DRAFT
Environmental Impact Report
City of Napa General Plan Housing Element
City of Napa, Napa County, California

State Clearinghouse No. 2014052002

APPENDICES

Prepared for:

City of Napa
1600 First Street
Napa, CA 94559
Phone: 707.257.9530

Contact: Ken MacNab, Planning Manager

Prepared by:

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Contact: Mary Bean, Project Director
Janna Waligorski, Project Manager

November 6, 2014

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Appendix A:
Notice of Preparation and Responses

A.1 - Notice of Preparation

Notice of Preparation
Draft Environmental Impact Report
City of Napa General Plan Housing Element

Date: May 1, 2014

To: Public Agencies and Interested Parties

From: Ken MacNab, Planning Manager

Subject: Notice of Preparation for a Draft Environmental Impact Report for the City of Napa General Plan Housing Element

The City of Napa will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the update of the City's Housing Element of the General Plan for the 2015-2023 planning period. The Housing Element identifies sites in accordance with state law to accommodate the city's fair share of the regional housing need. The project description, location, and probable environmental effects of the City of Napa General Plan Housing Element are described in the attached materials.

The City of Napa is soliciting comments regarding the scope and content of the environmental information, which are germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR when considering permitting or other approvals. Because of time limits mandated by state law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please provide your written response to the address shown below by **5:00 p.m. on May 31, 2014**. Please also provide the name of a contact person in your agency.

City of Napa
Community Development Department
Planning Division
1600 First Street
Napa, CA 94559
Attn: Ken MacNab, Planning Manager
Phone: (707) 257-9530
Fax: (707) 257-9522
Email: kmacnab@cityofnapa.org

CITY OF NAPA GENERAL PLAN HOUSING ELEMENT

1.1 - Project Location

The project is located in the City of Napa, Napa County, California (Exhibit 1). The City of Napa is located in southern Napa County and is surrounded by agricultural areas (north), Vaca Mountains (east), San Pablo Bay (south), and Mayacamas Mountains (west) (Exhibit 2). The Napa River flows from north to south through the City to the San Pablo Bay. State Routes 12, 29, 121, and 221 provide regional access to the City.

1.2 - Background

California Government Code Section 65302(c) mandates that each city shall include a Housing Element in its General Plan. The Housing Element is required to identify and analyze existing and projected housing needs, and include statements of the City's goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The City, in adopting its Housing Element, must consider economic, environmental, and fiscal factors, as well as community goals as set forth in the General Plan, in compliance with California *Government Code* Section 65580 et seq. Each jurisdiction within the Bay Area Region, which includes Napa County, must prepare an updated Housing Element for the fifth planning cycle, which covers the 2015–2023 period.

The City of Napa has initiated preparation of an Environmental Impact Report (EIR) to evaluate the potential environmental impacts that would be expected to result from adoption of the Housing Element, to the extent they can be foreseen at this time. **No specific development projects would be approved in connection with adoption of the Housing Element and all future developments will be subject to CEQA review.**

One important aspect of Housing Element updates that normally receives close attention is the identification of housing growth needs and the jurisdiction's capacity to accommodate that growth based on available sites for residential development. This process is referred to as the Regional Housing Needs Assessment (RHNA). At the beginning of each new housing element planning period, the California Department of Housing and Community Development (HCD) determines the amount of new housing needed for each income group in each region of the state, based on expected household growth. In February 2012, HCD determined that the nine-county Bay Area region would need 187,990 additional housing units between January 2014 and October 2022 to accommodate projected household growth.

Each Bay Area city's share of the regional housing need is based on a plan prepared by the Association of Bay Area Governments (ABAG), entitled the Final Regional Housing Needs Plan (RHNP) for the San Francisco Bay Area: 2014-2022, which was adopted in July 2013.

In preparing the RHNP, ABAG balanced state laws that require regional sustainable development with "fair share" components. ABAG directed much of the regional growth to infill locations near

transit and jobs and Priority Development Areas (PDAs). Directing growth to these infill areas was a key component in protecting the region's agricultural and natural resources. It also encouraged housing, and in particular affordable housing, in neighborhoods near transit, jobs, and services. However, to make sure that PDAs did not shoulder too much of the responsibility for meeting the region's housing need each jurisdiction was assigned a minimum number of units to meet 40% of its household formation growth, then "fair share" factors were applied that considered a community's past affordable housing construction, 2010 jobs, and transit service. This approach resulted in lower housing need numbers than in prior Housing Element planning periods to all jurisdictions in Napa County, including the City of Napa. The approach is supportive of local goals to protect the County's agricultural resources and to promote efficient use of land in core mixed-use areas where transit, jobs, and services are nearby. In the City of Napa, the Downtown and Soscol Gateway Mixed Use area is a designated PDA.

The draft Housing Element includes an inventory of vacant and underutilized sites with appropriate zoning that can fully accommodate the share of regional housing growth needs allocated to the City of Napa in the RHNP. **No changes to land use designations or development standards are proposed.**

In addition to the RHNA, the draft Housing Element includes a variety of programs intended to improve the quality of the City's housing stock, conserve existing neighborhoods, increase housing affordability, and remove potential constraints to housing for lower-income households and persons with special needs. These programs are discussed further in Section 1.3 Project Description, below.

1.3 - Project Description

In accordance with State Law, the City of Napa proposes to adopt a General Plan Amendment (GPA), updating the General Plan's Housing Element for the 2015-2023 planning period. The draft Housing Element includes the following sections:

Section 1 provides an overview of the Housing Element, state housing law, the process by which the City prepared the Housing Element, opportunities for public participation, and a review of the Housing Element's consistency with other elements of the General Plan.

Sections 2 and 3 of the Housing Element identify the goals and policies that will guide City decisions and activities relating to housing, while **Section 4** describes the program actions intended to implement the goals and policies. **Section 5** of the Housing Element presents background information and data regarding demographic characteristics and trends, housing needs and conditions.

Section 6 includes analysis of potential constraints to housing and available resources, as well as a discussion of the City's share of regional housing needs and potential sites that could accommodate the amount of housing development allocated to the City through ABAG's Regional Housing Needs Plan (RHNP). *It should be emphasized that while state law requires cities to identify sites with sufficient capacity to accommodate the level of development reflected in the RHNP, cities are not*

required to achieve RHNP objectives since development is ultimately determined by market conditions and landowner intentions.

