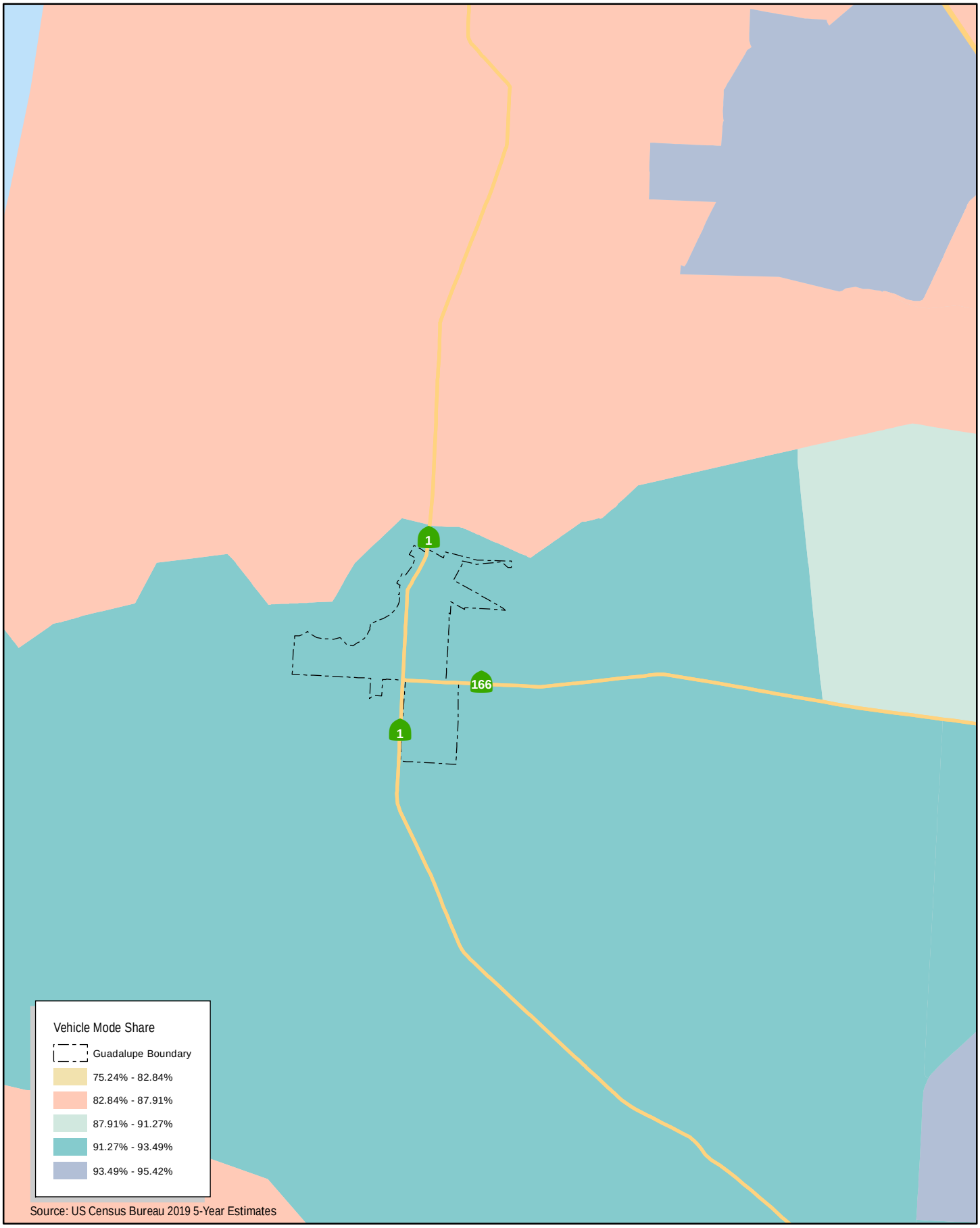
Figure 3-1

Existing Traffic Volumes

Guadalupe GPU Transportation Study

LINSCOTT LAW & GREENSPAN engineers



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LINSCOTT LAW & GREENSPAN engineers

Figure 3-2

Vehicle Mode Share

Guadalupe GPU Transportation Study

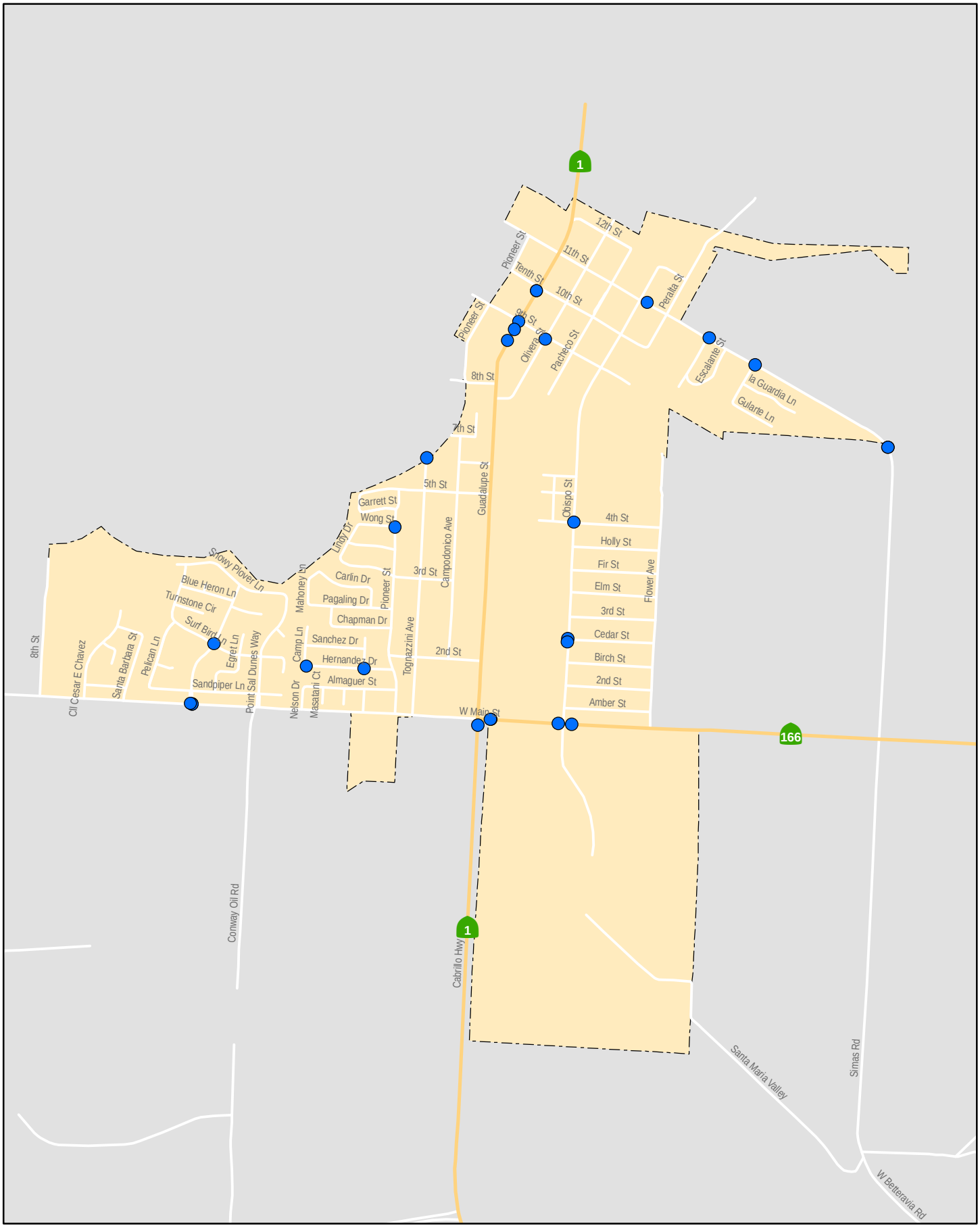

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Figure 3-3

Collision History

Guadalupe GPU Transportation Study

LINSCOTT LAW & GREENSPAN engineers

4.0 PEDESTRIAN MOBILITY

Efficiency, access, and safety for pedestrians provide residents and employees options when trip planning and lessen their dependence on single passenger auto-mobile travel. The result will be cleaner air, a safer environment, an improved economy, and a higher quality of life.

The benefit of implementing a complete sidewalk connection is creating a more balanced transportation network. Economic benefits are derived from a complete street because transportation costs and travel times are reduced while property values and job growth are enhanced.

4.1 Existing Pedestrian Conditions

According to the *City of Guadalupe Bicycle and Pedestrian Master Plan*, sidewalks are generally complete within the City, except for several areas where there are gaps in pedestrian connectivity. Based on data obtained from the American Community Survey 2019 Five Year Estimates, approximately 1.05% of Guadalupe residents walk to work. ***Figure 4–1*** depicts the percent range of residents in the City and surrounding areas that walk to work.

A pedestrian inventory was also conducted in the *City of Guadalupe Pedestrian and Bicycle Master Plan* along street segments, which included documenting sidewalks, dedicated pedestrian bridges, and signage. ***Appendix C*** contains an excerpt of this study that shows the existing pedestrian network.

Based on collision data obtained from SafeTREC's Transportation Injury Mapping System (TIMS) which uses the California Statewide Integrated Traffic Records System (SWITRS), ***Figure 4–2*** illustrates the location of the pedestrian-involved collisions that occurred over the five-year period from January 1, 2014 to December 31, 2018.

4.2 Future Pedestrian Conditions

According to the *City of Guadalupe 2021 General Plan Update*, several projects are or will be implemented by the California Department of Transportation (Caltrans). ***Table 4–1*** list these pedestrian network improvements. Additionally, the *City of Guadalupe Pedestrian and Bicycle Master Plan* identifies pedestrian network improvements, the *Guadalupe Mobility & Revitalization Plan* identifies issues and opportunities for pedestrians, and the *SBCAG Regional Bicycle and Pedestrian Plan* lists planned pedestrian projects. ***Appendix D*** contains excerpts of these studies.

TABLE 4–1
PEDESTRIAN NETWORK IMPROVEMENTS

#	Improvements
1	**Santa Maria River Bridge Replacement**: The bridge will be replaced due to its deteriorating structural integrity. The new "complete street" bridge will accommodate motorists, pedestrians, and bicyclists.
2	**West Main Street/Guadalupe Street Intersection**: A traffic signal with pedestrian crossing signals will be installed.
3	**West Main Street**: Traffic signals along West Main Street at Obispo Street and Flower Avenue will be installed with a pedestrian crossing signal.
4	**Guadalupe Street:** New and upgraded facilities will be provided for pedestrians at 6th Street, Olivera Street, and 9th Street.

General Notes:
1. Improvements obtained from the City of Guadalupe 2021 General Plan Update.

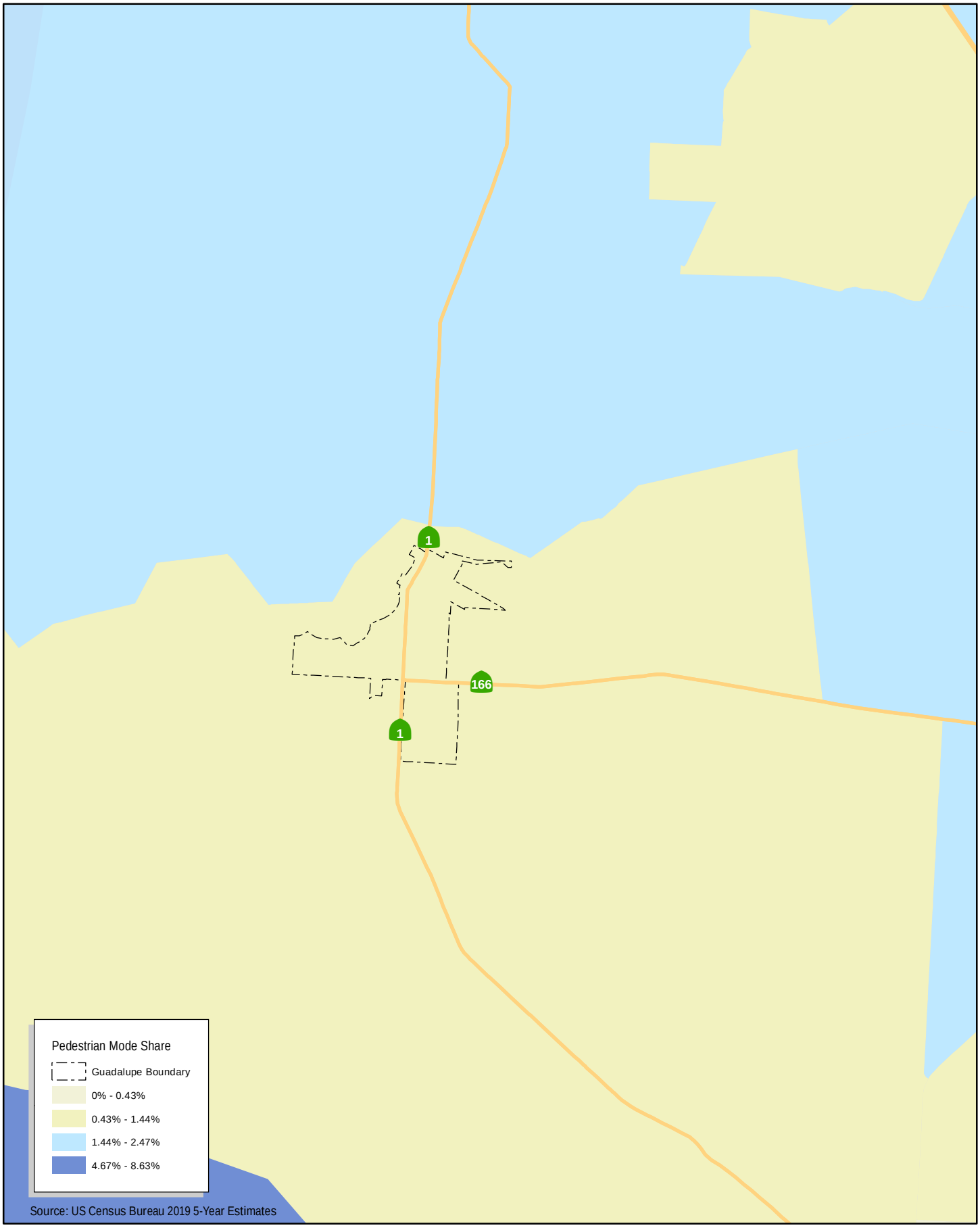

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Figure 4-1

Pedestrian Mode Share

Guadalupe GPU Transportation Study

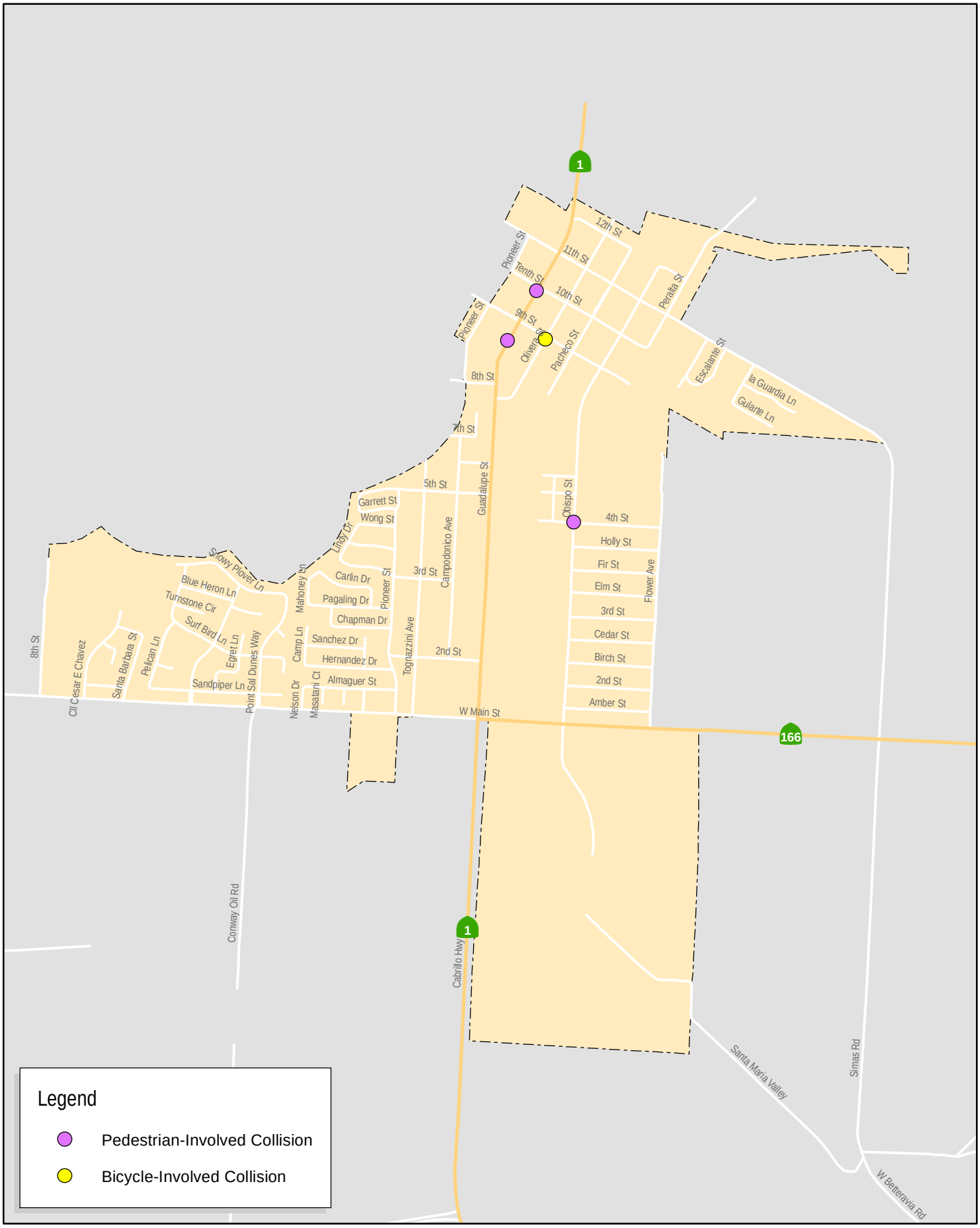

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Figure 4-2

Pedestrian & Bicycle-Involved Collision History

Guadalupe GPU Transportation Study

LINSCOTT LAW & GREENSPAN engineers

5.0 BICYCLE MOBILITY

Efficiency, access, and safety for bicyclists provide residents and employees options when trip planning and lessen their dependence on single passenger auto-mobile travel. The result will be cleaner air, a safer environment, an improved economy, and a higher quality of life.

Having alternative forms of transportation and being informed of their benefits can also provide residents and employees with financial savings in fuel, vehicle maintenance, or not owning a vehicle at all. Additionally, active forms of transportation, such as walking and biking, can provide substantial health benefits.

5.1 Existing Bicycle Conditions

According to the *City of Guadalupe Bicycle and Pedestrian Master Plan*, the City provides a total of three (3) miles of bikeways, which is a facility that is provided primarily for bicycle travel. ***Appendix C*** contains an excerpt of this study that shows the existing bicycle network. There are three types of bikeways, as described in ***Table 5–1***. Based on data obtained from the American Community Survey 2019 Five Year Estimates, less than 0.2% of Guadalupe residents bike to work. ***Figure 5–1*** depicts the percent range of residents in the City and surrounding areas that bike to work.