Sections 1, 2, 3, 5, and 6 of the Housing Element provide background information and analysis relevant to City housing policies and programs, but would not change development patterns or result in any physical changes to the environment that requires CEQA review. All potential environmental impacts that would result from adoption of the Housing Element are determined by the program actions contained in Section 4 of the element. These programs describe the City's commitments to future actions and are listed below for each of the City's five broad housing goals. (Please refer to the draft Housing Element for the full text of these programs.)

Goal H1 – Napa is a Vital and Diverse Community

- Program H1.A Adequate Sites
- Program H1.B Future Land Use Planning
- Program H1.C Local Housing Need
- Program H1.D Job Housing Analyses
- Program H1.E Job Impact Analysis
- Program H1.F Housing Sites Study of Surplus Institutional Lands

These programs identify the City's commitment to broad policy objectives regarding housing needs and jobs-housing balance, and to conduct future studies. No specific developments or regulatory changes are proposed that would result in environmental impacts, therefore these programs will not be evaluated in the EIR. At such time that specific developments, regulations, or standards are proposed, they will be subject to CEQA review.

Goal H2 – We Have a Variety of Housing Types and Choices

- Program H2.A Adequate Sites for Multi-Family Use
- Program H2.B New Rental Units
- Program H2.C New Ownership Units
- Program H2.D First Time Homebuyer Programs
- Program H2.E Identify Potential Acquisition Sites
- Program H2.F Affordable Housing Overlay Zones
- Program H2.G Long-Term Affordability Agreements and Monitoring
- Program H2.H Sustainable Development and Practices
- Program H2.I Preferences in Affordable Housing
- Program H2.J Duplex and Triplexes in Other Areas

These programs establish commitments to conduct future studies of potential affordable housing sites, facilitate development and purchase of affordable housing, minimize constraints on affordable housing development, preserve existing affordable housing units, foster sustainable development practices, enhance affordable housing opportunities for Napa residents and employees, and consider a future General Plan amendment to facilitate duplex and triplex development. No specific developments or regulatory changes are proposed that would result in environmental impacts,

therefore these programs will not be evaluated in the EIR. At such time that specific developments, regulations, or standards are proposed, they will be subject to CEQA review.

Goal H3 – We Have Great Neighborhoods Offering a Variety of Nearby Services and Activities

- Program H3.A Design Review
- Program H3.B Use of Planned Development Zoning
- Program H3.C Housing Mix
- Program H3.D New Second Units
- Program H3.E Second Unit Standards and Fees
- Program H3.F Amnesty Program
- Program H3.G Rental and Owner Rehabilitation Programs
- Program H3.H Code Enforcement
- Program H3.I Targeted Neighborhood Improvement
- Program H3.J Historic Area Process
- Program H3.K Transportation Element Amendments
- Program H3.L Capital Improvement Programs for Neighborhood Improvement
- Program H3.M Parks and Recreation Element Update
- Program H3.N Retain Federal, State and Locally Subsidized Affordable Units
- Program H3.O Rental Acquisition and Maintenance
- Program H3.P Mixed-Use Livability

These programs establish commitments to support high-quality development, promote design flexibility, encourage a mix of housing opportunities including second units, facilitate housing maintenance and rehabilitation, preserve historic homes, ensure the provision of adequate streets, parks, and other infrastructure, retain existing affordable units, and develop guidelines for mixed-use development. No specific developments or regulatory changes are proposed that would result in environmental impacts, therefore these programs will not be evaluated in the EIR. At such time that specific developments, regulations, or standards are proposed, they will be subject to CEQA review.

Goal H4 – We Have Housing Linked with Services for Our Special Needs Populations

- Program H4.A Emergency Shelters
- Program H4.B Permanent Supportive/Transitional Housing
- Program H4.C Support Services
- Program H4.D Rental Assistance for Special Needs
- Program H4.E Capital Improvements for Non-Profit Facilities
- Program H4.F Encourage Well Managed New SRO Permanent Housing
- Program H4.G Rehabilitate Existing Facilities for SROs
- Program H4.H Coordination with Napa County and Other Actions to Address Farmworker Housing

These programs establish commitments to assist emergency shelters, transitional/supportive housing, non-profit facilities, SRO housing, and farmworker housing. No specific developments or regulatory changes are proposed that would result in environmental impacts, therefore these

programs will not be evaluated in the EIR. At such time that specific developments, regulations, or standards are proposed, they will be subject to CEQA review. Program H4.F includes a commitment to amend the SRO ordinance, however no specific changes have been identified at this time, therefore this issue will not be evaluated in the EIR.

Goal H5 – We Have a Strong Sense of Community and Responsibility

- Program H5.A Universal Design
- Program H5.B Traffic Impact Overlay
- Program H5.C Priority Processing
- Program H5.D Affordable Housing Fees
- Program H5.E Fair Housing
- Program H5.F Database Monitoring
- Program H5.G Legislation
- Program H5.H Housing Transfer Agreements
- Program H5.I Cities/County Coordination
- Program H5.J Community Outreach Efforts
- Program H5.K Use of Funds
- Program H5.L Maximize Rental Subsidies
- Program H5.M Public/Private Partnerships

These programs establish commitments to support accessible design and fair housing, monitor traffic impact policies and development trends, provide priority processing and fee deferrals for affordable and special needs housing, cooperate with other cities and the County on housing issues, increase community outreach, and seek funding for affordable housing and special needs housing. No specific developments or regulatory changes are proposed that would result in environmental impacts, therefore these programs will not be evaluated in the EIR.

In 1998, the City of Napa certified an EIR for the 2020 General Plan. In addition, two separate EIRs have been certified for the Gasser Master Plan (2006) and Downtown Specific Plan (2012) that significantly modified land uses identified in the 2020 General Plan. The draft 2015-2023 Housing Element would retain many of the programs of the current (2009) Housing Element, therefore the framework for environmental review of the proposed Housing Element amendment is established by CEQA Section 21166 and CEQA Guidelines Section 15162.

These sections of CEQA and the Guidelines provide that when an EIR has been certified for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence, one or more of the following:

1. Substantial changes are proposed in the project that would require major revision to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which would require major revisions of the previous EIR due to the involvement

of new significant effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance shows that the project would have one or more significant effects not discussed in the previous EIR, or that significant effects previously examined would be substantially more severe, or that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects but the City declined to adopt them, or mitigation measures or alternatives that are different from those included in the previous EIR would substantially reduce one or more significant effects on the environment but the City declined to adopt them.

As discussed above, the program actions contained in Section 4 of the draft 2015-2023 Housing Element do not include substantial changes to the current (2009) Housing Element that would result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects. However, changes may have occurred in circumstances related to proposed Housing Element programs that could require major revisions to the previous General Plan EIR with regard to transportation and traffic, noise, air quality, greenhouse gas emissions, land use and planning, or population and housing (see Section 1.5 below). In addition, new information is available for these topics that could change the conclusions regarding the significance of environmental impacts identified in the previous General Plan EIR. Therefore, the City has determined that a subsequent EIR should be prepared to evaluate these issues.

Since no specific developments or changes to regulations are identified in the draft Housing Element, the EIR will evaluate potential environmental impacts of development anticipated in the Housing Element at a programmatic level, pursuant to CEQA Guidelines Section 15168 (Program EIR). When specific developments or amendments to development regulations are proposed, they will be subject to subsequent CEQA review pursuant to Guidelines Section 15162 (Subsequent EIRs and Negative Declarations) or Section 15164 (Addendum to an EIR or Negative Declaration).

The draft Housing Element identifies potential housing sites that could accommodate development of 892 new housing units, which is the portion of the region's new housing need that has been allocated by ABAG to the City of Napa for the 2015-2023 period as shown in Table 1.

Table 1: Napa's 2015–2023 Regional Housing Needs Allocation (RHNA)

Very Low Income	Low Income	Moderate	Above Moderate	Total Units
185	106	141	403	835

Land suitable for residential development includes vacant residentially zoned sites; vacant non-residentially zoned sites that allow residential uses; underutilized residentially zoned sites capable of being developed at higher density or with greater intensity; and non-residentially zoned sites that can be redeveloped for, and/or rezoned for residential use. The Housing Element identifies appropriately zoned sites that could accommodate the housing needs identified in the RHNA during the 2015-2023 planning period, therefore no changes to land use plans or regulations are needed to

provide additional capacity for housing development. The EIR will evaluate potential environmental impacts that would be expected from development consistent with the RHNA and existing land use and zoning designations during the planning period.

1.4 - Required Approvals and Intended Uses

The proposed project requires the following discretionary approvals:

- General Plan Amendment – City of Napa

The Housing Element will also be reviewed by the California Department of Housing and Community Development (HCD) although this review does not constitute an "approval" within the context of CEQA.

1.5 - Environmental Review

1.5.1 - Potential Environmental Effects

The EIR will evaluate whether the proposed project may potentially result in one or more significant environmental effects. The topics listed below will be further analyzed in the EIR.

- Air Quality
- Greenhouse Gas Emissions
- Land Use and Planning
- Noise
- Population and Housing
- Transportation and Traffic

1.5.2 - Effects Found Not To Be Significant

Because of project characteristics, the proposed project would not have significant effects on the remaining CEQA topic areas, which will be addressed in the Effects Found Not To Be Significant Section of the EIR:

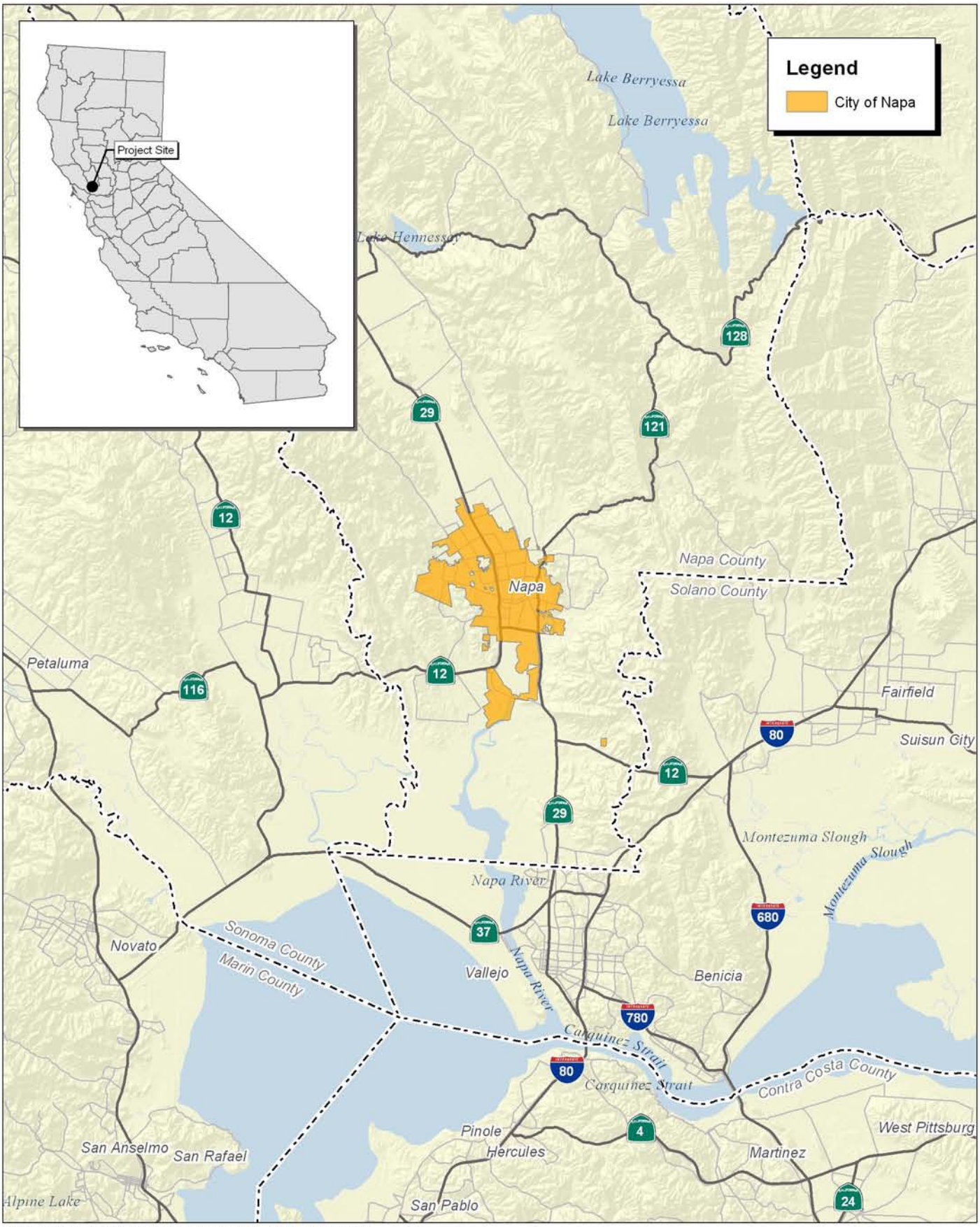
- Aesthetics
- Agricultural Resources
- Biological Resources
- Cultural Resources
- Geology, Soils, and Seismicity
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Mineral Resources
- Public Services and Utilities
- Recreation