Based on collision data obtained from SafeTREC's Transportation Injury Mapping System (TIMS) which uses the California Statewide Integrated Traffic Records System (SWITRS), ***Figure 5–2*** illustrates the location of the bicycle-involved collisions that occurred over the five-year period from January 1, 2014 to December 31, 2018.

TABLE 5–1
CALIFORNIA BIKEWAY CLASSIFICATION SYSTEM

Class Description	Example Graphic
Class I – Bike Path Bike paths, also termed shared-use or multi-use paths, are paved right-of-way for exclusive use by bicyclists, pedestrians, and those using non-motorized modes of travel. They are physically separated from vehicular traffic and can be constructed in roadway right-of-way or exclusive right-of-way. Bike paths provide critical connections in the City where roadways are absent or are not conducive to bicycle travel.	
Class II – Bike Lane Bike lanes are defined by pavement striping and signage used to allocate a portion of a roadway for exclusive or preferential bicycle travel. Bike lanes are one-way facilities on either side of a roadway. Whenever possible, Bike Lanes should be enhanced with treatments that improve safety and connectivity by addressing site-specific issues, such as additional warning or wayfinding signage.	
Class III - Bike Route Bike routes provide shared use with motor vehicle traffic within the same travel lane. Designated by signs, Bike Routes provide continuity to other bike facilities or designate preferred routes through corridors with high demand. Whenever possible, Bike Routes should be enhanced with treatments that improve safety and connectivity, such as the use of "sharrows" or shared lane markings to delineate that the road is a shared-use facility.	

5.2 Future Bicycle Conditions

According to the *City of Guadalupe 2021 General Plan Update*, there are several projects that are or will be implemented by the California Department of Transportation (Caltrans). ***Table 5–2*** lists these bicycle network improvements. Additionally, the *City of Guadalupe Pedestrian and Bicycle Master Plan* identifies bicycle network improvements, the *Guadalupe Mobility & Revitalization Plan* identifies issues and opportunities for bicyclists, and the *SBCAG Regional Bicycle and Pedestrian Plan* lists planned bicycle projects. ***Appendix D*** contains excerpts of these studies.

TABLE 5–2
BICYCLE NETWORK IMPROVEMENTS

#	Improvements
1	**Santa Maria River Bridge Replacement**: The bridge will be replaced due to its deteriorating structural integrity. The new "complete street" bridge will accommodate motorists, pedestrians, and bicyclists.

General Notes:
1. Improvements obtained from the City of Guadalupe 2021 General Plan Update.

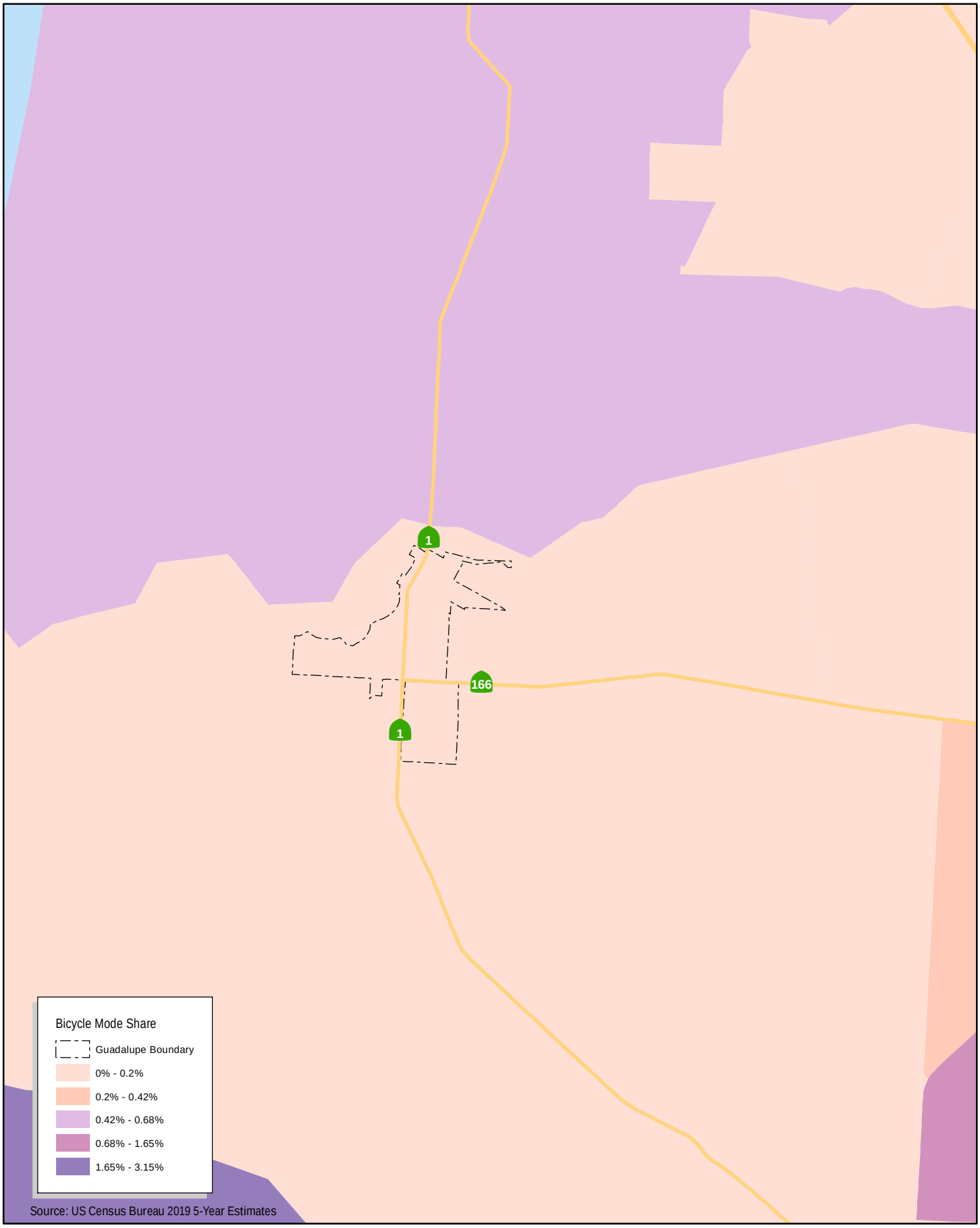

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Figure 5-1

Bicycle Mode Share

Guadalupe GPU Transportation Study

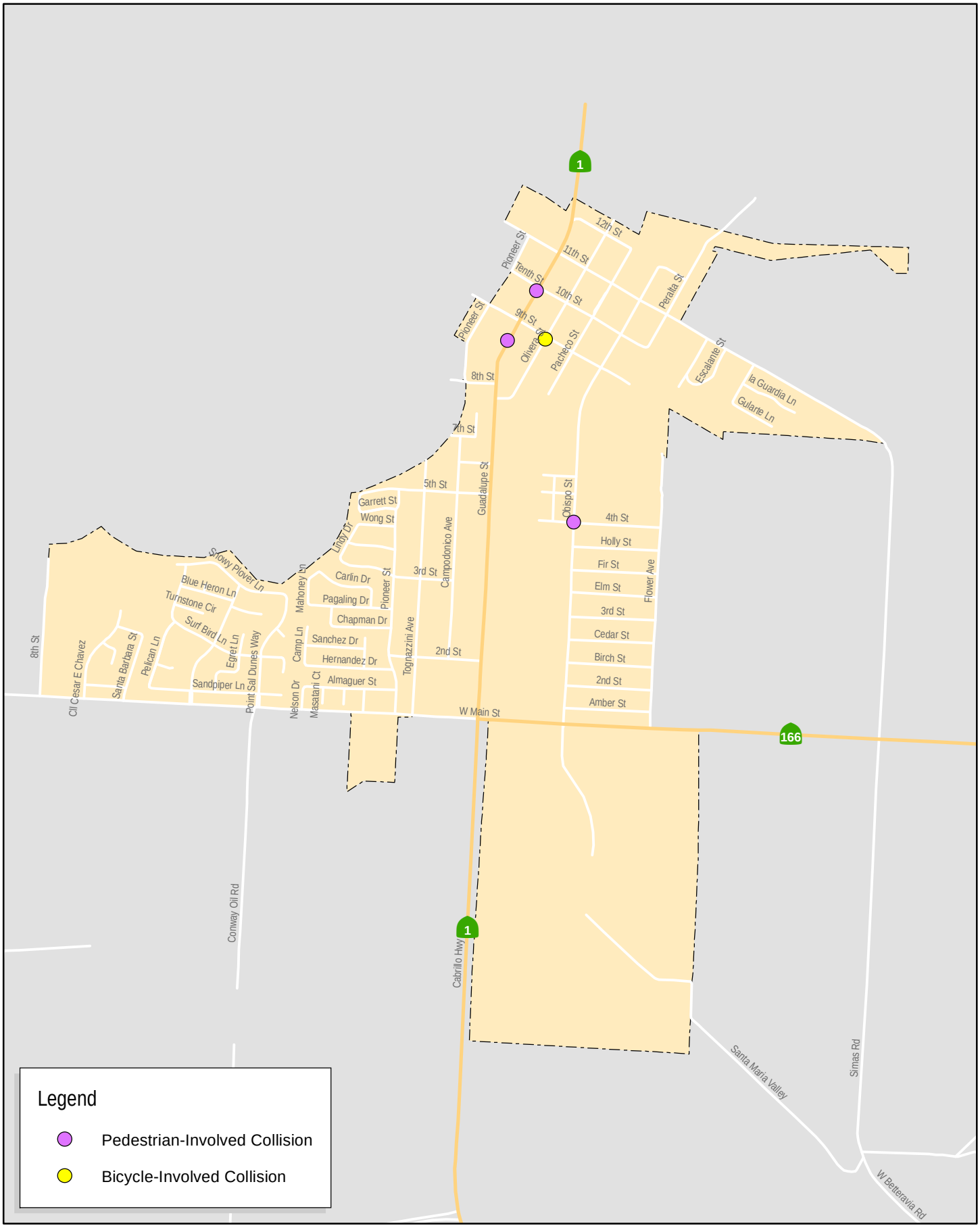

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Figure 5-2

Pedestrian & Bicycle-Involved Collision History

Guadalupe GPU Transportation Study

LINSCOTT LAW & GREENSPAN engineers

6.0 TRANSIT MOBILITY

Efficiency, access, and safety for transit provide residents and employees options when trip planning and lessen their dependence on single passenger auto-mobile travel. The result will be cleaner air, a safer environment, an improved economy, and a higher quality of life.

Having transit services throughout the City makes it more convenient for users who want to use transit as an alternative mode of transportation

6.1 Existing Transit Conditions

Public transit types within the City of Guadalupe include Amtrak and the Guadalupe Shuttle/Flyer. Based on data obtained from the American Community Survey 2019 Five Year Estimates, 4.07% percent of Guadalupe residents take public transportation to work. ***Figure 5–1*** depicts the percent range of residents in the City and surrounding areas that use transit to work.

The following is a description of the transit services.

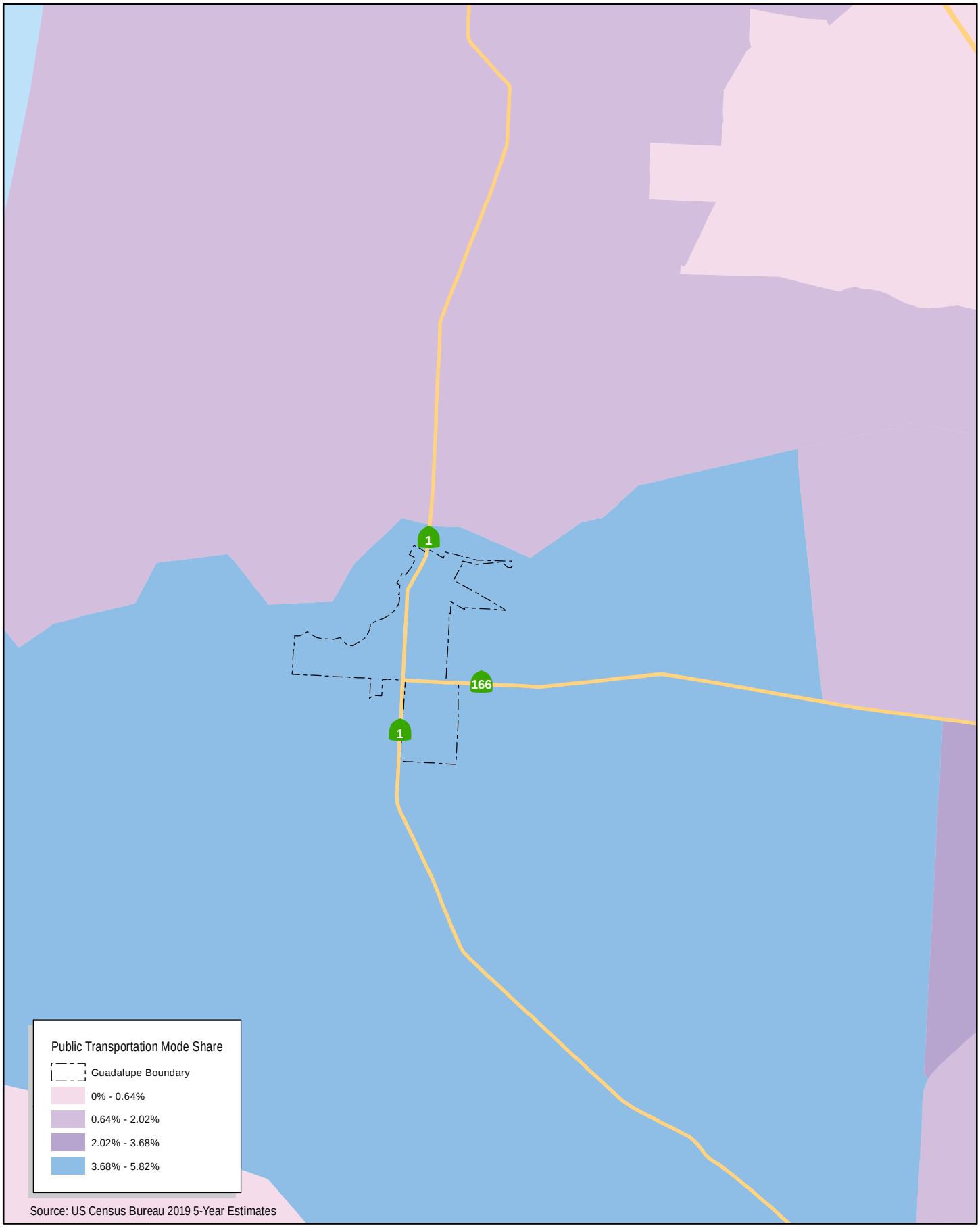
Amtrak is a railroad service that provides commuter, regional, and interstate travel. The next Amtrak station to the north and south are Grover Beach in San Louis Obispo County and Surf in Santa Barbara County.

The Guadalupe Amtrak Station is located on the east side of SR-1, between 2nd Street and 5th Street. The station provides same-day and overnight parking and an enclosed waiting area. Access to the station by transit is available via the Guadalupe flyer, as further described below.

Guadalupe Shuttle and Guadalupe Flyer service the City of Guadalupe. The Guadalupe Shuttle is a deviated fixed-route service that operates Monday through Friday, from 10:00 AM to 4:00 PM. The Guadalupe Flyer is a fixed route service that operates Monday through Saturday from 6:15 AM to 7:50 PM and Sundays from 8:45 AM to 6:35 PM. The Guadalupe Flyer provides bus service throughout the City of Guadalupe and several locations in the City of Santa Maria.

6.2 Future Transit Conditions

Currently, there are no planned transit improvements. It should be noted that the *City of Guadalupe Short Range Transit Plan* was recently updated, and identities issues that should be addressed to improve transit services in the City of Guadalupe.



LINSCOTT LAW & GREENSPAN engineers

N:\3463\Figures

Figure 6-1

Transit Mode Share

Guadalupe GPU Transportation Study

7.0 VEHICLES MILES TRAVELED (VMT)

This section presents a discussion on Vehicle Miles Traveled (VMT), which is used to evaluate a project's transportation effects.

7.1 VMT Background

VMT is defined as a measurement of miles traveled by vehicles within a specified region and for a specified time period. VMT is a measure of the use and efficiency of the transportation network. VMT's are calculated based on individual vehicle trips generated and their associated trip lengths. VMT accounts for two-way (round trip) travel and is often estimated for a typical weekday to measure transportation impacts.

7.2 Senate Bill 743

In September 2013, the Governor's Office signed SB 743 into law, starting a process that fundamentally changes the way transportation impact analysis is conducted under CEQA. Within the State's CEQA Guidelines, these changes include the elimination of automobile delay, level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. The guidance identifies VMT as the most appropriate CEQA transportation metric, along with the elimination of auto delay/LOS for CEQA purposes statewide. The justification for this paradigm shift is that auto delay/LOS impacts lead to improvements that increase roadway capacity and therefore induce more traffic and greenhouse gas emissions.

7.3 Proposed CEQA Guidelines

The following is CEQA Guideline Section 15064.3 Determining the Significance of Transportation Impacts. This represents regulatory guidelines on evaluating transportation impacts using VMT.

> Section 15064.3
> Determining the Significance of Transportation Impacts
>
> (a) Purpose:
> This section describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the Project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay does not constitute a significant environmental impact.
>
> (b) Criteria for Analyzing Transportation Impacts:
> (1) Land Use Projects: Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed

to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact.

(2) Transportation Projects: Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152.

(3) Qualitative Analysis: If existing models or methods are not available to estimate the vehicle miles traveled for the particular Project being considered, a lead agency may analyze the Project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(4) Methodology: A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the Project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

c) Applicability:
The provisions of this section shall apply prospectively as described in section 15007. A lead agency may elect to be governed by the provisions of this section immediately. Beginning on January 1, 2020, the provisions of this section shall apply statewide.

8.0 VMT Significance Criteria & Methodology

Local and regional agencies, as well as transportation professionals, have already transitioned to SB 743. As of writing this report, the City of Guadalupe has not yet adopted significance criteria or technical methodologies for VMT analysis. Given that no criteria or methodologies have been formally adopted, OPR guidance was used to develop significance thresholds and technical methodologies.

8.1 Screening Criteria

CEQA Guideline Section 15064.3, subdivision (b)(1) states that lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop will have a less-than-significant impact on VMT. A major transit stop is described as an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service internal of 15 minutes or less during the morning and afternoon peak commute period. Therefore, any proposed development within a ½ mile of the Guadalupe Amtrak Station, which is a transit station, is presumed to have a less than significant impact.

8.2 Significance Criteria

Public Resources Code Section 21099 provides the criteria for determining the significance of transportation impacts. There are three statutory goals that the significance criteria must promote: (1) reduction of GHG emissions; (2) development of multi-modal networks; and (3) a diversity of land uses. The *Technical Advisory* provides OPR's recommendations for quantitative thresholds of significance, which align with the State's three statutory goals. The recommended significance thresholds were developed from legislative mandates and state policies (i.e., AB 32, SB 375, SB 391 and a number of Executive Orders) that established quantitative GHG emissions reduction targets.

The Technical Advisory states that a fifteen (15) percent reduction in VMT is achievable for development projects in various place types and is consistent with SB 743's direction to OPR to select a threshold that aligns with the State's three statutory goals. ***Table 8–1*** summarizes the significance thresholds based on OPR's recommendations.

TABLE 8–1
VMT SIGNIFICANCE THRESHOLDS

Land Use Type	Thresholds for Determination of a Significant Transportation VMT Impact
Residential	15% below regional average or city VMT/Capita
Non-Residential[1]	15% below regional average VMT/Employee

Footnotes:
1. Includes commercial, retail, and industrial land uses.