1.6 - Scoping Meeting

A public scoping meeting will be held at **6:00 pm, Thursday, May 22, 2014,** at the following location:

City of Napa Council Chambers
955 School Street
Napa, CA 94559

At this meeting, agencies, organizations, and members of the public will be able to review the proposed project and provide comments on the scope of the environmental review process.



Source: Census 2000 Data, The CaSIL, FCS GIS 2014.

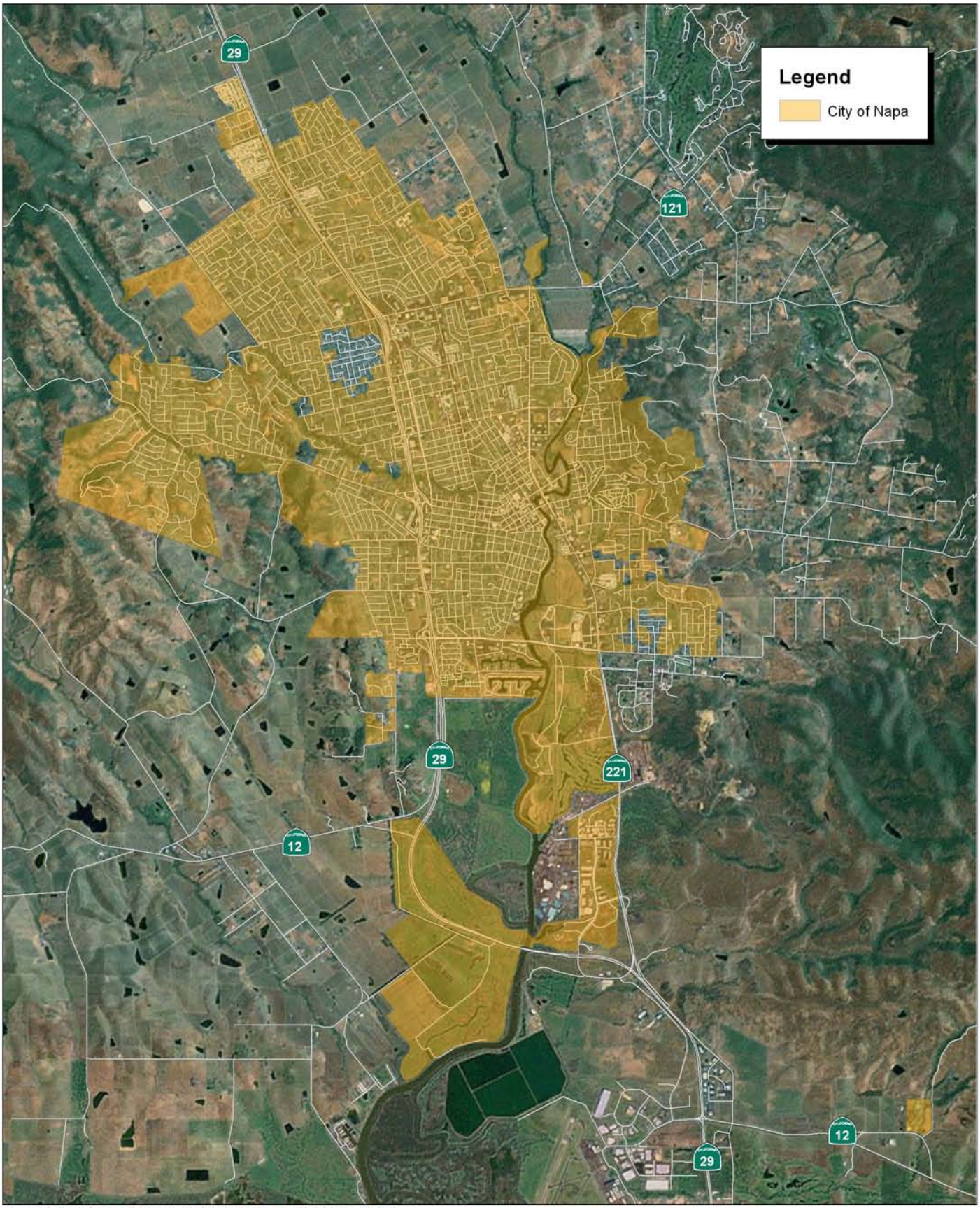
FirstCarbon SOLUTIONS

5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

35520004 • 04/2014 | 1_regional.mxd

CITY OF NAPA • CITY OF NAPA GENERAL PLAN HOUSING ELEMENT
NOTICE OF PREPARATION



Source: ESRI Aerial Imagery. Napa County GIS Data, 2013.

FirstCarbon® SOLUTIONS

6,000 3,000 0 6,000 Feet

Exhibit 2
Local Vicinity Map
Aerial Base

A.2 - Responses

State of California – The Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
(707) 944-5500
www.wildlife.ca.gov

EDMUND G. BROWN JR., *Governor*
CHARLTON H. BONHAM, *Director*

May 29, 2014

Mr. Ken MacNab
City of Napa
PO Box 660
Napa, CA 94559

Dear Mr. MacNab:

Subject: 2015-2023 Housing Element Update, Notice of Preparation of a Draft Environmental Impact Report, SCH #2014052002, City and County of Napa

The California Department of Fish and Wildlife (CDFW) has reviewed the documents provided for the subject project, and we have the following comments.