8.3 Methodology

Based on the significance criteria discussed, the regional average was utilized to compare the Project's VMT/Capita and VMT/employee. For residential land uses, the regional average was utilized because it is lower than the City average and therefore is a more conservative approach. The regional average was queried from the most recent 4-step travel demand model provided by Santa Barbara County Association of Governments. The model was prepared for the region's long-range Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS). Based on the model information, ***Table 8–2*** summarizes the regional averages and thresholds. ***Appendix E*** contains a technical memorandum that details the methodology.

TABLE 8–2
VMT REGIONAL AVERAGES AND THRESHOLDS

Land Use Type	Regional Average	Significance Threshold[1]
Residential	15.16 VMT/Capita	12.89 VMT/Capita
Non-Residential[2]	20.25 VMT/Employee	17.21 VMT/Employee

Footnotes:
1. The significance threshold is calculated as 15% below the regional average.
2. Includes commercial, retail, and industrial land uses.

9.0 VMT ANALYSIS

This section presents an evaluation of potential transportation impacts of the City of Guadalupe 2021 General Plan Update as proposed by the California Governor's Office of Planning and Research (OPR) to implement California State Law Senate Bill (SB) 743. OPR proposes that metrics based on Vehicle Miles Traveled (VMT) be used to evaluate a project's transportation effects and that projects in proximity to transit are presumed to result in less-than-significant impacts.

As discussed in ***Section 8.1***, developments within a ½ mile of a rail transit station. are presumed to have a less than significant impact. Approximately 59% of the City is within a ½ mile of the Guadalupe Amtrak Station, which is an existing rail transit station located on the east side of SR-1 between 2nd Street and 5th Street. Therefore, portions of the Project would be presumed to have a less than significant impact. However, to be conservative, a complete VMT assessment was conducted.

9.1 Project VMT

Based on the approach of using the Institute of Transportation Engineers' *Trip Generation Manual* (11th Edition) and the City's residential and employee trip lengths based on the model, the VMT/Capita and VMT/Employee were calculated for the Project (i.e., buildout scenario). ***Table 9–1*** tabulates the results of the VMT analysis. ***Appendix E*** contains a technical memorandum that details the Project VMT calculations.

Since the Project VMT/resident and VMT/employee are less than their respective significance thresholds, the Project would have a **less than significant** VMT impact.

TABLE 9–1
VMT ANALYSIS RESULTS

Land Use Type	Regional Average	Significance Threshold[1]	Project	Transportation Impact?
Residential	15.16 VMT/Capita	12.89 VMT/Capita	12.07 VMT/Capita	No
Non-Residential[2]	20.25 VMT/Employee	17.21 VMT/Employee	3.01 VMT/Employee	No

Footnotes:
1. The significance threshold is calculated as 15% below the regional average.
2. Includes commercial, retail, and industrial land uses.

10.0 ROADWAY CAPACITY ANALYSIS

This section presents an evaluation of key roadways to determine if the roadways have the capacity to accommodate the City of Guadalupe 2021 General Plan Update.

10.1 Methodology

Roadway capacity analysis is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries. Street segment analysis is based upon the comparison of daily traffic volumes (ADTs) to the City's roadway capacity guidelines. Since the City of Guadalupe does not have any capacity guidelines for segment analysis, the County of Santa Barbara's policy capacities based on the roadway classification were utilized. The analysis will conclude whether the roadway is under or over capacity.

10.2 Roadway Capacity Analysis

Table 10–1 summarizes the street segment analyses for the buildout conditions. ***Figure 10–1*** shows the buildout traffic volumes. As shown in ***Table 10–2,*** all of the study segments are calculated to operate at under capacity. Therefore, no roadway segment improvements are necessary along the study segments.

TABLE 10–1
BUILDOUT SEGMENT OPERATIONS

Street Segment	Classification	Buildout ADT[1]	Policy Capacity[2]	Over or Under Capacity?
1. Obispo Street, north of West Main Street (SR 166)	2-Lane Major Road	7,860	10,000	Under
2. Simas Road, north of West Main Street (SR 166)	2-Lane Major Road	7,150	10,000	Under
3. Eleventh Street, east of Guadalupe Street (SR 1)	2-Lane Major Road	6,280	10,000	Under
4. Fifth Street, west of Guadalupe Street (SR 1)	Collector Road	2,150	5,000	Under
5. Pioneer Street, north of West Main Street (SR 166)	Collector Road	3,250	5,000	Under

Footnotes:
1. Average Daily Traffic Volumes.
2. Policy capacity based on County of Santa Barbara Circulation Element

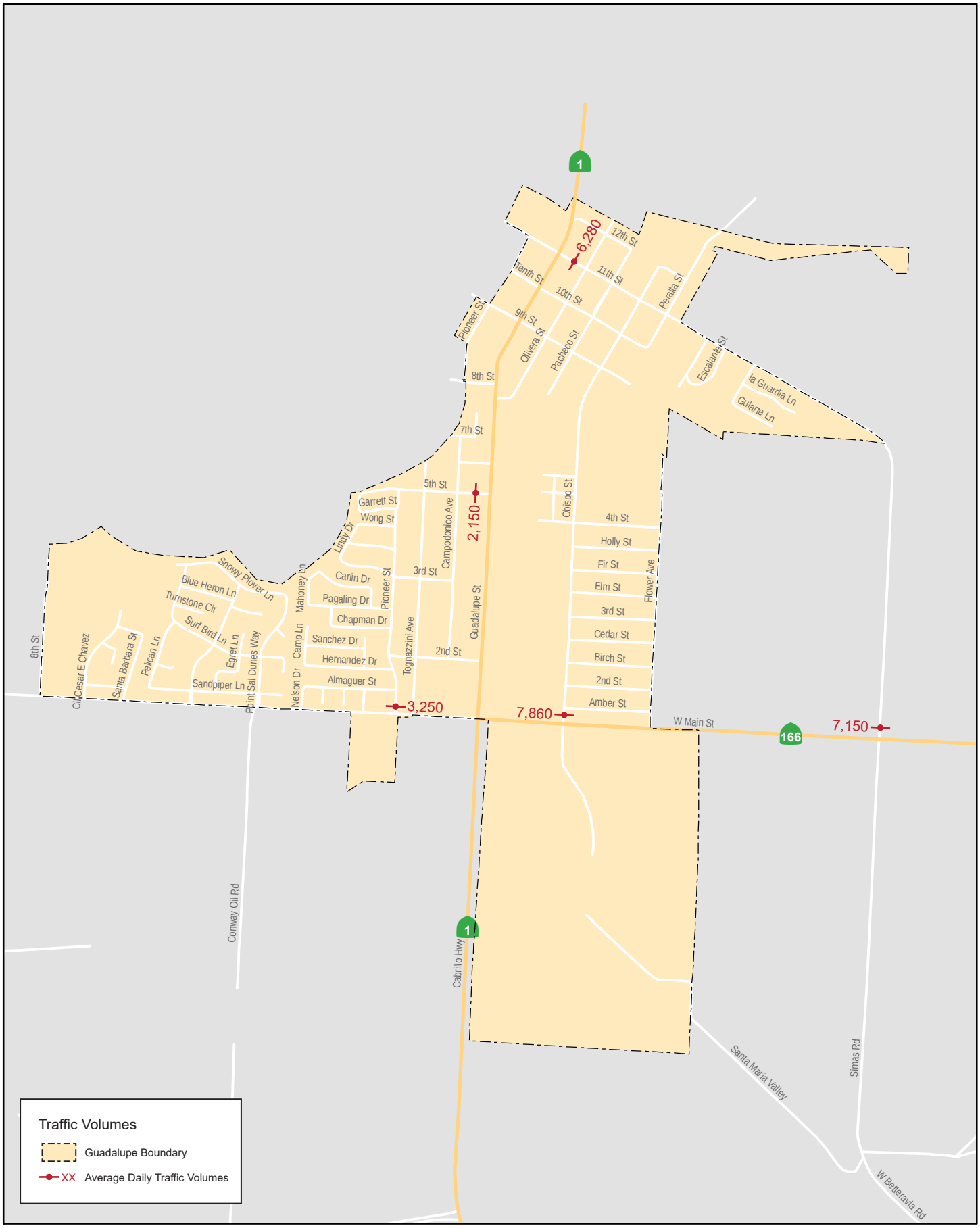


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Figure 10-1

Buildout Traffic Volumes

Guadalupe GPU Transportation Study

LINSCOTT LAW & GREENSPAN engineers

11.0 CONCLUSION

The analysis presented in this transportation study concludes that the General Plan Update results in a less than significant transportation VMT impact. Additionally, no roadway segment improvements are necessary along the study segments because the segments are calculated to operate under capacity.

LINSCOTT LAW & GREENSPAN engineers

TECHNICAL APPENDICES

CITY OF GUADALUPE TRANSPORTATION STUDY FOR THE 2021 GENERAL PLAN UPDATE

February 14, 2022

LLG Ref. 3-21-3463

APPENDIX A

TRAFFIC COUNTS

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

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

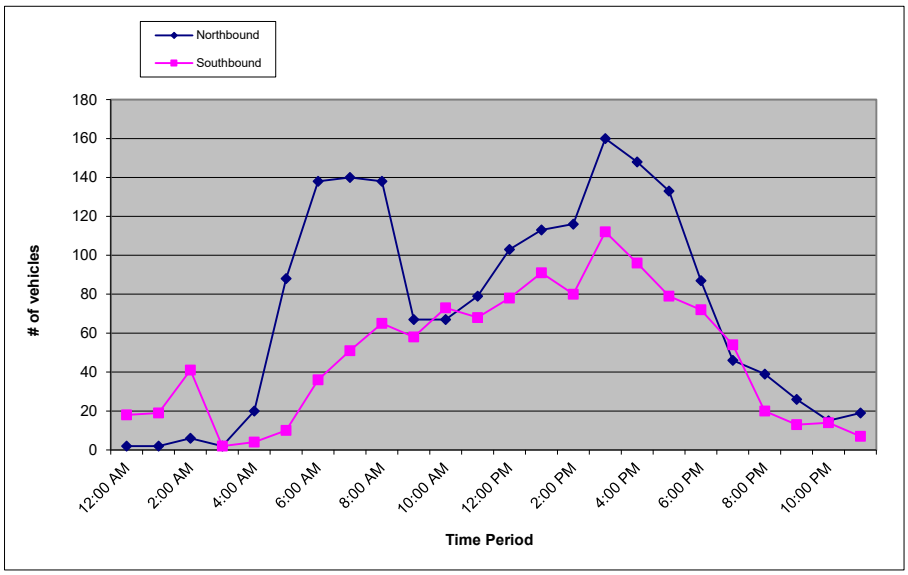
24 Hour Volume Report

Prepared For: **Linscott, Law & Greenspan**
4542 Ruffner St, Suite 100
San Diego, CA 92111

LOCATION Obispo St btwn Main / Amber
LATITUDE 34.9578269
COUNTY Santa Barbara
LONGITUDE -120.5706707
DATE COLLECTED Wednesday, December 15, 2021
WEATHER Clear
NUMBER OF LANES 2

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	1	0	0	1	**2**	2	2	4	10	**18**	**20**
1:00 AM	0	0	2	0	**2**	9	8	0	2	**19**	**21**
2:00 AM	2	0	3	1	**6**	13	9	14	5	**41**	**47**
3:00 AM	1	0	1	0	**2**	2	0	0	0	**2**	**4**
4:00 AM	2	4	6	8	**20**	2	1	1	0	**4**	**24**
5:00 AM	8	12	25	43	**88**	1	1	1	7	**10**	**98**
6:00 AM	26	37	40	35	**138**	12	6	9	9	**36**	**174**
7:00 AM	23	35	34	48	**140**	13	13	13	12	**51**	**191**
8:00 AM	58	43	17	20	**138**	15	16	25	9	**65**	**203**
9:00 AM	14	18	17	18	**67**	13	19	10	16	**58**	**125**
10:00 AM	17	19	13	18	**67**	9	23	23	18	**73**	**140**
11:00 AM	22	19	17	21	**79**	19	18	12	19	**68**	**147**
12:00 PM	17	24	31	31	**103**	20	17	26	15	**78**	**181**
1:00 PM	39	30	28	16	**113**	19	28	24	20	**91**	**204**
2:00 PM	24	25	31	36	**116**	16	19	17	28	**80**	**196**
3:00 PM	62	40	30	28	**160**	23	30	33	26	**112**	**272**
4:00 PM	31	42	30	45	**148**	32	17	24	23	**96**	**244**
5:00 PM	38	36	27	32	**133**	27	23	16	13	**79**	**212**
6:00 PM	26	22	24	15	**87**	21	19	21	11	**72**	**159**
7:00 PM	11	13	12	10	**46**	17	7	17	13	**54**	**100**
8:00 PM	8	12	10	9	**39**	8	4	4	4	**20**	**59**
9:00 PM	7	8	3	8	**26**	2	5	1	5	**13**	**39**
10:00 PM	3	3	4	5	**15**	6	2	2	4	**14**	**29**
11:00 PM	7	6	2	4	**19**	1	2	2	2	**7**	**26**
Total	**60.2%**				**1754**	**39.8%**				**1161**	
	2915										

AM%	**41.0%**	**AM Peak**	**239**	**7:30 am to 8:30 am**	**AM P.H.F.**	**0.82**
PM%	**59.0%**	**PM Peak**	**282**	**2:45 pm to 3:45 pm**	**PM P.H.F.**	**0.83**



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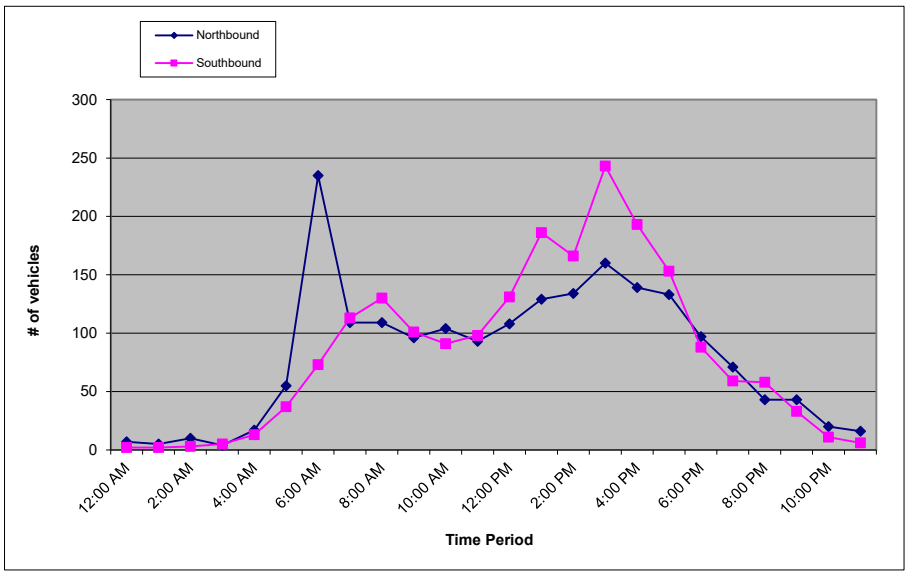
24 Hour Volume Report

Prepared For: **Linscott, Law & Greenspan**
4542 Ruffner St, Suite 100
San Diego, CA 92111

LOCATION Simas Rd n/o Main St
LATITUDE 34.9583395
COUNTY Santa Barbara
LONGITUDE -120.5582184
DATE COLLECTED Wednesday, December 15, 2021
WEATHER Clear
NUMBER OF LANES 2

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	1	1	4	1	**7**	0	2	0	0	**2**	**9**
1:00 AM	1	2	1	1	**5**	0	1	0	1	**2**	**7**
2:00 AM	3	2	3	2	**10**	0	1	0	2	**3**	**13**
3:00 AM	1	1	0	2	**4**	1	1	1	2	**5**	**9**
4:00 AM	2	6	5	4	**17**	1	2	7	3	**13**	**30**
5:00 AM	5	8	22	20	**55**	9	5	10	13	**37**	**92**
6:00 AM	52	77	66	40	**235**	15	11	24	23	**73**	**308**
7:00 AM	18	28	34	29	**109**	25	25	34	29	**113**	**222**
8:00 AM	44	16	26	23	**109**	30	39	37	24	**130**	**239**
9:00 AM	21	27	19	29	**96**	24	26	19	32	**101**	**197**
10:00 AM	27	33	24	20	**104**	26	25	27	13	**91**	**195**
11:00 AM	20	21	31	21	**93**	23	21	27	27	**98**	**191**
12:00 PM	15	32	29	32	**108**	34	30	31	36	**131**	**239**
1:00 PM	48	18	32	31	**129**	33	59	54	40	**186**	**315**
2:00 PM	36	36	37	25	**134**	37	46	40	43	**166**	**300**
3:00 PM	41	29	51	39	**160**	74	49	54	66	**243**	**403**
4:00 PM	28	40	32	39	**139**	47	47	47	52	**193**	**332**
5:00 PM	34	35	36	28	**133**	46	32	38	37	**153**	**286**
6:00 PM	24	18	29	26	**97**	27	24	22	15	**88**	**185**
7:00 PM	21	19	14	17	**71**	22	13	11	13	**59**	**130**
8:00 PM	12	9	15	7	**43**	19	8	10	21	**58**	**101**
9:00 PM	12	12	10	9	**43**	18	9	3	3	**33**	**76**
10:00 PM	6	5	5	4	**20**	3	1	4	3	**11**	**31**
11:00 PM	6	3	5	2	**16**	2	2	2	0	**6**	**22**
Total	**49.3%**				**1937**	**50.7%**				**1995**	
	3932										

AM%	**38.5%**	**AM Peak**	**308**	**6:00 am to 7:00 am**	**AM P.H.F.**	**0.86**
PM%	**61.5%**	**PM Peak**	**403**	**3:00 pm to 4:00 pm**	**PM P.H.F.**	**0.88**



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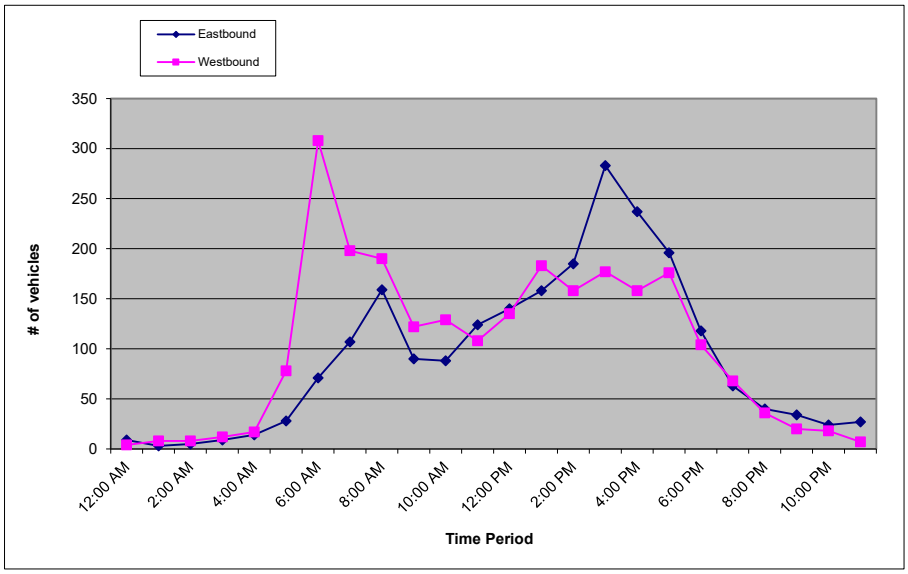
24 Hour Volume Report