Please provide a complete assessment (including but not limited to type, quantity and locations) of the habitats, flora and fauna within and adjacent to the project area, including endangered, threatened, and locally unique species and sensitive habitats. The assessment should include the reasonably foreseeable direct and indirect changes (temporary and permanent) that may occur with implementation of the project. Rare, threatened and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, Section 15380). CDFW recommended survey and monitoring protocols and guidelines are available at http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/Protocols_for_Surveying_and_Evaluating_Impacts.pdf.

Please be advised that a California Endangered Species Act (CESA) Permit must be obtained if the project has the potential to result in take of species of plants or animals listed under CESA, either during construction or over the life of the project. Issuance of a CESA Permit is subject to CEQA documentation; therefore, the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the project will impact CESA listed species, early consultation is encouraged, as significant modification to the project and mitigation measures may be required in order to obtain a CESA Permit.

For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream, or use material from a streambed, CDFW may require a Lake and Streambed Alteration Agreement (LSAA), pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant. Issuance of an LSAA is subject to CEQA. CDFW, as a responsible agency under CEQA, will consider the CEQA document for the project. The CEQA

document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for completion of the agreement. To obtain information about the LSAA notification process, please access our website at http://www.dfg.ca.gov/habcon/1600/; or to request a notification package, contact CDFW's Bay Delta Regional Office at (707) 944-5500.

If you have any questions, please contact Ms. Suzanne Gilmore, Environmental Scientist, at (707) 944-5536; or Ms. Karen Weiss, Senior Environmental Scientist (Supervisory), at (707) 944-5525.

Sincerely,

Scott Wilson
Regional Manager
Bay Delta Region

cc: State Clearinghouse

Appendix B:
Air Quality and Greenhouse Gas Emissions Modeling Data

Napa Housing Element - Alta Heights AH104

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	45.00	Dwelling Unit	2.81	45,000.00	129

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect.

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	24.75	31.05
tblFireplaces	NumberWood	6.30	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	8.81
tblVehicleTrips	SU_TR	6.07	8.81
tblVehicleTrips	WD_TR	6.59	8.81
tblWoodstoves	NumberCatalytic	0.90	0.00
tblWoodstoves	NumberNoncatalytic	0.90	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	0.2178	3.8800e-003	0.3353	2.0000e-005		1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	2.0385	2.0385	5.6000e-004	3.0000e-005	2.0588
Energy	2.1100e-003	0.0181	7.6900e-003	1.2000e-004		1.4600e-003	1.4600e-003		1.4600e-003	1.4600e-003	0.0000	57.2704	57.2704	2.0300e-003	7.5000e-004	57.5465
Mobile	0.2167	0.4755	2.2302	4.7300e-003	0.3280	6.3300e-003	0.3344	0.0878	5.8400e-003	0.0937	0.0000	335.1413	335.1413	0.0143	0.0000	335.4409
Waste						0.0000	0.0000		0.0000	0.0000	4.2019	0.0000	4.2019	0.2483	0.0000	9.4168
Water						0.0000	0.0000		0.0000	0.0000	0.7441	4.1851	4.9292	0.0766	1.8400e-003	7.1099
Total	**0.4366**	**0.4974**	**2.5732**	**4.8700e-003**	**0.3280**	**9.7400e-003**	**0.3378**	**0.0878**	**9.2500e-003**	**0.0971**	**4.9460**	**398.6354**	**403.5814**	**0.3418**	**2.6200e-003**	**411.5728**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	0.2167	0.4755	2.2302	4.7300e-003	0.3280	6.3300e-003	0.3344	0.0878	5.8400e-003	0.0937	0.0000	335.1413	335.1413	0.0143	0.0000	335.4409
Unmitigated	0.2167	0.4755	2.2302	4.7300e-003	0.3280	6.3300e-003	0.3344	0.0878	5.8400e-003	0.0937	0.0000	335.1413	335.1413	0.0143	0.0000	335.4409

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	396.45	396.45	396.45	885,022	885,022
Total	396.45	396.45	396.45	885,022	885,022

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	36.3530	36.3530	1.6300e-003	3.7000e-004	36.5018
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	36.9474	36.9474	1.6500e-003	3.8000e-004	37.0986
NaturalGas Mitigated	2.1100e-003	0.0181	7.6900e-003	1.2000e-004		1.4600e-003	1.4600e-003		1.4600e-003	1.4600e-003	0.0000	20.9174	20.9174	4.0000e-004	3.8000e-004	21.0447
NaturalGas Unmitigated	2.6200e-003	0.0224	9.5100e-003	1.4000e-004		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	25.8903	25.8903	5.0000e-004	4.7000e-004	26.0479

5.2 Energy by Land Use - NaturalGas

Mitigated

	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	391977	2.1100e-003	0.0181	7.6900e-003	1.2000e-004		1.4600e-003	1.4600e-003		1.4600e-003	1.4600e-003	0.0000	20.9174	20.9174	4.0000e-004	3.8000e-004	21.0447
Total		**2.1100e-003**	**0.0181**	**7.6900e-003**	**1.2000e-004**		**1.4600e-003**	**1.4600e-003**		**1.4600e-003**	**1.4600e-003**	**0.0000**	**20.9174**	**20.9174**	**4.0000e-004**	**3.8000e-004**	**21.0447**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	163012	36.3530	1.6300e-003	3.7000e-004	36.5018
Total		**36.3530**	**1.6300e-003**	**3.7000e-004**	**36.5018**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.2178	3.8800e-003	0.3353	2.0000e-005		1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	2.0385	2.0385	5.6000e-004	3.0000e-005	2.0588
Unmitigated	0.2178	3.8800e-003	0.3353	2.0000e-005		1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	2.0385	2.0385	5.6000e-004	3.0000e-005	2.0588

6.2 Area by SubCategory

Mitigated

	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	0.0317					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1758					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-004	0.0000	1.0000e-005	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4927	1.4927	3.0000e-005	3.0000e-005	1.5018
Landscaping	0.0102	3.8800e-003	0.3352	2.0000e-005		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	0.5458	0.5458	5.3000e-004	0.0000	0.5570
Total	**0.2178**	**3.8800e-003**	**0.3353**	**2.0000e-005**		**1.9400e-003**	**1.9400e-003**		**1.9400e-003**	**1.9400e-003**	**0.0000**	**2.0385**	**2.0385**	**5.6000e-004**	**3.0000e-005**	**2.0588**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.9292	0.0766	1.8400e-003	7.1099
Unmitigated	5.9109	0.0958	2.3100e-003	8.6368

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	2.34554 / 1.73564	4.9292	0.0766	1.8400e-003	7.1099
Total		**4.9292**	**0.0766**	**1.8400e-003**	**7.1099**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	4.2019	0.2483	0.0000	9.4168
Mitigated	4.2019	0.2483	0.0000	9.4168

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	20.7	4.2019	0.2483	0.0000	9.4168
Total		**4.2019**	**0.2483**	**0.0000**	**9.4168**

Napa Housing Element - Beard B77

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	92.00	Dwelling Unit	5.75	92,000.00	263

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.62	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use -

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	50.60	63.48
tblFireplaces	NumberWood	12.88	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.62
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	6.65
tblVehicleTrips	SU_TR	6.07	6.65
tblVehicleTrips	WD_TR	6.59	6.65
tblWoodstoves	NumberCatalytic	1.84	0.00
tblWoodstoves	NumberNoncatalytic	1.84	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	0.4453	7.9300e-003	0.6854	4.0000e-005		3.9800e-003	3.9800e-003		3.9800e-003	3.9800e-003	0.0000	4.1677	4.1677	1.1500e-003	6.0000e-005	4.2091
Energy	4.3200e-003	0.0369	0.0157	2.4000e-004		2.9900e-003	2.9900e-003		2.9900e-003	2.9900e-003	0.0000	117.0817	117.0817	4.1500e-003	1.5400e-003	117.6461
Mobile	0.3344	0.7337	3.4417	7.3000e-003	0.5062	9.7700e-003	0.5160	0.1356	9.0100e-003	0.1446	0.0000	517.1887	517.1887	0.0220	0.0000	517.6509
Waste						0.0000	0.0000		0.0000	0.0000	8.5906	0.0000	8.5906	0.5077	0.0000	19.2520
Water						0.0000	0.0000		0.0000	0.0000	1.5213	8.5557	10.0770	0.1566	3.7700e-003	14.5352
Total	**0.7839**	**0.7786**	**4.1428**	**7.5800e-003**	**0.5062**	**0.0167**	**0.5230**	**0.1356**	**0.0160**	**0.1515**	**10.1119**	**646.9937**	**657.1056**	**0.6916**	**5.3700e-003**	**673.2933**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	0.3344	0.7337	3.4417	7.3000e-003	0.5062	9.7700e-003	0.5160	0.1356	9.0100e-003	0.1446	0.0000	517.1887	517.1887	0.0220	0.0000	517.6509
Unmitigated	0.3344	0.7337	3.4417	7.3000e-003	0.5062	9.7700e-003	0.5160	0.1356	9.0100e-003	0.1446	0.0000	517.1887	517.1887	0.0220	0.0000	517.6509

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	611.80	611.80	611.80	1,365,762	1,365,762
Total	611.80	611.80	611.80	1,365,762	1,365,762

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	74.3172	74.3172	3.3300e-003	7.6000e-004	74.6214
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	75.5323	75.5323	3.3800e-003	7.7000e-004	75.8414
NaturalGas Mitigated	4.3200e-003	0.0369	0.0157	2.4000e-004		2.9900e-003	2.9900e-003		2.9900e-003	2.9900e-003	0.0000	42.7644	42.7644	8.2000e-004	7.8000e-004	43.0247
NaturalGas Unmitigated	5.3500e-003	0.0457	0.0195	2.9000e-004		3.7000e-003	3.7000e-003		3.7000e-003	3.7000e-003	0.0000	52.9313	52.9313	1.0100e-003	9.7000e-004	53.2534

5.2 Energy by Land Use - NaturalGas

Mitigated

	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	801375	4.3200e-003	0.0369	0.0157	2.4000e-004		2.9900e-003	2.9900e-003		2.9900e-003	2.9900e-003	0.0000	42.7644	42.7644	8.2000e-004	7.8000e-004	43.0247
Total		**4.3200e-003**	**0.0369**	**0.0157**	**2.4000e-004**		**2.9900e-003**	**2.9900e-003**		**2.9900e-003**	**2.9900e-003**	**0.0000**	**42.7644**	**42.7644**	**8.2000e-004**	**7.8000e-004**	**43.0247**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	333268	74.3172	3.3300e-003	7.6000e-004	74.6214
Total		**74.3172**	**3.3300e-003**	**7.6000e-004**	**74.6214**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.4453	7.9300e-003	0.6854	4.0000e-005		3.9800e-003	3.9800e-003		3.9800e-003	3.9800e-003	0.0000	4.1677	4.1677	1.1500e-003	6.0000e-005	4.2091
Unmitigated	0.4453	7.9300e-003	0.6854	4.0000e-005		3.9800e-003	3.9800e-003		3.9800e-003	3.9800e-003	0.0000	4.1677	4.1677	1.1500e-003	6.0000e-005	4.2091

6.2 Area by SubCategory

Mitigated

	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	0.0648					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3593					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.1000e-004	0.0000	2.0000e-005	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	3.0518	3.0518	6.0000e-005	6.0000e-005	3.0704
Landscaping	0.0209	7.9300e-003	0.6854	4.0000e-005		3.7700e-003	3.7700e-003		3.7700e-003	3.7700e-003	0.0000	1.1159	1.1159	1.0900e-003	0.0000	1.1387
Total	**0.4453**	**7.9300e-003**	**0.6854**	**4.0000e-005**		**3.9800e-003**	**3.9800e-003**		**3.9800e-003**	**3.9800e-003**	**0.0000**	**4.1677**	**4.1677**	**1.1500e-003**	**6.0000e-005**	**4.2091**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.0770	0.1566	3.7700e-003	14.5352
Unmitigated	12.0838	0.1958	4.7200e-003	17.6569

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	4.79534 / 3.54842	10.0770	0.1566	3.7700e-003	14.5352
Total		**10.0770**	**0.1566**	**3.7700e-003**	**14.5352**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.5906	0.5077	0.0000	19.2520
Unmitigated	8.5906	0.5077	0.0000	19.2520

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	42.32	8.5906	0.5077	0.0000	19.2520
Total		**8.5906**	**0.5077**	**0.0000**	**19.2520**