Prepared For: **Linscott, Law & Greenspan**
4542 Ruffner St, Suite 100
San Diego, CA 92111

LOCATION 11th St btwn Cabrillo Hwy / Olivera St
LATITUDE 34.9724934
COUNTY Santa Barbara
LONGITUDE -120.5710102
DATE COLLECTED Wednesday, December 15, 2021
WEATHER Clear
NUMBER OF LANES 2

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	1	2	2	4	**9**	1	1	1	1	**4**	**13**
1:00 AM	2	1	0	0	**3**	3	0	3	2	**8**	**11**
2:00 AM	3	1	0	1	**5**	1	4	1	2	**8**	**13**
3:00 AM	4	2	1	2	**9**	3	3	1	5	**12**	**21**
4:00 AM	3	3	6	2	**14**	4	0	7	6	**17**	**31**
5:00 AM	6	3	8	11	**28**	8	12	29	29	**78**	**106**
6:00 AM	15	16	22	18	**71**	58	102	94	54	**308**	**379**
7:00 AM	17	26	26	38	**107**	46	46	54	52	**198**	**305**
8:00 AM	54	48	29	28	**159**	59	59	43	29	**190**	**349**
9:00 AM	22	28	18	22	**90**	29	29	36	28	**122**	**212**
10:00 AM	30	21	20	17	**88**	35	36	34	24	**129**	**217**
11:00 AM	27	41	24	32	**124**	25	23	36	24	**108**	**232**
12:00 PM	42	33	30	35	**140**	39	32	31	33	**135**	**275**
1:00 PM	42	40	37	39	**158**	46	59	41	37	**183**	**341**
2:00 PM	46	48	39	52	**185**	43	39	38	38	**158**	**343**
3:00 PM	86	55	57	85	**283**	41	39	52	45	**177**	**460**
4:00 PM	69	57	55	56	**237**	26	46	37	49	**158**	**395**
5:00 PM	54	37	49	56	**196**	36	41	48	51	**176**	**372**
6:00 PM	37	19	25	37	**118**	30	27	27	20	**104**	**222**
7:00 PM	28	15	10	10	**63**	41	12	7	8	**68**	**131**
8:00 PM	13	12	7	8	**40**	9	11	9	7	**36**	**76**
9:00 PM	12	6	7	9	**34**	5	7	5	3	**20**	**54**
10:00 PM	6	6	5	7	**24**	7	4	4	3	**18**	**42**
11:00 PM	8	10	6	3	**27**	3	1	3	0	**7**	**34**
Total	**47.7%**				**2212**	**52.3%**				**2422**	
	4634										

AM%	**40.8%**	**AM Peak**	**379**	**6:00 am to 7:00 am**	**AM P.H.F.**	**0.80**
PM%	**59.2%**	**PM Peak**	**460**	**3:00 pm to 4:00 pm**	**PM P.H.F.**	**0.88**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

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

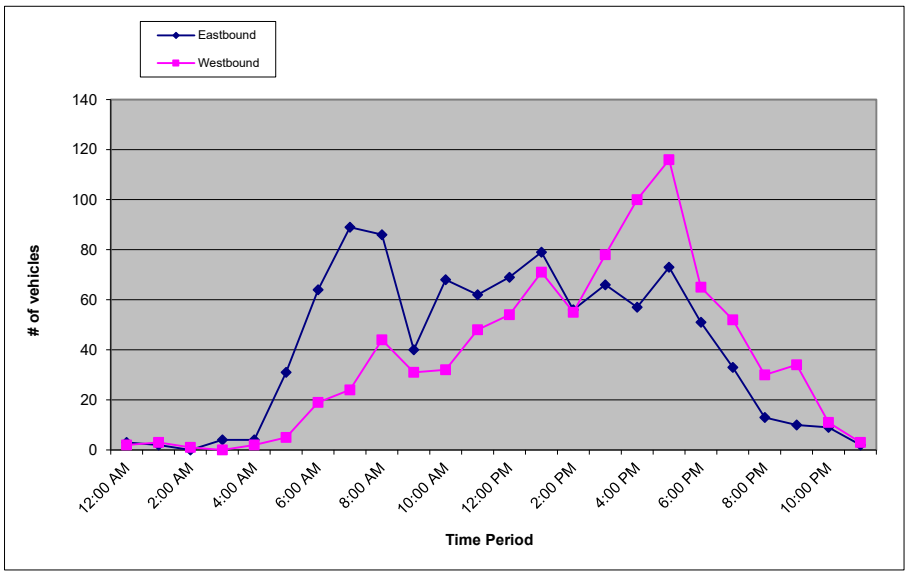
24 Hour Volume Report

Prepared For: **Linscott, Law & Greenspan**
4542 Ruffner St, Suite 100
San Diego, CA 92111

LOCATION 5th St btwn Campodonico Ave / Cabrillo Hwy
LATITUDE 34.9648382
COUNTY Santa Barbara
LONGITUDE -120.5744599
DATE COLLECTED Wednesday, December 15, 2021
WEATHER Clear
NUMBER OF LANES 2

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	1	0	2	0	**3**	1	0	0	1	**2**	**5**
1:00 AM	1	0	0	1	**2**	1	1	0	1	**3**	**5**
2:00 AM	0	0	0	0	**0**	1	0	0	0	**1**	**1**
3:00 AM	0	2	1	1	**4**	0	0	0	0	**0**	**4**
4:00 AM	0	0	2	2	**4**	1	0	0	1	**2**	**6**
5:00 AM	5	9	6	11	**31**	2	0	0	3	**5**	**36**
6:00 AM	7	16	20	21	**64**	4	3	6	6	**19**	**83**
7:00 AM	13	15	34	27	**89**	3	2	7	12	**24**	**113**
8:00 AM	39	22	18	7	**86**	9	14	17	4	**44**	**130**
9:00 AM	12	6	12	10	**40**	5	13	9	4	**31**	**71**
10:00 AM	14	17	21	16	**68**	7	12	7	6	**32**	**100**
11:00 AM	17	16	16	13	**62**	13	12	13	10	**48**	**110**
12:00 PM	15	15	21	18	**69**	12	16	11	15	**54**	**123**
1:00 PM	17	25	17	20	**79**	15	27	18	11	**71**	**150**
2:00 PM	15	18	11	12	**56**	17	11	10	17	**55**	**111**
3:00 PM	13	22	15	16	**66**	17	18	18	25	**78**	**144**
4:00 PM	19	9	15	14	**57**	16	22	29	33	**100**	**157**
5:00 PM	15	18	19	21	**73**	28	32	34	22	**116**	**189**
6:00 PM	7	20	9	15	**51**	22	17	18	8	**65**	**116**
7:00 PM	14	7	6	6	**33**	21	11	10	10	**52**	**85**
8:00 PM	3	4	4	2	**13**	8	9	9	4	**30**	**43**
9:00 PM	3	6	1	0	**10**	14	4	8	8	**34**	**44**
10:00 PM	1	3	2	3	**9**	4	3	3	1	**11**	**20**
11:00 PM	0	1	1	0	**2**	0	1	1	1	**3**	**5**
Total	**52.5%**				**971**	**47.5%**				**880**	
	1851										

AM%	**35.9%**	**AM Peak**	**164**	**7:30 am to 8:30 am**	**AM P.H.F.**	**0.85**
PM%	**64.1%**	**PM Peak**	**193**	**4:45 pm to 5:45 pm**	**PM P.H.F.**	**0.91**



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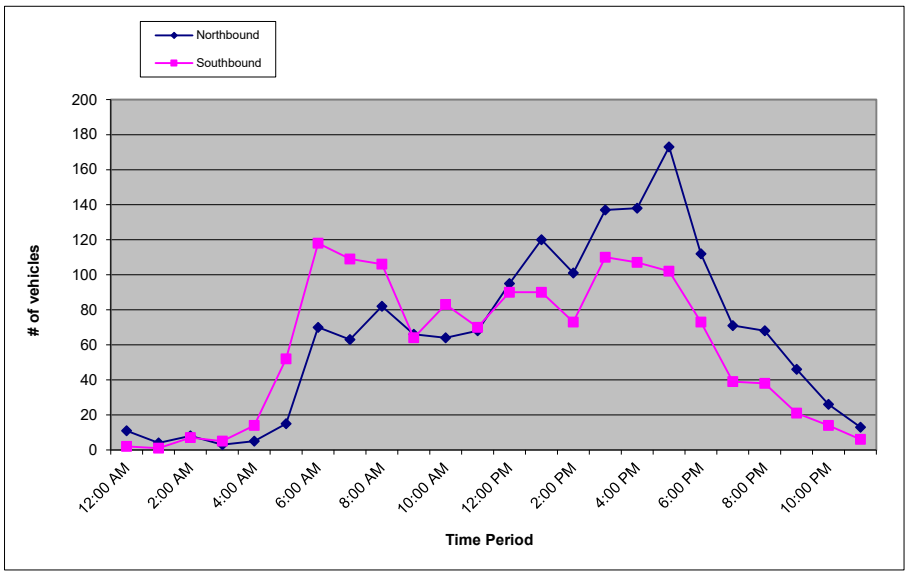
24 Hour Volume Report

Prepared For: **Linscott, Law & Greenspan**
4542 Ruffner St, Suite 100
San Diego, CA 92111

LOCATION Pioneer St btwn Almaguer Ave / Main St
LATITUDE 34.9579655
COUNTY Santa Barbara
LONGITUDE -120.5773038
DATE COLLECTED Wednesday, December 15, 2021
WEATHER Clear
NUMBER OF LANES 2

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	3	5	1	2	**11**	2	0	0	0	**2**	**13**
1:00 AM	3	1	0	0	**4**	0	1	0	0	**1**	**5**
2:00 AM	4	1	2	1	**8**	4	1	2	0	**7**	**15**
3:00 AM	2	0	1	0	**3**	1	0	1	3	**5**	**8**
4:00 AM	0	1	2	2	**5**	1	0	4	9	**14**	**19**
5:00 AM	1	2	7	5	**15**	13	4	14	21	**52**	**67**
6:00 AM	16	16	21	17	**70**	34	24	41	19	**118**	**188**
7:00 AM	18	12	17	16	**63**	23	27	29	30	**109**	**172**
8:00 AM	24	21	28	9	**82**	28	24	31	23	**106**	**188**
9:00 AM	14	19	20	13	**66**	19	13	19	13	**64**	**130**
10:00 AM	16	12	17	19	**64**	25	16	18	24	**83**	**147**
11:00 AM	16	24	11	17	**68**	17	23	15	15	**70**	**138**
12:00 PM	22	19	22	32	**95**	14	24	24	28	**90**	**185**
1:00 PM	24	41	30	25	**120**	16	18	32	24	**90**	**210**
2:00 PM	24	23	30	24	**101**	19	13	22	19	**73**	**174**
3:00 PM	29	40	37	31	**137**	37	38	14	21	**110**	**247**
4:00 PM	31	30	40	37	**138**	29	27	24	27	**107**	**245**
5:00 PM	48	40	46	39	**173**	32	24	22	24	**102**	**275**
6:00 PM	40	36	23	13	**112**	33	16	15	9	**73**	**185**
7:00 PM	7	18	28	18	**71**	7	9	10	13	**39**	**110**
8:00 PM	17	19	18	14	**68**	7	16	6	9	**38**	**106**
9:00 PM	12	11	17	6	**46**	10	4	6	1	**21**	**67**
10:00 PM	6	14	2	4	**26**	6	5	2	1	**14**	**40**
11:00 PM	3	3	6	1	**13**	0	2	3	1	**6**	**19**
Total	**52.8%**				**1559**	**47.2%**				**1394**	
	2953										

AM%	**36.9%**	**AM Peak**	**188**	**6:00 am to 7:00 am**	**AM P.H.F.**	**0.76**
PM%	**63.1%**	**PM Peak**	**276**	**4:45 pm to 5:45 pm**	**PM P.H.F.**	**0.86**



APPENDIX B

COLLISION DATA

CASE_ID	Year	Date	Time	Day	Primary Road	Secondary Road	Distance	Direction	Intersection	Severity	Fatalities	Number Injured	Party Count	Primary Collision Factor	Type of Collision	MVIW	Pedestrian Involved	Bicycle Involved	Alcohol Involved	Longitude	Latitude
7168315	2016	1/7/2016	1850	Thursday	GUADALUPE ST	RT 1	0		N	4	0	1	2	A	G	B	Y			-120.5734851	34.96980629
6292917	2017	7/24/2017	1503	Monday	RT 166	W MAIN ST 4500 BLOCK	0		N	1	1	0	2	A	D	F				-120.573544	34.95752425
8309772	2016	12/30/2016	1215	Friday	PIONEER ST	WONG ST	12	S	N	3	0	1	2	A	D	C				-120.5776078	34.96362709
8768223	2018	12/8/2018	610	Saturday	GUADALUPE ST	10TH ST	187	S	N	4	0	1	2	A	G	B	Y			-120.5724411	34.97146225
8726349	2018	9/4/2018	1745	Tuesday	11TH ST	GULARTE RD	0		Y	4	0	1	3	A	C	C				-120.5637207	34.96936035
6673729	2014	11/6/2014	1115	Thursday	TOGNAZZINI AV	5TH ST	386.8	N	N	3	0	3	1	A	E	I				-120.5764808	34.96590222
6749159	2014	11/18/2014	830	Tuesday	GUADALUPE ST	10TH ST	0		Y	4	0	2	2	A	C	D				-120.5724405	34.97146215
8352594	2017	4/24/2017	2000	Monday	GUADALUPE AV	9TH ST	0		N	4	0	1	2	A	D	C			Y	-120.5730801	34.97044224
8440870	2017	6/30/2017	2002	Friday	11TH ST	ESCALANTE ST	0		Y	4	0	1	2	A	D	C				-120.5655699	34.97016004
8496923	2017	11/7/2017	1730	Tuesday	WEST MAIN ST	PACIFIC DUNES WY	0		Y	3	0	2	2	A	B	C				-120.5852999	34.95763002
8405715	2017	6/24/2017	2240	Saturday	OBISPO ST	CEDAR ST	0		Y	4	0	1	2	A	C	E			Y	-120.5706499	34.96025001
7098726	2015	10/6/2015	718	Tuesday	OBISPO ST	4TH	10		N	4	0	1	2	D	G	B	Y			-120.5706	34.96402011
6344241	2014	3/30/2014	1450	Sunday	OLIVERA ST	9TH ST	31	S	N	3	0	1	2	A	D	G		Y		-120.5720143	34.96990303
8036131	2016	4/10/2016	1800	Sunday	PACIFIC DUNES WY	SURF BIRD LN	0		Y	3	0	1	2	A	D	D				-120.5845399	34.95960004
8543388	2017	5/21/2017	1130	Sunday	HERNANDEZ DR	MILLS LN	0		-	4	0	2	2	A	B	C				-120.5785999	34.95900004
6745913	2014	11/6/2014	1949	Thursday	11TH ST	OBISPO ST	93	E	N	4	0	1	2	C	B	E				-120.5680576	34.97122756
7112494	2015	10/18/2015	240	Sunday	SIMAS RD	11TH ST	0		Y	4	0	2	1	A	F	J				-120.55837	34.96686007
8561213	2018	1/5/2018	1700	Friday	W MAIN	RAILROAD TRACKS	0		Y	4	0	1	2	A	C	C				-120.5735474	34.95752335
7174983	2016	1/24/2016	1030	Sunday	OBISPO ST	CEDAR ST	45	S	N	3	0	1	2	C	C	E				-120.5706516	34.9601264
8387083	2017	6/12/2017	1752	Monday	GUADALUPE ST	GUADALUPE ST 889	0		N	4	0	3	2	A	D	C				-120.5732422	34.97018764
8493359	2017	10/31/2017	1505	Tuesday	WEST MAIN ST	OBISPO ST	135	E	N	4	0	1	2	A	A	C				-120.5703478	34.95748174
8163550	2016	10/22/2016	1513	Saturday	HERNANDEZ DR	HERNANDEZ ST	18	N	N	4	0	1	2	A	-	C				-120.58087	34.95899
7180379	2016	1/29/2016	845	Friday	WEST MAIN ST	PACIFIC DUNES WY	0		Y	4	0	1	2	A	-	-				-120.5852999	34.95763002
8114931	2016	7/16/2016	1356	Saturday	GUADALUPE ST	WEST MAIN ST	31	S	N	4	0	1	2	A	C	C				-120.5740299	34.95732151
8377222	2017	5/25/2017	1910	Thursday	SIMAS RD	11TH ST	215	N	N	3	0	1	1	A	F	J			Y	-120.55837	34.96686
8438772	2017	8/11/2017	615	Friday	WEST MAIN ST	OBISPO ST	0		Y	4	0	1	2	A	B	C				-120.5708761	34.95748624
8122946	2016	8/30/2016	1751	Tuesday	WEST MAIN ST	PACIFIC DUNES WY	17	W	N	3	0	1	2	A	D	C				-120.5853567	34.95763083

APPENDIX C

EXCERPTS OF THE CITY OF GUADALUPE PEDESTRIAN & BICYCLE MASTER PLAN – EXISTING CONDITIONS FIGURE

Figure 3-5 Existing Bicycle Network

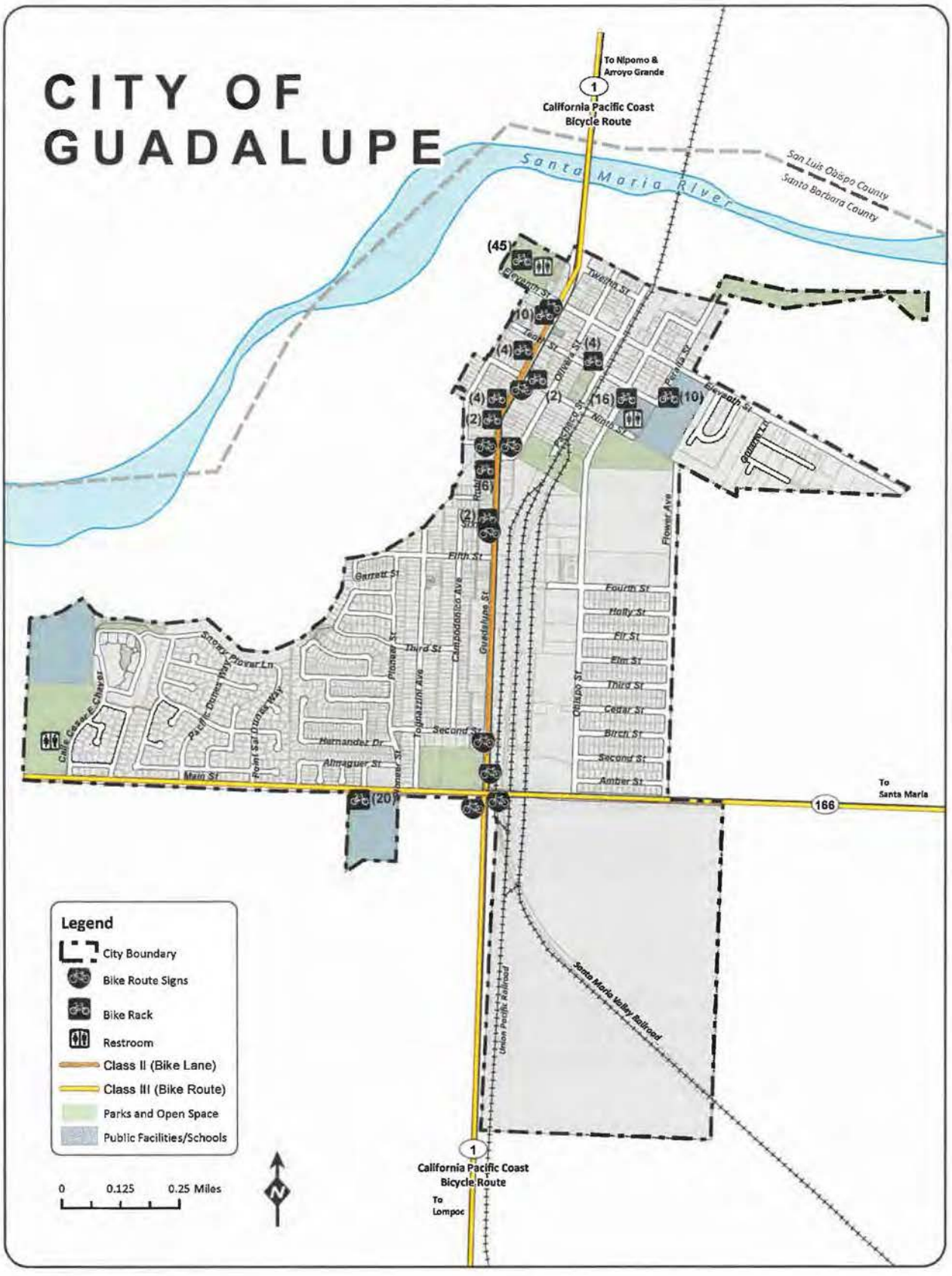
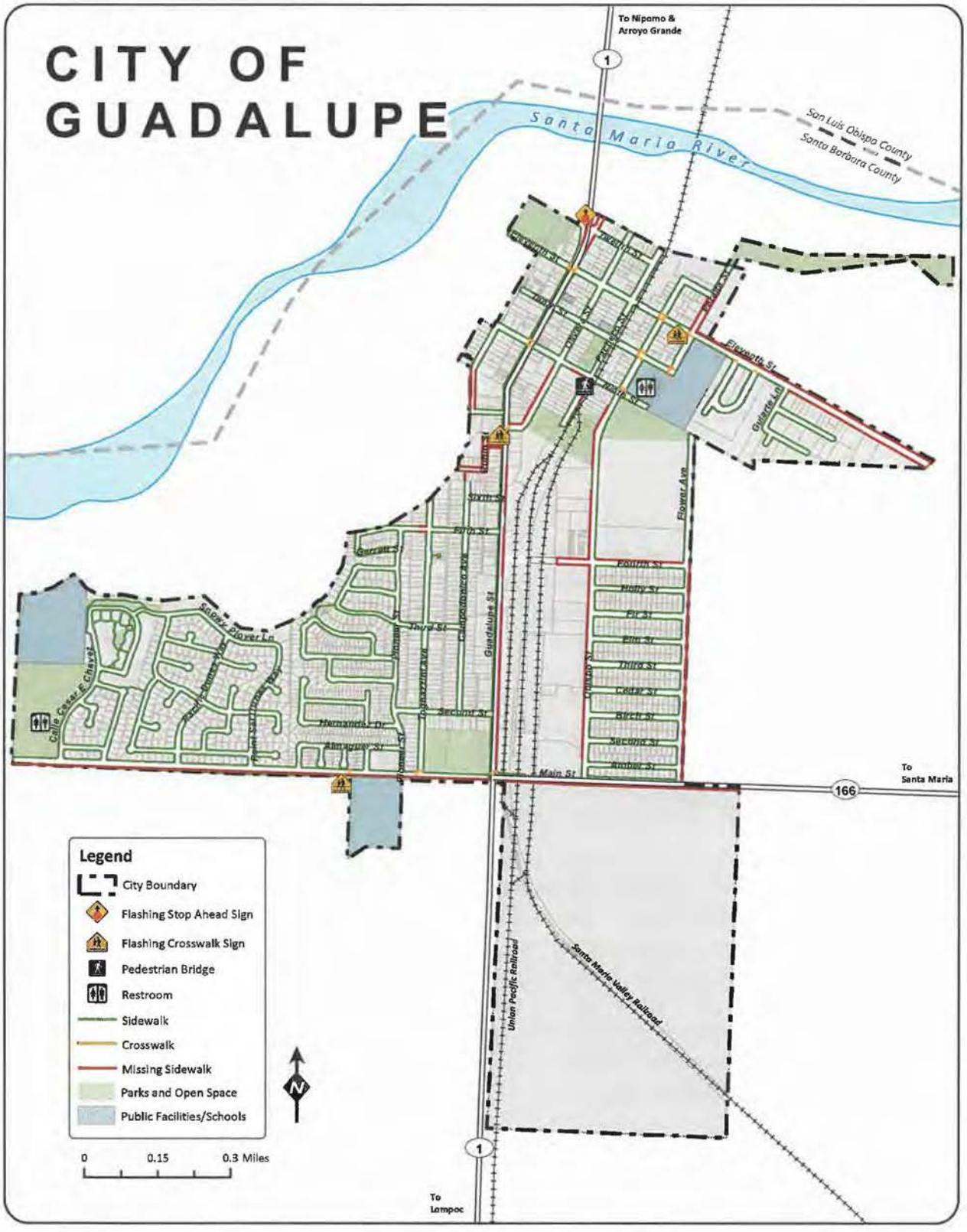


Figure 4-5 Existing Pedestrian Network



APPENDIX D

EXCERPTS OF VARIOUS PLANNING STUDIES – PLANNED PEDESTRIAN & BICYCLE IMPROVEMENTS

City of Guadalupe
Bicycle & Pedestrian Master Plan

Final Report

Prepared for:

City of Guadalupe
918 Obispo Street
Guadalupe, CA 93434

Submitted by:

Rincon Consultants, Inc.
Environmental Scientists Planners Engineers

Funded by:

California Department of Transportation
FY 12/13 Environmental Justice
Transportation Planning Grant Program

February 25, 2014

3.4 Proposed Bicycle Improvements and Programs

This section identifies bicycle improvements and programs to meet the needs of the community based on an evaluation of existing infrastructure, commute patterns, accident data, and public input. The improvements identified in this section and shown on Figure 3-7 are designed to attract and encourage residents of Guadalupe to utilize the bicycle network as a safe and convenient mode of transportation within the city. Please note that the Santa Maria Levee Trail is not proposed as part of this plan, as it is outside of the jurisdiction of the City and is being implemented regionally. The proposed multi-use trail is shown on Figure 3-7 since it is an important regional connector for Guadalupe.

3.4.1 Bicycle Network Improvements

The recommended bikeway network is a backbone of primary routes within the city; it is not meant to accommodate every bicycle trip in the city. Secure bicycle parking and appropriate signage are also important components of the bicycle network which provide support and enhance safety for all users. Once completed, this network would provide safer and more direct routes for the majority of cyclists within Guadalupe and traveling to neighboring communities. It considers the range of age and skill level (adults, novice and children) of those that chose to travel by bicycle. Proposed locations for bicycle infrastructure improvements are listed below and shown on Figure 3-7.

#	Proposed Improvements
Bikeway Improvements	
B.1	Re-stripe existing Class II bike lanes and pavement markings along Guadalupe Street/Highway 1
B.2	Add Class II bike lanes and appropriate signage along both sides of Main Street/Highway 166 within the city limits
B.3	Add Class II bike lanes and appropriate signage along the extension of Obispo Street through the DJ Farms Specific Plan area, consistent with the approved specific plan
B.4	Add a Class III bike route and appropriate signage along Obispo Street between Eleventh Street and Main Street/Highway 166
B.5	Add a Class III bike route and appropriate signage along the entire length of Eleventh Street within the city limits
B.6	Add a railroad overcrossing connecting Fourth Street to Guadalupe Street/Highway 1
B.7	Add a railroad overcrossing within the DJ Farms Specific Plan area as identified in the approved DJ Farms Specific Plan
Bicycle Parking	
B.8	Add short-term (Class II) bicycle parking in the downtown, at identified bus stops(see B.13), and at other key locations including the library and Amtrak station
B.9	Add long-term (Class I) bicycle parking at the Amtrak station
Signage	
B.10	Add directional way-finding signage to community and regional attractions
Bicycle Support Facilities	
B.11	Add a do-it-yourself bicycle repair station in the downtown
B.12	Add public restrooms at or near the Amtrak station

3.4.2 Multi-Modal Connections

Use of multi-modal connections within the city, including the bus stops and Amtrak station, could be greatly improved by providing safe and convenient access to transit stops, secure bicycle parking, and adequate shelter. The following recommendations are designed to encourage bicycling to and from transit stops within the city.

#	Proposed Improvements
Multi-modal Connections	
B.13	Add bicycle parking at the bus stops on Guadalupe Street/Highway 1 at Olivera Street, at O'Connell Park, and on Obispo Street between Holly Street and Fir Street
B.14	Add covered shelters with benches at the bus stops at Main Street/Highway 166 at Point Sal Dunes Way, Fifth Street at Third Street, Obispo Street between Holly Street and Fir Street, Flower Avenue at Birch Street, and Amber Street at Obispo Street

3.4.3 Education and Outreach Programs

Education and outreach is a key component to the BPMP, as the BPMP will only be effective if the bicycle network is safe and utilized by the community. Input from stakeholder groups and the public has identified the need for better awareness regarding bicycling in the city. To address these issues, education and outreach programs that focus on safety and/or encourage bicycling should be implemented. Proposed education and outreach programs are listed below.

#	Proposed Programs
Education and Outreach Programs	
B.15	Publish the city bicycle map on the City's website and post on a sign at the entrance to the city
B.16	Partner with Traffic Solutions, a county-wide program by SBCAG that promotes alternative transportation through various incentive programs
B.17	Partner with local organizations to educate students about potential bicycling paths to school
B.18	Hold a community event (such as bike to school day) at least once a year to encourage alternative transportation; focus on safety

Please note that the Santa Maria Levee Trail is not proposed as part of this plan, as it is outside of the jurisdiction of the City and is being implemented regionally. The trail is shown on Figure 4-7 since it is an important regional connector for bicyclists and pedestrians Guadalupe.

4.4.1 Pedestrian Network Improvements

Figure 4-7 and the list below identify the recommended improvements to the pedestrian network based on the results of the existing conditions assessment and community needs analysis. Installing sidewalks at the following locations will close gaps in the pedestrian network and facilitate pedestrian access to destinations throughout the city. In addition, enhancing visibility of pedestrians by improving existing crossings or adding new crosswalks at stop or signal controlled intersections may improve safety of residents walking within the city.

#	Proposed Improvements
Sidewalks and Paths	
P.1	Add sidewalk along the east side of Guadalupe Street/Highway 1 between Olivera Street and Main Street/Highway 166
P.2	Add sidewalk along the northwest side of Olivera Street between Ninth Street and Guadalupe Street/Highway 1
P.3	Add sidewalk along the southeastern side of Eleventh Street between Gularte Lane and Simas Road
P.4	Add sidewalk along the south side of Main Street/Highway 166 between Kermit McKenzie Jr. High and the eastern city limits
P.5	Add sidewalk along Fifth Street just west of Tognazzini Avenue
P.6	Add sidewalk along Seventh Street
P.7	Add sidewalk along Rubio Street
P.8	Add sidewalk along Pacheco Street just south of Ninth Street
P.9	Add sidewalk along the west side Peralta Street between Eleventh and Twelfth Street
P.10	Add a walking path with emergency access in the Ninth Street wetland complex
Crosswalks (at Controlled Intersections Only)	
P.11	Add painted crosswalks at the intersections of Main Street/Highway 166 and Flower Avenue (if a signal control is installed), Obispo Street, Guadalupe Street/Highway 1, Pioneer Street, Julia Drive, Nelson Drive, Point Sal Dunes Way, Pacific Dunes Way, Santa Barbara Street, and Calle Cesar E Chavez
P.12	Add painted crosswalks at the intersections of Second Street and Guadalupe Street/Highway 1 and Tognazzini Avenue
P.13	Add painted crosswalks at the intersections of Third Street and Pioneer Street, Tognazzini Avenue, and Campodonico Avenue
P.14	Add painted crosswalks at the intersections of Fifth Street and Tognazzini Avenue, Campodonico Avenue, and Guadalupe Street/Highway 1
P.15	Add painted crosswalks at the intersection of Sixth Street and Guadalupe Street/Highway 1
P.16	Add painted crosswalks at the intersections of Ninth Street and Olivera Street and Obispo Street
P.17	Add painted crosswalks at the intersections of Tenth Street and Guadalupe Street/Highway 1, Olivera Street, and Obispo Street
P.18	Add painted crosswalks at the intersection of Eleventh Street and Olivera Street
P.19	Add painted crosswalks at the intersection of Hernandez Drive and Pioneer Street

Signage	
P.20	Add a flashing crosswalk sign at the intersection of Main Street/Highway 166 and Tognazzini Avenue
P.21	Add advanced flashing pedestrian warning signs prior to the intersection of Guadalupe Street/Highway 1 and Olivera Street from both northbound and southbound directions
Streetscape Improvements	
P.22	Add lighting and/or landscaping along Guadalupe Street/Highway 1 between Eleventh Street and the Amtrak station, along Eleventh Street, and along Ninth Street between Obispo Street and Guadalupe Street/Highway 1
Pedestrian Support Facilities	
P.23	Install public restrooms at or near the Amtrak station

4.4.2 Multi-Modal Connections

Multi-modal connections within the city, between pedestrians and transit (including bus and train), could be greatly improved by providing safe and convenient pedestrian access to transit stops and adequate shelter at transit stops. The following recommendations are designed to encourage walking to transit stops within the city.

#	Proposed Improvements
Multi-modal Connections	
P.24	Install covered shelters with benches at the bus stops at Main Street/Highway 166 at Point Sal Dunes Way, Fifth Street at Third Street, Obispo Street between Holly Street and Fir Street, Flower Avenue at Birch Street, and Amber Street at Obispo Street

4.4.3 Education and Outreach Programs

Education and outreach is a key component to the BPMP, as the BPMP will only be effective if the pedestrian network is safe and utilized by the community. Public input gathered during the planning process indicates a need for better pedestrian awareness in the city. To address these issues, the following education, outreach, and enforcement programs that focus on safety and/or encourage walking were identified.

#	Proposed Programs
Education and Outreach Programs	
P.25	Publish the pedestrian network map on the City's website
P.26	Partner with Traffic Solutions, a county-wide program by SBCAG that promotes alternative transportation through various incentive programs
P.27	Partner with local organizations to educate students about potential walking paths to school
P.28	Hold a community event (such as walking tours, and/or street fairs) at least once a year to encourage walking; focus on safety

Guadalupe Mobility + Revitalization Plan

City of Guadalupe

Final
February 2020

OPTICOS

Issue

3 Sidewalks and Safe Routes to School

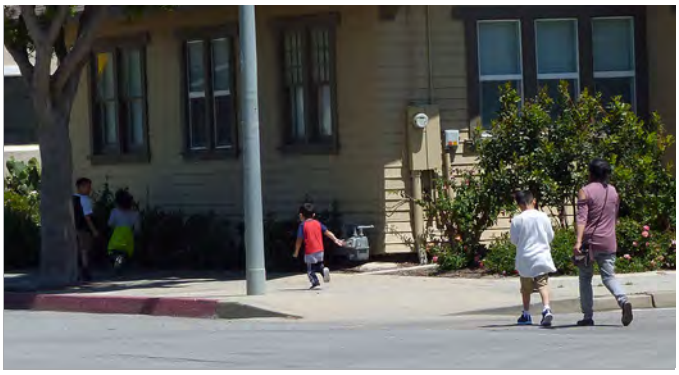


Figure 2.5.3 *Children walk along Guadalupe Street.*

Issue

Some destinations in Guadalupe, including schools, are inconvenient or difficult to access as a pedestrian or cyclist. Kermit McKenzie Intermediate School and Mary Buren Elementary School are accessible by sidewalk, but both schools are located on high-traffic roadways where the community reports that drivers frequently exceed the speed limit—W. Main Street and 11th Street, respectively—creating a difficult environment for children going to and from school. Portions of major streets, like W. Main Street and Guadalupe Street, only have sidewalks on one side, forcing extra pedestrian crossings.

Opportunity

Guadalupe's compact size means that most places in town would be within walking distance to each other with appropriate connections. Limiting the need to cross the street by providing sidewalks on both sides of major streets, and providing safe crosswalks at intersections, can help to minimize hazards to pedestrians and keep students walking to and from school safer. Separated bicycle lanes and paths can provide a safer and more convenient cycling experience for errands around town, children biking to school, and longer-distance trips.

Community members expressed particular concern about high vehicular speed on W. Main St. and 11th St, and support for improving walking along 11th St., from Obispo Street to Pasadera, and to encourage greater use of the existing pedestrian bridge across the railroad tracks.

Issue

4 Businesses and Services

Figure 2.5.4 *A mix of occupied and unoccupied retail spaces.*

Issue

Guadalupe's retail and services are limited, and don't meet all shopping and dining needs of residents. Guadalupe is home to a variety of restaurants, stores, and service-oriented busineses. While these satisfy many of the shopping and dining needs of Guadalupe residents and workers, it is necessary to travel to Santa Maria or other nearby cities to shop at a full service grocery store or dine at a restaurant with late-night operating hours. Addtionally, high turnover of busineses in Guadalupe indicates a challenging operating environment.

Opportunity

Guadalupe Street is a unique retail environment. An improved public realm, programming, and events along the street, and a robust branding and wayfinding strategy could help bring awareness to local businesses and draw people from Guadalupe and surrounding communities to patronize local businesses. Chapter 4, Implementation Strategies, details a suite of strategies that can be used to support local businesses.

Locating more businesses within proximity to existing businesses creates a convenient "one-stop" shopping environment that attracts more customers making everyday and convenience purchases. To that end, vacant and underutilized parcels along Guadalupe Street can be targeted for infill development.