Napa Housing Element - Beard B81

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	80.00	Dwelling Unit	5.00	80,000.00	229
Condo/Townhouse	71.00	Dwelling Unit	4.44	71,000.00	203

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use - Project Specifics

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	44.00	55.20
tblFireplaces	NumberGas	39.05	48.99
tblFireplaces	NumberWood	11.20	0.00
tblFireplaces	NumberWood	9.94	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	7.60
tblVehicleTrips	ST_TR	7.16	5.81
tblVehicleTrips	SU_TR	6.07	7.60
tblVehicleTrips	SU_TR	6.07	5.81
tblVehicleTrips	WD_TR	6.59	7.60
tblVehicleTrips	WD_TR	6.59	5.81
tblWoodstoves	NumberCatalytic	1.60	0.00
tblWoodstoves	NumberCatalytic	1.42	0.00
tblWoodstoves	NumberNoncatalytic	1.60	0.00
tblWoodstoves	NumberNoncatalytic	1.42	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	0.7308	0.0130	1.1250	6.0000e-005		6.5400e-003	6.5400e-003		6.5300e-003	6.5300e-003	0.0000	6.8404	6.8404	1.8800e-003	9.0000e-005	6.9084
Energy	9.6300e-003	0.0823	0.0350	5.3000e-004		6.6500e-003	6.6500e-003		6.6500e-003	6.6500e-003	0.0000	227.4813	227.4813	7.7400e-003	3.0900e-003	228.6023
Mobile	0.5577	1.2239	5.7409	0.0122	0.8444	0.0163	0.8607	0.2261	0.0150	0.2412	0.0000	862.6941	862.6941	0.0367	0.0000	863.4651
Waste						0.0000	0.0000		0.0000	0.0000	14.0998	0.0000	14.0998	0.8333	0.0000	31.5985
Water						0.0000	0.0000		0.0000	0.0000	2.4970	14.0433	16.5403	0.2571	6.1900e-003	23.8575
Total	**1.2982**	**1.3192**	**6.9008**	**0.0128**	**0.8444**	**0.0295**	**0.8739**	**0.2261**	**0.0282**	**0.2543**	**16.5967**	**1,111.0592**	**1,127.6559**	**1.1367**	**9.3700e-003**	**1,154.4318**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	0.5577	1.2239	5.7409	0.0122	0.8444	0.0163	0.8607	0.2261	0.0150	0.2412	0.0000	862.6941	862.6941	0.0367	0.0000	863.4651
Unmitigated	0.5577	1.2239	5.7409	0.0122	0.8444	0.0163	0.8607	0.2261	0.0150	0.2412	0.0000	862.6941	862.6941	0.0367	0.0000	863.4651

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	608.00	608.00	608.00	1,357,279	1,357,279
Condo/Townhouse	412.51	412.51	412.51	920,873	920,873
Total	1,020.51	1,020.51	1,020.51	2,278,152	2,278,152

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3
Condo/Townhouse	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	132.1602	132.1602	5.9100e-003	1.3400e-003	132.7010
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	133.9462	133.9462	5.9900e-003	1.3600e-003	134.4943
NaturalGas Mitigated	9.6300e-003	0.0823	0.0350	5.3000e-004		6.6500e-003	6.6500e-003		6.6500e-003	6.6500e-003	0.0000	95.3212	95.3212	1.8300e-003	1.7500e-003	95.9013
NaturalGas Unmitigated	0.0121	0.1035	0.0440	6.6000e-004		8.3600e-003	8.3600e-003		8.3600e-003	8.3600e-003	0.0000	119.8132	119.8132	2.3000e-003	2.2000e-003	120.5424

5.2 Energy by Land Use - NaturalGas

Mitigated

	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					
Condo/Townhouse	1.0894e+006	5.8700e-003	0.0502	0.0214	3.2000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	58.1347	58.1347	1.1100e-003	1.0700e-003	58.4885
Apartments Low Rise	696848	3.7600e-003	0.0321	0.0137	2.0000e-004		2.6000e-003	2.6000e-003		2.6000e-003	2.6000e-003	0.0000	37.1865	37.1865	7.1000e-004	6.8000e-004	37.4128
Total		**9.6300e-003**	**0.0823**	**0.0350**	**5.2000e-004**		**6.6600e-003**	**6.6600e-003**		**6.6600e-003**	**6.6600e-003**	**0.0000**	**95.3212**	**95.3212**	**1.8200e-003**	**1.7500e-003**	**95.9013**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	289799	64.6276	2.8900e-003	6.6000e-004	64.8921
Condo/Townhouse	302825	67.5326	3.0200e-003	6.9000e-004	67.8089
Total		**132.1602**	**5.9100e-003**	**1.3500e-003**	**132.7010**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.7308	0.0130	1.1250	6.0000e-005		6.5400e-003	6.5400e-003		6.5300e-003	6.5300e-003	0.0000	6.8404	6.8404	1.8800e-003	9.0000e-005	6.9084
Unmitigated	0.7308	0.0130	1.1250	6.0000e-005		6.5400e-003	6.5400e-003		6.5300e-003	6.5300e-003	0.0000	6.8404	6.8404	1.8800e-003	9.0000e-005	6.9084

6.2 Area by SubCategory

Mitigated

	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	0.1063					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1000e-004	0.0000	3.0000e-005	0.0000		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	5.0090	5.0090	1.0000e-004	9.0000e-005	5.0395
Landscaping	0.0343	0.0130	1.1249	6.0000e-005		6.1900e-003	6.1900e-003		6.1900e-003	6.1900e-003	0.0000	1.8315	1.8315	1.7900e-003	0.0000	1.8690
Total	**0.7308**	**0.0130**	**1.1250**	**6.0000e-005**		**6.5400e-003**	**6.5400e-003**		**6.5400e-003**	**6.5400e-003**	**0.0000**	**6.8404**	**6.8404**	**1.8900e-003**	**9.0000e-005**	**6.9084**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.5403	0.2571	6.1900e-003	23.8575
Unmitigated	19.8342	0.3213	7.7400e-003	28.9813

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	4.16986 / 3.08558	8.7631	0.1362	3.2800e-003	12.6397
Condo/Townhouse	3.70075 / 2.73845	7.7772	0.1209	2.9100e-003	11.2178
Total		**16.5403**	**0.2571**	**6.1900e-003**	**23.8575**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	14.0998	0.8333	0.0000	31.5985
Mitigated	14.0998	0.8333	0.0000	31.5985