3.a

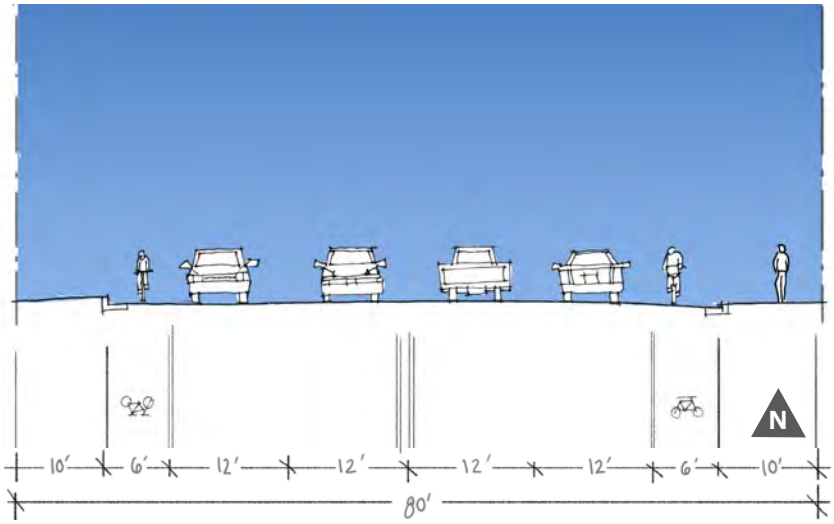
Obispo Street (South of W. Main Street)

Potential Improvements

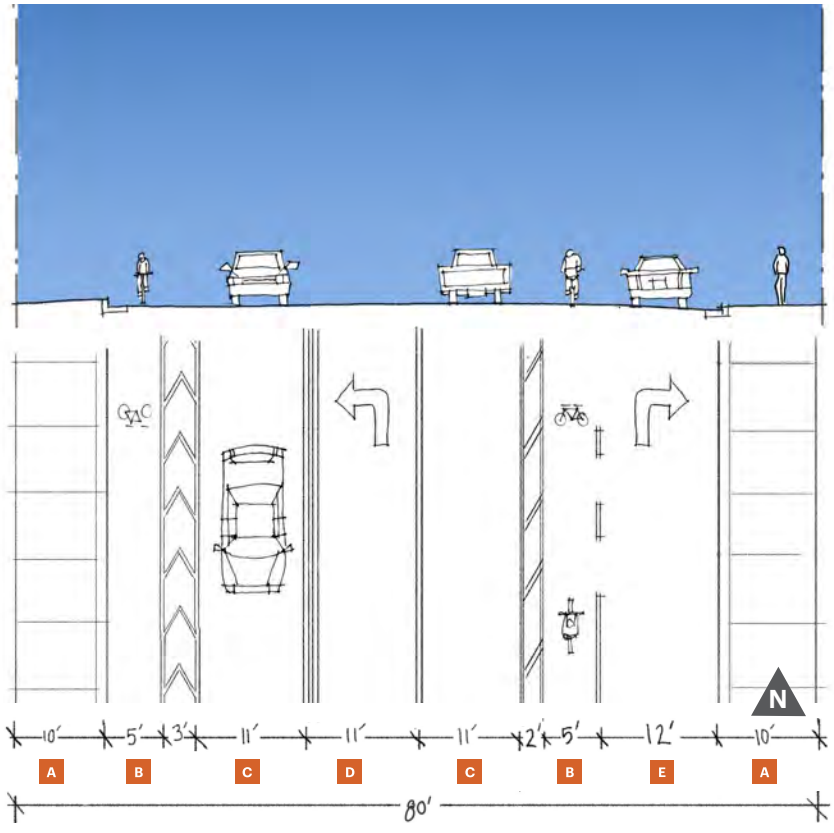
These design options build upon the street design included in the D.J. Farms Specific Plan to provide a more robust multi-modal street.

- A Maintain sidewalk
- B Restripe lanes for buffered bicycle lanes on both sides of street.
- C Demarcate 11' travel lanes.
- D Demarcate 11' center turn lane.
- E Demarcate 12' parallel parking lane on east side of street.

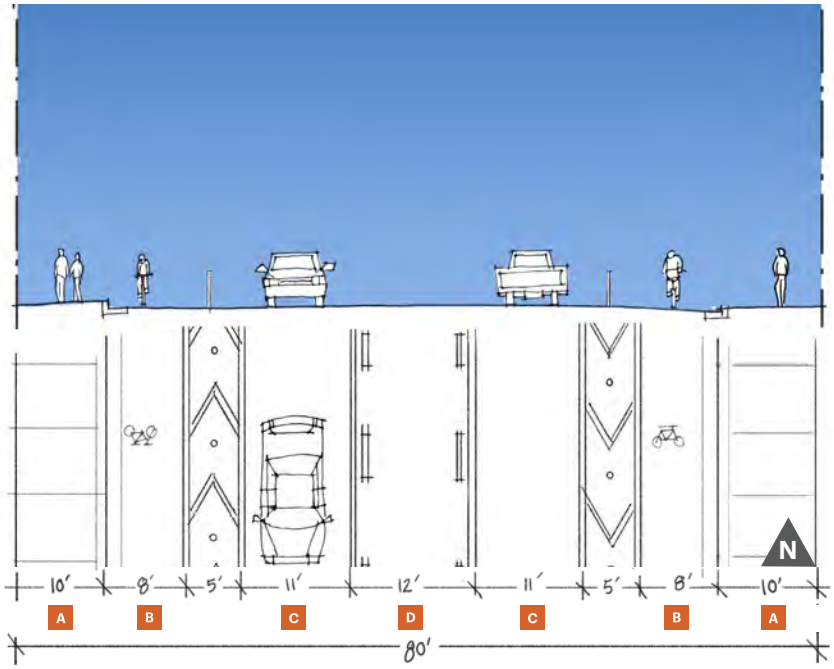
Condition Detailed in DJ Farms Specific Plan (looking north)



Near Intersection, Potential (1 of 2): Buffered bike lanes



Away from Intersection, Potential (1 of 2): Buffered bike lanes

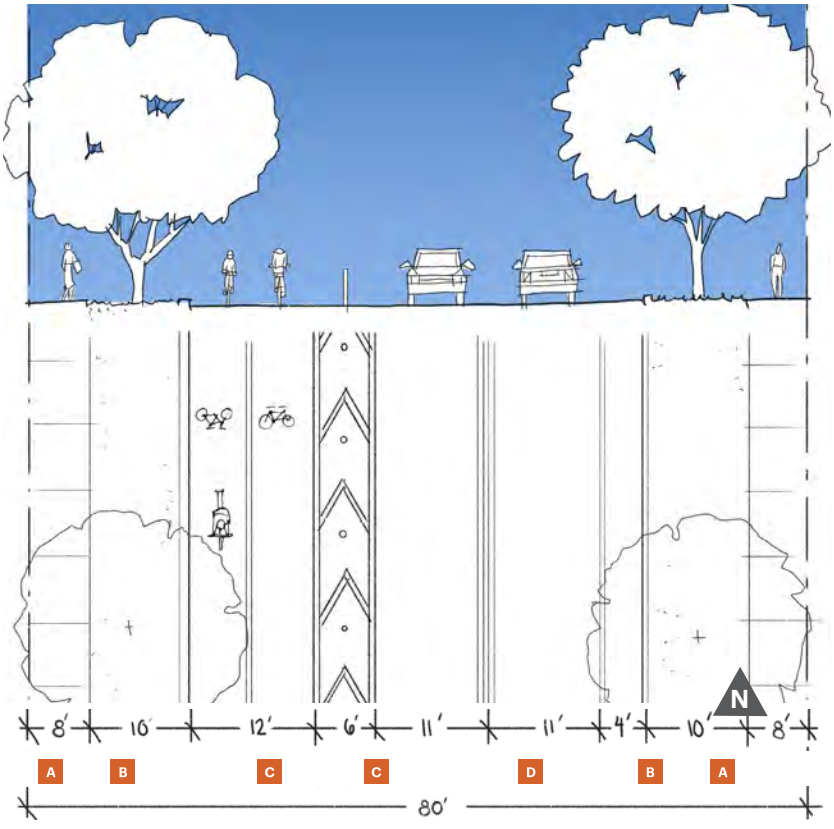


Potential Improvements

These design options build upon the street design included in the D.J. Farms Specific Plan to provide a more robust multi-modal street.

- **A** Maintain sidewalk
- **B** Restripe lanes for buffered bicycle lanes on both sides of street.
- **C** Demarcate 11' travel lanes.
- **D** Demarcate 12' center turn lane.

Away from Intersection, Potential (2 of 2): Separated 2-way cycle track



Potential Improvements

These design options build upon the street design included in the D.J. Farms Specific Plan to provide a more robust multi-modal street.

- **A** Maintain sidewalk
- **B** Plant trees in planter strip.
- **C** Demarcate 11' travel lanes.
- **D** Develop 2-way buffered bikeway with landscaped buffer (Class IV cycle track).

Figure 3.3.4 *Street existing condition*

3.b

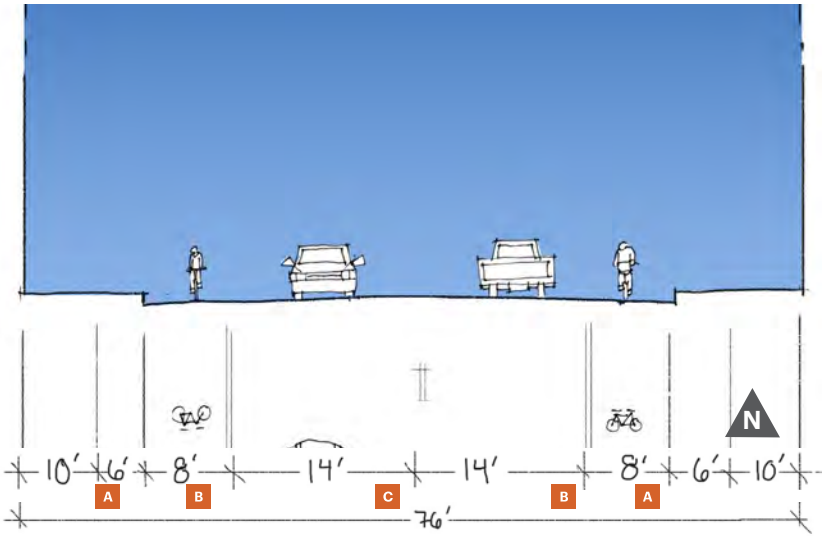
Obispo Street (South of Buena Vista Road)

Potential Improvements

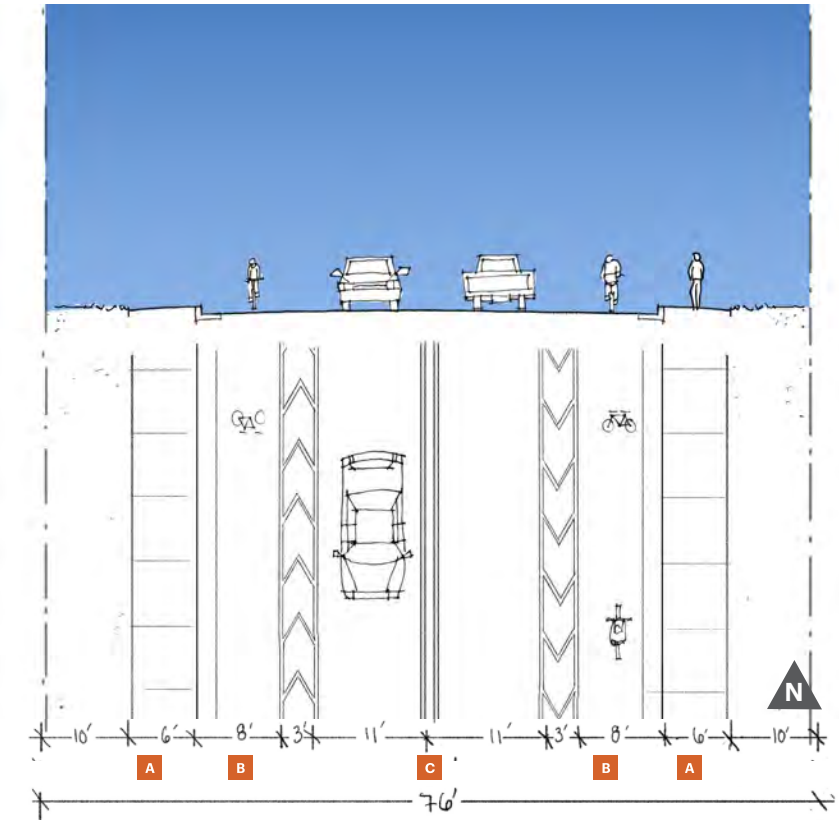
This design option builds upon the street design included in the D.J. Farms Specific Plan to provide a more robust multi-modal street.

- A Existing sidewalk
- B 8' buffered bicycle lane
- C Demarcate 11' travel lanes'.

Condition Detailed in DJ Farms Specific Plan (looking north)



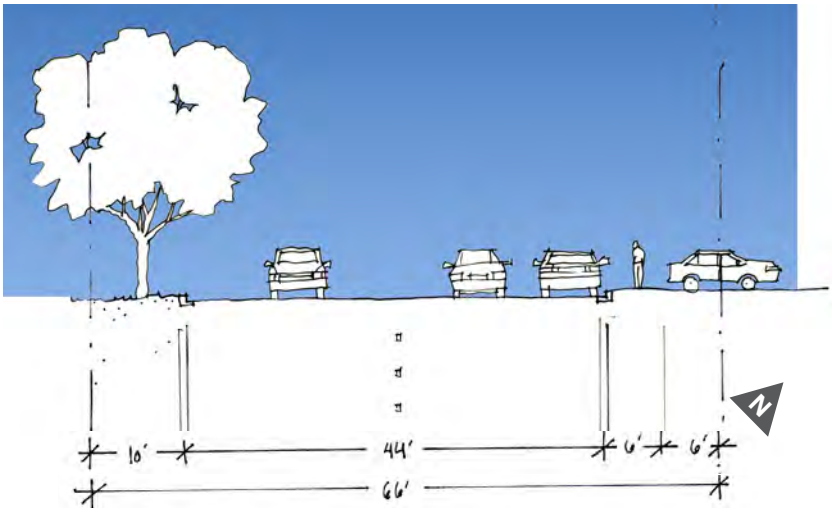
Potential: Buffered bike lanes



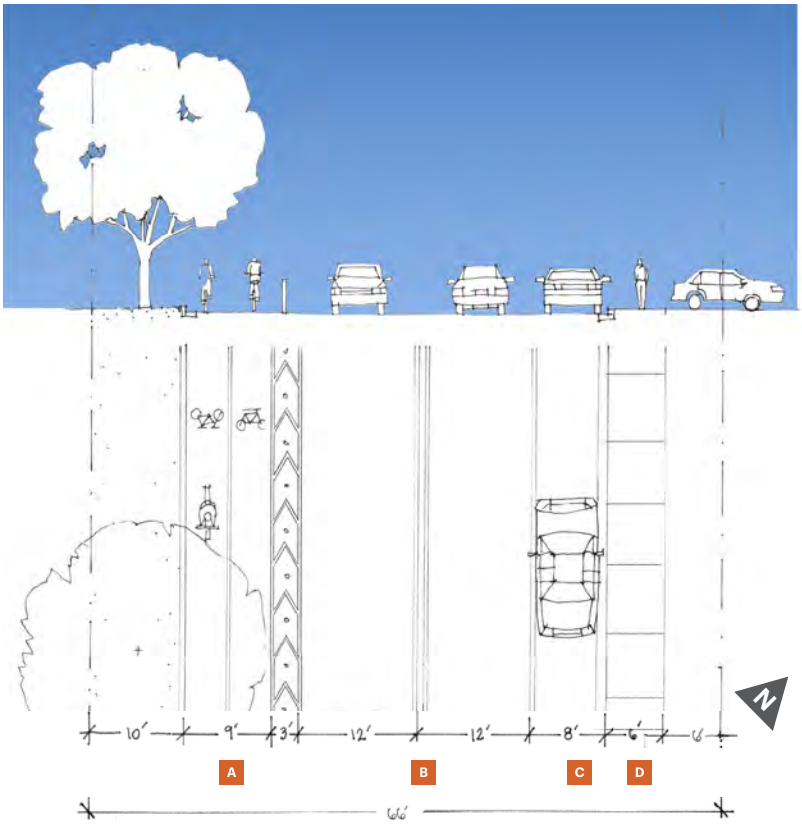
Obispo Street (9th Street to W. Main Street)

4

Existing Condition (looking north)



Potential 2-way buffered bicycle lanes + on-street parking



Potential Improvements

- **A** Buffered 2-way bikeway, making Class 4 cycle track.
- **B** Demarcate 12' travel lanes.
- **C** Restripe lines for parallel parking on east side.
- **D** Maintain sidewalk

Figure 3.3.5 *Street existing condition*

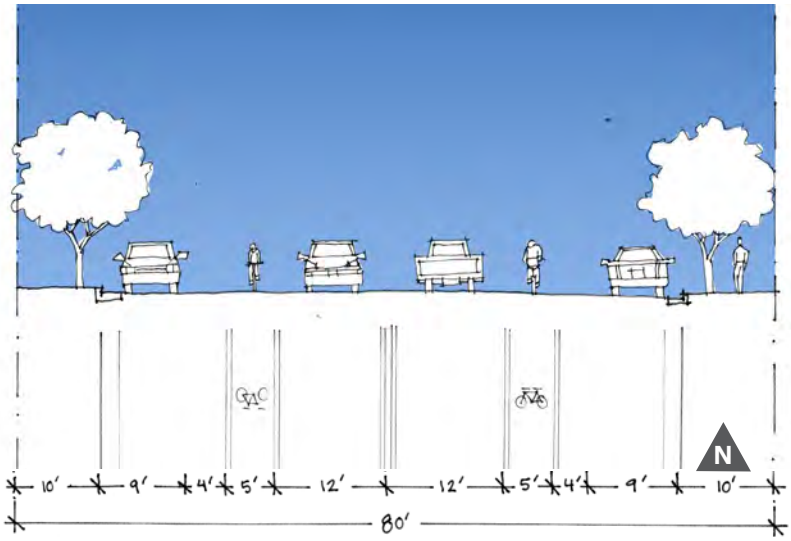
5

Guadalupe Street (Downtown)

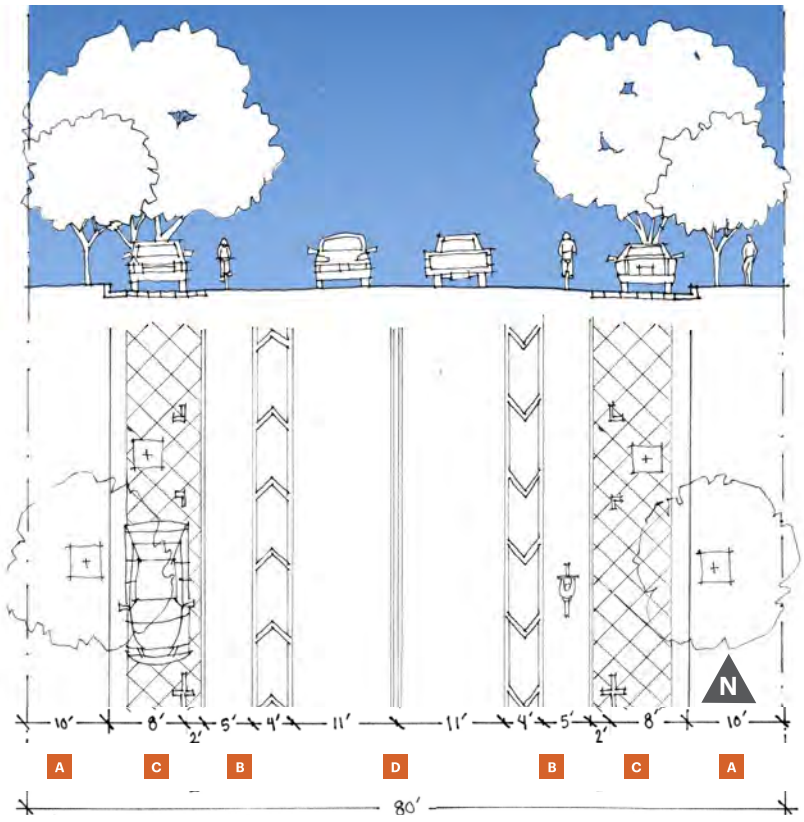
Potential Improvements

- **A** Maintain sidewalk
- **B** Buffered bikeway, providing Class 2 bicycle lanes or Class 4 cycle tracks.
- **C** Parallel parking, with space for trees. The trees shade the cars and narrow the road, slowing traffic. Optional permeable paving and rain garden to support water drainage.
- **D** Narrow travel lanes from 12' to 11'.

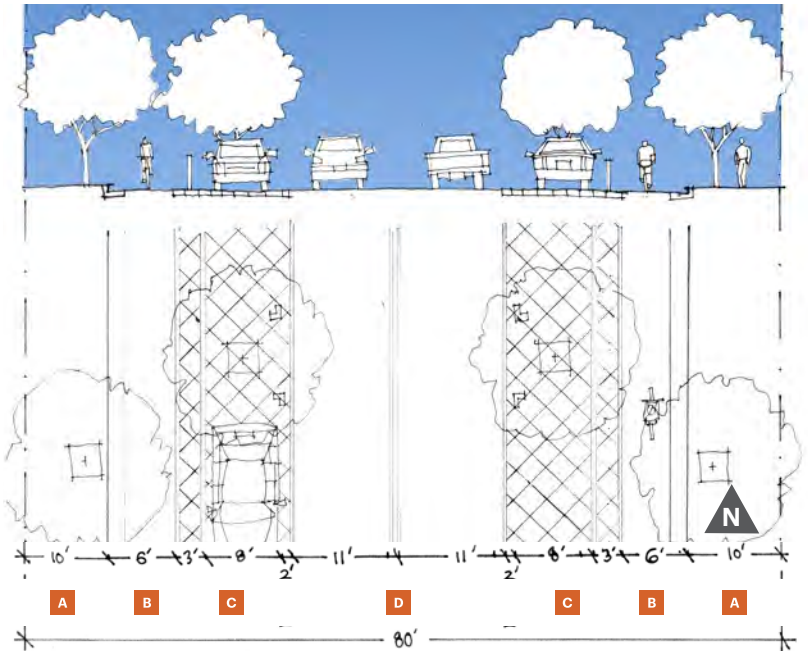
Existing Condition (looking north)



Potential (1 of 3): 1-way buffered bicycle lanes



Potential (2 of 3): Parking-separated 1-way buffered bicycle lanes



Potential (3 of 3): Parking-separated 2-way buffered bicycle lane

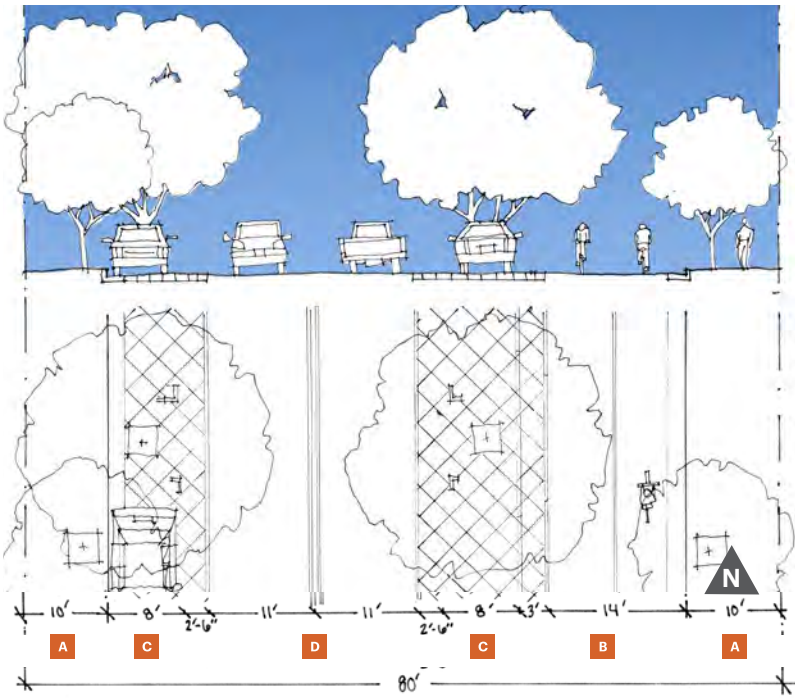


Figure 3.3.6 *Existing street condition*

Figure 3.3.7 *Potential street condition*

SBCAG Regional Bicycle and Pedestrian Plan
Santa Barbara County

SBCAG
santa barbara county association of governments

DRAFT – APRIL 2015

Table A-2: Regional Transportation Plan Bicycle and Pedestrian Projects (Page 2 of 2)

Index	Project/Program	RTP Status		Cost
RTP 26	*Santa Claus Lane to Carpinteria Avenue Multiuse Trail, Carpinteria*	*Planned*	*$*	*1,288,750*
RTP 27	Third Street Multiuse Trail, Linden Avenue to Marsh Park, Carpinteria	Planned	$	760,000
RTP 28	Rincon Trail, Rincon Park to Carpinteria Avenue, Carpinteria	Planned	$	2,385,000
RTP 29	Covington Way Pedestrian Bridge Replacement, Goleta	Planned	$	436,512
RTP 30	*Santa Ynez River (south side) Class I Bikeway, Lompoc Valley*	*Planned*	*$*	*1,889,396*
RTP 31	Class 2 Bikeways, various locations, Lompoc Valley	Planned	$	1,807,114
RTP 32	Cabrillo Blvd Class II Bike Lanes and Pedestrian Path, Santa Barbara	Planned	$	262,366
RTP 33	Class II Bike lanes and pedestrian pathways - Montecito St, Cliff Dr., Las Positas, Santa Barbara	Planned	$	154,500
RTP 34	Class II Bike lanes and pedestrian pathways - Various, Santa Barbara	Planned	$	2,018,129
RTP 35	Arroyo Burro Multi-Purpose Pathway, Modoc to Cliff Drive, Santa Barbara	Planned	$	3,748,083
RTP 36	Bikeway Improvements, various locations, Santa Maria Valley	Planned	$	7,116,401
RTP 37	SR-246 Class I Bikeway, HCA Park to West End , Santa Ynez Valley	Planned	$	748,307
RTP 38	South Alisal Road Class II Bike Lanes, Santa Ynez Valley	Planned	$	522,489
RTP 39	SR-246 Class II Bike Lanes, West End to Fifth Street , Santa Ynez Valley	Planned	$	8,665,831
RTP 40	West Main Class II Bike Lanes, Guadalupe to Dunes Park. Santa Maria Valley	Planned	$	3,748,083
RTP 41	Santa Maria Levee Multi Use Trail, Santa Maria to Guadalupe, Santa Maria Valley	Planned	$	249,436
RTP 42	CA Coastal Trail Feasibility Study, Phase I, Gaviota to San Onofre, South Coast	Planned	$	5,238,150
RTP 43	Replace Anapamu St Hwy 101 Bike/Ped Overcrossing, Santa Barbara	Unfunded, Illustrative	$	15,000,000
RTP 44	Construct bike path rail undercrossing at Calle Ocho, Carpinteria	Unfunded, Illustrative	$	507,000
RTP 45	Construct bike path rail undercrossing at Carpinteria Bluffs, Carpinteria	Unfunded, Illustrative	$	2,835,000
RTP 46	Santa Maria Levee Multi Use Trail, Santa Maria to Guadalupe, Santa Maria Valley	Unfunded, Illustrative	$	9,359,000
RTP 47	*Class I Bike Path near Lompoc Airport, connecting existing bikeways, Lompoc Valley*	*Unfunded, Illustrative*	*$*	*1,200,000*
RTP 48	*Bike Path connecting Hwy 1 to Allan Hancock Bikeway, Lompoc Valley*	*Unfunded, Illustrative*	*$*	*1,700,000*
RTP 49	Class I Bike Path near Railroad Corridor, South Coast/County	Unfunded, Illustrative	$	5,000,000
		Total Cost of Improvements	**$**	**235,822,391**

Also listed in a member jurisdiction plan

Guadalupe 2021 General Plan

Public Review Draft

July 30, 2021

3.4 PLANNED CALTRANS IMPROVEMENTS

The following projects are or will be implemented by the California Department of Transportation (Caltrans). This plan accommodates those projects that have been approved or for which implementation is underway, as described below. Some recommendations have been made in this plan for Caltrans projects that are still undergoing design or which have not yet been implemented. There may be opportunities to implement certain complete street elements within existing Caltrans projects.

Santa Maria River Bridge Replacement

The bridge supporting Guadalupe Street where it crosses the Santa Maria River will be replaced by Caltrans due to deteriorated structural integrity. The new bridge will be a "complete street" that includes facilities for motorists, pedestrians, and cyclists.

West Main Street/Guadalupe Street Signalization

A traffic signal with pedestrian crossing signals will be installed by Caltrans at the intersection of West Main Street and Guadalupe Street. Roadway and railroad crossing improvements will increase safety and operational efficiency of the intersection. This project is funded through mitigation fees paid by Unocal/ Chevron for the Guadalupe-Nipomo Dunes Restoration Plan. Initial designs studied a roundabout; however, proximity to railroad and cemetery made this option infeasible.

West Main Street Improvements

The DJ Farms Specific Plan, which provides standards for the development of the Pasadera neighborhood, requires intersection improvements along West Main Street at Obispo Street and Flower Avenue. State procedures require Caltrans to first consider roundabout treatments for intersections along state highways such as West Main Street. Assessment is underway to determine the suitability and desirability of roundabout designs prepared by Caltrans for these intersections. If roundabouts are proven infeasible at these locations, signalized 4-way intersections will be implemented. Regardless of the type of intersection design chosen, Caltrans is focusing on ADA-compliant curb ramps and well-lit, signaled crosswalks to improve pedestrian access.

Guadalupe Street Pedestrian Improvements

New and upgraded facilities for pedestrians will provide safer access across Guadalupe Street. New crosswalks with pedestrian-actuated warning lights will be installed at 6th Street, and the existing intersections at Olivera and 9th Streets will be upgraded with ADA-compliant ramps and pedestrian-actuated warning lights. A new sidewalk has been installed along the east side of Guadalupe Street to connect the Amtrak Station and bus stop to the existing sidewalk south of Olivera Street.

Highway 166 to Santa Maria River Bridge

Completed in 2013, this project reconstructed sidewalks, driveways, and curb ramps. In some areas, there is new sidewalk construction to help complete the pedestrian network in Guadalupe.

3.5 CIRCULATION CLASSIFICATIONS

The circulation network in this element was designed with the primary goal of creating a safe, efficient, multi-modal street system that facilitates mobility and connectivity, avoids congestion, and maintains the quality of life for residents. The circulation classifications used in the Circulation Diagram are described below.

Streets and Highway Classifications

State Highway

The primary purpose of state highways is to move regional traffic through the city. Two routes in Guadalupe as classified as State Highways: Highway 1 and Highway 166. Highway 1, or Guadalupe Street, bisects the City extending north into the Five Cities area of San Luis Obispo County and south through Orcutt and toward Vandenberg Space Force Base and Lompoc. Highway 1 is also designated as a Scenic Highway on the State's plan, necessitating special care in preservation of the scenic character of the route.

Highway 166 extends from the southerly edge of Guadalupe, east to Highway 101 in Santa Maria. It serves as an arterial between the two cities and also carries traffic between the two highways. Any increases in regional traffic as a result of increased population will likely occur along this route.

In Guadalupe, state highways have rights-of-way from 80 to 120 feet in width, typically with two to three wide lanes, plus parking and sidewalks.

Arterial Street

The primary purpose of arterial streets is to move traffic around and through the city. Three routes in Guadalupe are classified as arterial streets: 11Th Street, Simas Road, and West Main Street (west of Guadalupe Street). In Guadalupe, arterial streets have rights of way of 66 to 70 feet in width, typically with two travel lanes, plus parking, and sidewalks.

Collector Street

The primary purpose of collector streets is to provide access to adjacent properties and to serve as corridors for travel within the community. Because of this dual function, traffic volumes on collector streets may exceed the level that is deemed tolerable on a local street, even though the streets have similar rights-of-way and pavement width.

APPENDIX E

TECHNICAL MEMORANDUM ON PROJECT VMT METHODOLOGY

MEMORANDUM

To:	Ron Sissem EMC Planning	Date:	February 14, 2022
From:	K.C. Yellapu, PE, TE, PTOE Erika Carino, PE LLG, Engineers	LLG Ref:	3-21-3463
Subject:	City of Guadalupe General Plan Update - Project VMT Methodology		

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Woodland Hills

Linscott, Law & Greenspan, Engineers (LLG) has prepared this technical memorandum to discuss the Vehicle Miles Traveled (VMT) methodology utilized to calculate the VMT/Capita and VMT/Employee for the City of Guadalupe General Plan Update Transportation Impact Study.

VMT Background

VMT is defined as a measurement of miles traveled by vehicles within a specified region and for a specified time period. VMT is a measure of the use and efficiency of the transportation network. VMT's are calculated based on individual vehicle trips generated and their associated trip lengths..

Using the vehicle trips generation, associated trip lengths, and socio-economic data (i.e., employements and population), the VMT per Capita and VMT per Employee can be calculated for the Project. This is compared against the respective regional average thresholds to measure the transportation impacts.

Project Trip Generation

The trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) were utilized to calculate the trip generated by the existing land uses and proposed land uses (i.e., the increase of land uses). It should be noted that Agriculture is not a land-use found in ITE's Trip Generation Manual. Therefore, the trip from SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates was utilized.

Based on the above methodology, ***Table 1*** and ***Table 2*** tabulate the trips generated for the existing and proposed land uses, respectively. ***Attachment A*** contains detailed trip generation tables.

Table 1
Existing Trip Generation

Land Use Type	**Daily Trip Ends (Average Daily Traffic)**
Residential	15,662
Non-Residential[1]	13,602
Subtotal	29,264
Trip Reductions	(9,052)
Net Total	**20,212**

Footnotes:
1. Includes commercial, retail, and industrial land uses.

Table 2
Project Trip Generation (GPU Capacity Increase)

Land Use Type	Daily Trip Ends (Average Daily Traffic)
Residential	6,002
Non-Residential[1]	20,660
Subtotal	26,662
Trip Reductions	(11,984)
Net Total	**14,678**

Footnotes:
1. Includes commercial, retail, and industrial land uses.

VMT/Capita and VMT/Employee

In order to calculate the GPU VMT/Capita and VMT/Employee, the following parameters are needed:

1) Average Trip Length
2) Number of Residents
3) Number of Employees

The travel demand model prepared by the Santa Barabara County Association of Governements for the region's long-range Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) was utilized as a source of inputs for the City's VMT, population, and employees used in the analysis. The City of Guadalupe comprises eight (8) traffic analysis zones of the model.

Utilizing the existing trips generated in ***Table 1*** and the Base (2020) VMT obtained from the model, average trip lengths for the residents and employees were calculated (i.e., VMT divided by Trips = Average Trip Length). The average trip lengths were then used to calculate the Buildout VMT (i.e., Existing + Project).

The number of residents was calculated by adding the existing total residents obtained from the Base (2020) Model and the proposed residential increase from Table 2–2 of the Guadalupe 2021 General Plan Update. A similar approach was utilized to calculate the number of employees. However, to calculate the employee for the Project (i.e., the additional number of employees associated with the increase of non-residential land uses), data from the Metropolitan Council Local Planning Handbook was utilized, which states that on the low-end, space utilization is 556 square feet per job. Using this space utilization rate is more conservative as the space utilization for the City is likely lower due to the geographic, economic, and social characteristics of the City. This is because a lower space utilization would result in more jobs/more employees, thus a lower and aggressive VMT/employee result.

Based on the above, the VMT per Capita and VMT per Employee results are shown in ***Table 3***. ***Attachment B*** contains the inputs and calculations for steps described above.

Table 3
Guadalupe General Plan Update VMT

Residential	15.03 VMT/Capita
Non-Residential	6.06 VMT/Employee

Footnotes:
1. Includes commercial, retail, and industrial land uses.

VMT/Capita and VMT/Employee Adjustment
Based on the trip generation and average trip length methodology utilized to calculate the City's VMT/Capita and VMT/Employee, three adjustments were applied. These adjustments were applied since this method does not account for a reduction in VMT that is inherent with the General Plan Update. These are characteristics are the following:

1. Increased Residential Density
2. Increase Job Density
3. Transit-Oriented Development

The California Air Pollution Control Officers Association's *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* was utilized to quantify the adjustments. ***Attachment C*** contains an excerpt of this handbook.

Based on this, the reductions below are applied to the VMT/Capita and VMT/Employee. It should be noted that the total reductions applied are on a multiplicative basis, not an additive basis per the handbook's methodology to dampen the effect of multiple reductions on the same population. ***Attachment D*** contains the calculations.

Table 4
Guadalupe General Plan Update Adjusted VMT

Land Use Type	VMT	% Adjustment	Adjust VMT
Residential	15.03 VMT/Capita	19.7%	12.07 VMT/Capita
Non-Residential[1]	6.06 VMT/Employee		3.10 VMT/Employee

Footnotes:
1. Includes commercial, retail, and industrial land uses.

VMT/Capita & VMT/Employee: Regional Averages and Significance Thresholds
Consisent with the methodology guidance in the Office of Planning and Research's Technical Advisory, the regional average was queried from the most recent 4-step travel demand model provided by Santa Barbara County Association of Governments. The model was prepared for the region's long-range Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS). Queries included information such as home-based VMT, Home-Based Work VMT, population and employements data from the model to calculate the VMT/Capita and VMT/Employee for the City and for the region.

Based on the information extracted from the model, the VMT/Capita and VMT/Employee and trip lenghts were calculated and used in the VMT assessment. ***Table 5*** tabulates the regional VMT/Capita and VMT/Employee averages.

The Technical Advisory states that a fifteen (15) percent reduction in VMT is achievable for development projects in various place types and is consistent with Senate Bill 743's direction to the Office of Planning and Research to select a threshold that aligns with the State's three statutory goals. As such, ***Table 8–1*** summarizes the significance thresholds based on OPR's recommendations.

Table 5
Regional VMT Averages and Thresholds

Land Use Type	Regional Averages	Significance Thresholds[2]
Residential	15.16 VMT/Capita	12.89 VMT/Capita
Non-Residential[1]	20.25 VMT/Employee	17.21 VMT/Employee

Footnotes:
1. Includes commercial, retail, and industrial land uses.
2. The significance threshold is calculated as 15% below the regional average.

GPU VMT/Capita and VMT/Employee

In conclusion, the VMT/Capita and VMT/Employee at buildout of the 2021 General Plan Updated are 12.07 and 5.05, respectively. These numbers were compared against the respective regional thresholds of 12.89 and 17.21 to determine if a significant transportation impact would occur.

cc: File

ATTACHMENT A

Table A: Existing Trip Generation

Land Use	Size		Daily Trip Ends (ADT)	
			Rate[1]	Volume
Single Family Residential	1,653	DU[2]	7.98 /DU[3]	13,194
Multi Family Residential	266	DU[2]	6.69 /DU[3]	1,780
Downtown Mixed Use	200	DU[2]	3.44 /DU	688
Residential Subtotal	*2,119*	DU		*15,662*
General Commercial	60.6	KSF[4]	54.45 /KSF	3,300
Specific Plan Commercial	--	KSF	- -	-
General Industrial	938.1	KSF[4]	4.87 /KSF	4,568
Light Industrial	452.2	KSF[4]	2.74 /KSF	1,239
Agriculture	2,247.2	Acres	2 /acre[5]	4,494
Non-Residential Subtotal				*13,602*
Total				*29,264*
Trip Reductions[6]:				
Pass By & Diverted Trips				(6,126)
Transit & Active Transportation				(2,926)
Net Total				**20,212**

General Notes:

A. DU = Dwelling Units, KSF = 1000 Square Feet, ADT = Average Daily Traffic

Footnotes:

1. Rates based on ITE's Trip Generation Manual (11th Edition), unless otherwise noted
2. Total existing residential units obtained from the 2020 US Census. The percent split between single family and multi-family residential is based on City of Guadalupe's 2015 Housing Element.
3. Rate back calculated from fitted curve equation.
4. Square footage was calculated based on the existing commercial acreage and floor area ratio of 0.5
5. No comparable land use found in the ITE. Therefore utilized the rate from SANDAG's (Not So) Brief Guide of Vehicular
6. Trip reductions are based on SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates.

Table B: Project Trip Generation (GPU Capacity Increase)

Land Use	Size[1]		Daily Trip Ends (ADT)	
			Rate[2]	Volume
Single Family Residential	126	DU	9.81 /DU[3]	1,236
Multi Family Residential	713	DU	6.52 /DU[3]	4,646
Downtown Mixed Use	35	DU	3.44 /DU	120
Residential Subtotal	*874*	DU		*6,002*
General Commercial	5.254	KSF	54.45 /KSF	286
Specific Plan Commercial	436.820	KSF	37.01 /KSF	16,167
General Industrial	863.868	KSF	4.87 /KSF	4,207
Non-Residential Subtotal				*20,660*
Total				*26,662*
Trip Reductions[4]:				
Pass By & Diverted Trips				(9,316)
Internal (Transit & Active Transportation)				(2,668)
Net Total				**14,678**

General Notes:

A. DU = Dwelling Units, KSF = 1000 Square Feet, ADT = Average Daily Traffic

Footnotes:

1. Sizes are based on Table 2–2 of the Guadalupe 2021 General Plan Update.
2 Rates based on ITE's Trip Generation Manual (10th Edition), unless otherwise noted.
3. Rate back calculated from fitted curve equation.
4. Trip reductions are based on SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates.

ATTACHMENT B

	Residential	
	Full	Internal
Average Trip Length	13.92	1.0
Project VMT	2974.92	1600
Buildout VMT	170253.79	
Buildout VMT/Capita	15.03	
Reduction 19.7%	**12.07**	

	Per Employee
Average Trip Length	1.27
Project VMT	12865.87
Buildout VMT	23432.14
Buildout VMT/Capita	6.06
Reduction 19.7%	**3.10**

Obtained from 2020 Base Model

Area	HB VMT	Population	VMT/Cap	HBW VMT	Employees	VMT/Emp	OD VMT	SP	VMT/SP
Regional	6,985,548.92	460,800.00	15.16	4,512,427.74	222,840.00	20.25	21,795,240.62	683,640.00	31.88
	85% Threshold =		12.89	85% Threshold =		17.21			

Existing Trip Generation

11,903 Residential
8,309 Non Residential
20,212 Total ADT

Proposed Trip Generation

4,561 Residential Trips (with Reductions)
10,117 Non Residential Trips (With Reduction)
14,678 Total ADT

35% Internal from Residential to Retail (Table 7.1 ITE Trip Generation Handbook 3rd Edition)
1600 of residential trips stay within Guadalupe (Apply shorter trip length)
2,961 of residnetial trips go out of the Guadalupe (Apply longer trip length)

Existing Census Est Data

5386 employees

Proposed Employees

1365280 SF of Commercial Proposed
556 Space per employy (Utilization per Metropolitan Council Local Planning Handbook)
2456 employees

Proposed Resdiential Population per Table 2-2 of GPU

3425 residents

ATTACHMENT C

California Air Pollution Control Officers Association

Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity

Designed for Local Governments, Communities, and Project Developers

T-1. Increase Residential Density

GHG Mitigation Potential

Up to 30.0% of GHG emissions from project VMT in the study area

Co-Benefits (icon key on pg. 34)

Climate Resilience

Increased density can put people closer to resources they may need to access during an extreme weather event. Increased density can also shorten commutes, decreasing the amount of time people are on the road and exposed to hazards such as extreme heat or flooding.

Health and Equity Considerations

Neighborhoods should include different types of housing to support a variety of household sizes, age ranges, and incomes.

Measure Description

This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of dwelling units (du) compared to the average residential density in the U.S. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. Increasing residential density results in shorter and fewer trips by single-occupancy vehicles and thus a reduction in GHG emissions. This measure is best quantified when applied to larger developments and developments where the density is somewhat similar to the surrounding area due to the underlying research being founded in data from the neighborhood level.

Subsector

Land Use

Locational Context

Urban, suburban

Scale of Application

Project/Site

Implementation Requirements

This measure is most accurately quantified when applied to larger developments and/or developments where the density is somewhat similar to the surrounding neighborhood.

Cost Considerations

Depending on the location, increasing residential density may increase housing and development costs. However, the costs of providing public services, such as health care, education, policing, and transit, are generally lower in more dense areas where things are closer together. Infrastructure that provides drinking water and electricity also operates more efficiently when the service and transmission area is reduced. Local governments may provide approval streamlining benefits or financial incentives for infill and high-density residential projects.

Expanded Mitigation Options

When paired with Measure T-2, *Increase Job Density*, the cumulative densification from these measures can result in a highly walkable and bikeable area, yielding increased co-benefits in VMT reductions, improved public health, and social equity.

GHG Reduction Formula

$$A = \frac{B - C}{C} \times D$$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project VMT in study area	0–30.0	%	calculated
User Inputs				
B	Residential density of project development	[ ]	du/acre	user input
Constants, Assumptions, and Available Defaults				
C	Residential density of typical development	9.1	du/acre	Ewing et al. 2007
D	Elasticity of VMT with respect to residential density	-0.22	unitless	Stevens 2016

Further explanation of key variables:

- (C) – The residential density of typical development is based on the blended average density of residential development in the U.S. forecasted for 2025. This estimate includes apartments, condominiums, and townhouses, as well as detached single-family housing on both small and large lots. An acre in this context is defined as an acre of developed land, not including streets, school sites, parks, and other undevelopable land. If reductions are being calculated from a specific baseline derived from a travel demand forecasting model, the residential density of the relevant transportation analysis zone should be used instead of the value for a typical development.
- (D) – A meta-regression analysis of five studies that controlled for self-selection found that a 0.22 percent decrease in VMT occurs for every 1 percent increase in residential density (Stevens 2016).

GHG Calculation Caps or Maximums

Measure Maximum

(A_{max}) The percent reduction in GHG emissions (A) is capped at 30 percent. The purpose for the 30 percent cap is to limit the influence of any single built environmental factor (such as density). Projects that implement multiple land use strategies (e.g., density, design, diversity) will show more of a reduction than relying on improvements from a single built environment factor.

Subsector Maximum

($\sum A_{max_{T\text{-}1 \text{ through } T\text{-}4}} \leq 65\%$) This measure is in the Land Use subsector. This subcategory includes Measures T-1 through T-4. The VMT reduction from the combined implementation of all measures within this subsector is capped at 65 percent.

Example GHG Reduction Quantification

The user reduces VMT by increasing the residential density of the project study area. In this example, the project's residential density would be 15 du per acre (B), which would reduce GHG emissions from project VMT by 14.2 percent.

$$A = \frac{15 \frac{du}{ac} - 9.1 \frac{du}{ac}}{9.1 \frac{du}{ac}} \times -0.22 = -14.2\%$$

Quantified Co-Benefits

Improved Local Air Quality

The percent reduction in GHG emissions (A) would be the same as the percent reduction in NO_X, CO, NO_2, SO_2, and PM. Reductions in ROG emissions can be calculated by multiplying the percent reduction in GHG emissions (A) by an adjustment factor of 87 percent. See *Adjusting VMT Reductions to Emission Reductions* above for further discussion.

Energy and Fuel Savings

The percent reduction in vehicle fuel consumption would be the same as the percent reduction in GHG emissions (A).

VMT Reductions

The percent reduction in VMT would be the same as the percent reduction in GHG emissions (A).

Sources

- Ewing, R., K. Bartholomew, S. Winkelman, J. Walters, and D. Chen. 2007. *Growing Cooler: The Evidence on Urban Development and Climate Change*. October. Available: https://www.nrdc.org/sites/default/files/cit_07092401a.pdf. Accessed: January 2021.
- Stevens, M. 2016. Does Compact Development Make People Drive Less? *Journal of the American Planning Association* 83:1(7–18), DOI: 10.1080/01944363.2016.1240044. November. Available: https://www.researchgate.net/publication/309890412_Does_Compact_Development_Make_People_Drive_Less. Accessed: January 2021.

T-2. Increase Job Density

GHG Mitigation Potential

Up to 30.0% of GHG emissions from project VMT in the study area

Co-Benefits (icon key on pg. 34)

Climate Resilience

Increased density can put people closer to resources they may need to access during an extreme weather event. Increased density can also shorten commutes, decreasing the amount of time people are on the road and exposed to hazards such as extreme heat or flooding.

Health and Equity Considerations

Increased job density may increase nearby housing prices. Jurisdictions should consider the jobs-housing balance and consider measures to reduce displacement and increase affordable housing.

Measure Description

This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of jobs compared to the average job density in the U.S. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. Increasing job density results in shorter and fewer trips by single-occupancy vehicles and thus a reduction in GHG emissions.

Subsector

Land Use

Locational Context

Urban, suburban

Scale of Application

Project/Site

Implementation Requirements

This measure is most accurately quantified when applied to larger developments and/or developments where the density is somewhat similar to the surrounding neighborhood.

Cost Considerations

Areas with increased job density generally have higher economic gross metropolitan product (GMP) and job growth. Prosperity, measured as GMP per job, also grows faster in areas with increased job density. Decreased commute times and car use may also generate funds for public transit and reduce the need for infrastructure spending on road maintenance.

Expanded Mitigation Options

When paired with Measure T-1, *Increase Residential Density*, the cumulative densification from these measures can result in a highly walkable and bikeable area, yielding increased co-benefits in VMT reductions, improved public health, and social equity.

GHG Reduction Formula

$$A = \frac{B - C}{C} \times D$$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project VMT in study area	0–30.0	%	calculated
User Inputs				
B	Job density of project development	[ ]	jobs per acre	user input
Constants, Assumptions, and Available Defaults				
C	Job density of typical development	145	jobs per acre	ITE 2020
D	Elasticity of VMT with respect to job density	-0.07	unitless	Stevens 2016

Further explanation of key variables:

- (C) – The jobs density is based on the calculated density of a development with a floor-area ratio of 1.0 and 300 square feet (sf) of building space per employee:

  $$\frac{43{,}560 \frac{\text{sf}}{\text{acre}}}{300 \frac{\text{sf}}{\text{employee}}} \times 1.0 \frac{\text{sf}}{\text{acre}} = 145 \frac{\text{employees}}{\text{acre}}$$

  If reductions are being calculated from a specific baseline derived from a travel demand forecasting model, the job density of the relevant transportation analysis zone should be used for this variable instead of the default value presented above.
- (D) – A meta-regression analysis of two studies that controlled for self-selection found that a 0.07 percent decrease in VMT occurs for every 1 percent increase in job density (Stevens 2016).

GHG Calculation Caps or Maximums

Measure Maximum

(A_{max}) The percent reduction in GHG emissions (A) is capped at 30 percent. The purpose for the 30 percent cap is to limit the influence of any single built environmental factor (such as density). Projects that implement multiple land use strategies (e.g., density, design, diversity) will show more of a reduction than relying on improvements from a single built environment factor.

Subsector Maximum

($\sum A_{max_{T\text{-}1 \text{ through } T\text{-}4}} \leq 65\%$) This measure is in the Land Use subsector. This subcategory includes Measures T-1 through T-4. The VMT reduction from the combined implementation of all measures within this subsector is capped at 65 percent.

Example GHG Reduction Quantification

The user reduces VMT by increasing the job density of the project study area. In this example, the project's job density would be 400 jobs per acre (B), which would reduce GHG emissions from project VMT by 12.3 percent.

$$A = \frac{400 \frac{\text{job}}{\text{acre}} - 145 \frac{\text{job}}{\text{acre}}}{145 \frac{\text{job}}{\text{acre}}} \times -0.07 = -12.3\%$$

Quantified Co-Benefits

Improved Local Air Quality

The percent reduction in GHG emissions (A) would be the same as the percent reduction in NO_X, CO, NO_2, SO_2, and PM. Reductions in ROG emissions can be calculated by multiplying the percent reduction in GHG emissions (A) by an adjustment factor of 87 percent. See *Adjusting VMT Reductions to Emission Reductions* above for further discussion.

Energy and Fuel Savings

The percent reduction in vehicle fuel consumption would be the same as the percent reduction in GHG emissions (A).

VMT Reductions

The percent reduction in VMT would be the same as the percent reduction in GHG emissions (A).

Sources

- Institute of Transportation Engineers (ITE). *Trip Generation Manual.* 10th Edition. Available: https://www.ite.org/technical-resources/topics/trip-and-parking-generation/trip-generation-10th-edition-formats/. Accessed: January 2021.
- Stevens, M. 2016. Does Compact Development Make People Drive Less? *Journal of the American Planning Association* 83:1(7–18), DOI: 10.1080/01944363.2016.1240044. November. Available: https://www.researchgate.net/publication/309890412_Does_Compact_Development_Make_People_Drive_Less. Accessed: January 2021.

T-3. Provide Transit-Oriented Development

GHG Mitigation Potential

Up to 31.0% of GHG emissions from project VMT in study area

Co-Benefits (icon key on pg. 34)

Climate Resilience

Providing TOD puts a large number of people close to reliable public transportation, diversifying their transportation options during an extreme weather event.

Health and Equity Considerations

TOD may increase housing prices, leading to gentrification and displacement. Please refer to the *Accountability and Anti-Displacement and Housing* section in Chapter 5, *Measures for Advancing Health and Equity*, for potential strategies to minimize disruption to existing residents. TOD coupled with affordable housing options can help to support equity by helping to lower transportation costs for residents and increase active mobility.

Measure Description

This measure would reduce project VMT in the study area relative to the same project sited in a non-transit-oriented development (TOD) location. 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. Project site residents, employees, and visitors would have easy access to high-quality public transit, thereby encouraging transit ridership and reducing the number of single-occupancy vehicle trips and associated GHG emissions.

Subsector

Land Use

Locational Context

Urban and suburban. Rural only if adjacent to commuter rail station with convenient rail service to a major employment center.

Scale of Application

Project/Site

Implementation Requirements

To qualify as a TOD, the development must be a residential or office project that is within a 10-minute walk (0.5 mile) of a high frequency transit station (either rail, or bus rapid transit with headways less than 15 minutes). Ideally, the distance should be no more than 0.25 to 0.3 of a mile but could be up to 0.5 mile if the walking route to station can be accessed by pedestrian-friendly routes. Users should confirm "unmitigated" or "baseline" VMT does not already account for reductions from transit proximity.

Cost Considerations

TOD reduces car use and car ownership rates, providing cost savings to residents. It can also increase property values and public transit use rates, providing additional revenue to municipalities, as well as open new markets for business development. Increased transit use will likely necessitate increased spending on maintaining and improving public transit systems, the costs of which may be high.

Expanded Mitigation Options

When building TOD, a best practice is to incorporate bike and pedestrian access into the larger network to increase the likelihood of transit use.

GHG Reduction Formula

$$A = \frac{(B \times C)}{-D}$$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project VMT in study area	6.9–31.0	%	calculated
User Inputs				
	None			
Constants, Assumptions, and Available Defaults				
B	Transit mode share in surrounding city	Table T-3.1	%	FHWA 2017a
C	Ratio of transit mode share for TOD area with measure compared to existing transit mode share in surrounding city	4.9	unitless	Lund et al. 2004
D	Auto mode share in surrounding city	Table T-3.1	%	FHWA 2017b

Further explanation of key variables:

- (B and D) – Ideally, the user will calculate transit and auto mode share for a Project/Site at a scale no larger than a census tract. Ideally, variables B and D will reflect travel behavior in locations that are *not* already within 0.5 mile of a high-quality transit stop and may instead substitute data from nearby tracts further from transit if such locations exist. Potential data sources include the U.S. Census, California Household Travel Survey (preferred), or local survey efforts. If the user is not able to provide a project-specific value using one of these data sources, they have the option to input the mode share for one of the six most populated core-based statistical areas (CBSAs) in California, as presented in Table T-3.1 in Appendix C, *Emission Factors and Data Tables*. Transit mode share is likely to be smaller for areas not covered by the listed CBSAs, which represent the most transit-accessible areas of the state. Conversely, auto mode share is likely to be larger.
- (C) – A study of people living in TODs in California found that, on average, transit shares for TOD residents exceed the surrounding city by a factor of 4.9 (Lund et al. 2004).

GHG Calculation Caps or Maximums

Measure Maximum

$((B \times C)_{max})$ The transit mode share in the project study area with the measure is capped at 27 percent. This is based on the weighted average transit commute mode share of five surveyed sites in California where residents lived within 3 miles of rail stations (Lund et al. 2004). As transit mode share is typically higher for commute trips compared to all trips, 27 percent represents a reasonable upper bound for expected transit mode share in a TOD

area. Projects in the CBSAs of San Francisco-Oakland-Hayward and San Jose-Sunnyvale-Santa Clara would have their transit mode share capped at 27 percent in the formula.

(A_{max}) For projects that use default CBSA data from Table T-3.1 in Appendix C, the maximum percent reduction in GHG emissions (A) is 31.0 percent. This is based on a project in the CBSA of San Francisco-Oakland-Hayward with a transit mode share that reaches the cap ($(B \times C)_{max}$). This maximum scenario is presented in the below example quantification.

Subsector Maximum

($\sum A_{max_{T\text{-}1 \text{ through } T\text{-}4}} \leq 65\%$) This measure is in the Land Use subsector. This subcategory includes Measures T-1 through T-4. The VMT reduction from the combined implementation of all measures within this subsector is capped at 65 percent.

Example GHG Reduction Quantification

The user reduces VMT by locating their project in a TOD location. Project site residents, employees, and visitors would have easy access to high-quality public transit, thereby encouraging transit use and reducing single occupancy vehicle travel. In this example, the project is within the San Jose-Sunnyvale-Santa Clara CBSA with an existing transit mode share (B) of 6.69 percent. Applying a 4.9 ratio of transit mode share for TOD area with the measure compared to existing transit mode share in the surrounding city yields 33 percent, which exceeds the 27 percent cap ($(B \times C)_{max}$). Therefore, 27 percent is used to define ($B \times C$). The existing vehicle mode share is 86.96 percent (D). The user would reduce GHG emissions from project study area VMT (as compared to the same project in a non-TOD location) by 31 percent.

$$A = \frac{27\%}{-86.96\%} = -31\%$$

Quantified Co-Benefits

Improved Local Air Quality

The percent reduction in GHG emissions (A) would be the same as the percent reduction in NO_X, CO, NO_2, SO_2, and PM. Reductions in ROG emissions can be calculated by multiplying the percent reduction in GHG emissions (A) by an adjustment factor of 87 percent. See *Adjusting VMT Reductions to Emission Reductions* above for further discussion.

Energy and Fuel Savings

The percent reduction in vehicle fuel consumption would be the same as the percent reduction in GHG emissions (A).

ATTACHMENT D

Increase Land Use Density

Total City Acres	863	acres
Existing DU	2119	DU
Proposed DU	874	DU
Buildout DU	2993	DU

A	-9.1%	Reduction
B	3.47	Residential Density of Buildout
C	2.46	Resiential Density of the Existing Conditions
D	-0.22	Elasticity Constant

Increase Job Density

Total City Commercial/Industrial Acres	144.992	acres	= 3157925.8	SF (Excluding Agriculture)
Existing Jobs	5383	jobs (per ACS 5 yr Estimates)		
Proposed Commercial/Industrial Acres	1365280	SF		
Space Utilization Rate:	556	SF/Job (per the Metropolitan Council Local Planning Handbook)		
Proposed Jobs	2456	jobs		
Buildout Jobs	7839	jobs		

A	-3.2%	Reduction
B	54.06	Buildout Jobs per Acre
C	37.13	Existing Jobs per Acre
D	-0.07	Elasticity Constant

Transit Oriented Development

A	-15%	Reduction
B	3%	Per Table T-3.1
C	4.9	Constant
D	95.04%	Per Table T-3.1

Percentage of Area within TOD = 59%

A_Adjusted (A*0.59)= -8.82%

Final Total Adjustment (Multiplicative)
-19.7%