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	36.8	7.4701	0.4415	0.0000	16.7409
Condo/Townhouse	32.66	6.6297	0.3918	0.0000	14.8576
Total		**14.0998**	**0.8333**	**0.0000**	**31.5985**

Napa Housing Element - Beard B84 and B86

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	8.00	Dwelling Unit	0.50	8,000.00	23
Mobile Home Park	20.00	Dwelling Unit	2.52	24,000.00	57

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use - Project Specifics

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	4.40	5.52
tblFireplaces	NumberGas	11.00	13.80
tblFireplaces	NumberWood	1.12	0.00
tblFireplaces	NumberWood	2.80	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	6.65
tblVehicleTrips	ST_TR	5.00	4.99
tblVehicleTrips	SU_TR	6.07	6.65
tblVehicleTrips	SU_TR	4.36	4.99
tblVehicleTrips	WD_TR	6.59	6.65
tblWoodstoves	NumberCatalytic	0.16	0.00
tblWoodstoves	NumberCatalytic	0.40	0.00
tblWoodstoves	NumberNoncatalytic	0.16	0.00
tblWoodstoves	NumberNoncatalytic	0.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	0.1540	2.4100e-003	0.2086	1.0000e-005		1.2100e-003	1.2100e-003		1.2100e-003	1.2100e-003	0.0000	1.2684	1.2684	3.5000e-004	2.0000e-005	1.2810
Energy	1.7900e-003	0.0153	6.5100e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	45.4323	45.4323	1.5800e-003	6.1000e-004	45.6535
Mobile	0.0836	0.1835	0.8607	1.8300e-003	0.1266	2.4400e-003	0.1290	0.0339	2.2500e-003	0.0362	0.0000	129.3395	129.3395	5.5000e-003	0.0000	129.4550
Waste						0.0000	0.0000		0.0000	0.0000	2.6145	0.0000	2.6145	0.1545	0.0000	5.8593
Water						0.0000	0.0000		0.0000	0.0000	0.4630	2.6041	3.0671	0.0477	1.1500e-003	4.4239
Total	**0.2394**	**0.2012**	**1.0758**	**1.9400e-003**	**0.1266**	**4.8900e-003**	**0.1315**	**0.0339**	**4.7000e-003**	**0.0386**	**3.0775**	**178.6442**	**181.7217**	**0.2096**	**1.7800e-003**	**186.6728**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	0.0836	0.1835	0.8607	1.8300e-003	0.1266	2.4400e-003	0.1290	0.0339	2.2500e-003	0.0362	0.0000	129.3395	129.3395	5.5000e-003	0.0000	129.4550
Unmitigated	0.0836	0.1835	0.8607	1.8300e-003	0.1266	2.4400e-003	0.1290	0.0339	2.2500e-003	0.0362	0.0000	129.3395	129.3395	5.5000e-003	0.0000	129.4550

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	53.20	53.20	53.20	118,762	118,762
Mobile Home Park	99.80	99.80	99.80	222,790	222,790
Total	153.00	153.00	153.00	341,552	341,552

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3
Mobile Home Park	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	27.7118	27.7118	1.2400e-003	2.8000e-004	27.8252
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	28.4186	28.4186	1.2700e-003	2.9000e-004	28.5349
NaturalGas Mitigated	1.7900e-003	0.0153	6.5100e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.7205	17.7205	3.4000e-004	3.2000e-004	17.8283
NaturalGas Unmitigated	2.2800e-003	0.0195	8.2800e-003	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003	0.0000	22.5237	22.5237	4.3000e-004	4.1000e-004	22.6608

5.2 Energy by Land Use - NaturalGas

Mitigated

	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					
Mobile Home Park	262385	1.4100e-003	0.0121	5.1400e-003	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	14.0018	14.0018	2.7000e-004	2.6000e-004	14.0871
Apartments Low Rise	69684.8	3.8000e-004	3.2100e-003	1.3700e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7187	3.7187	7.0000e-005	7.0000e-005	3.7413
Total		**1.7900e-003**	**0.0153**	**6.5100e-003**	**1.0000e-004**		**1.2400e-003**	**1.2400e-003**		**1.2400e-003**	**1.2400e-003**	**0.0000**	**17.7205**	**17.7205**	**3.4000e-004**	**3.3000e-004**	**17.8283**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	28979.9	6.4628	2.9000e-004	7.0000e-005	6.4892
Mobile Home Park	95283.5	21.2490	9.5000e-004	2.2000e-004	21.3360
Total		**27.7118**	**1.2400e-003**	**2.9000e-004**	**27.8252**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.1540	2.4100e-003	0.2086	1.0000e-005		1.2100e-003	1.2100e-003		1.2100e-003	1.2100e-003	0.0000	1.2684	1.2684	3.5000e-004	2.0000e-005	1.2810
Unmitigated	0.1540	2.4100e-003	0.2086	1.0000e-005		1.2100e-003	1.2100e-003		1.2100e-003	1.2100e-003	0.0000	1.2684	1.2684	3.5000e-004	2.0000e-005	1.2810

6.2 Area by SubCategory

Mitigated

	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	0.0225					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1250					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.0000e-005	0.0000	1.0000e-005	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.9288	0.9288	2.0000e-005	2.0000e-005	0.9345
Landscaping	6.3500e-003	2.4100e-003	0.2086	1.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	0.3396	0.3396	3.3000e-004	0.0000	0.3466
Total	**0.1540**	**2.4100e-003**	**0.2086**	**1.0000e-005**		**1.2100e-003**	**1.2100e-003**		**1.2100e-003**	**1.2100e-003**	**0.0000**	**1.2684**	**1.2684**	**3.5000e-004**	**2.0000e-005**	**1.2810**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.0671	0.0477	1.1500e-003	4.4239
Unmitigated	3.6779	0.0596	1.4400e-003	5.3740

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.416986 / 0.308558	0.8763	0.0136	3.3000e-004	1.2640
Mobile Home Park	1.04246 / 0.771395	2.1908	0.0341	8.2000e-004	3.1599
Total		**3.0671**	**0.0477**	**1.1500e-003**	**4.4239**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	2.6145	0.1545	0.0000	5.8593
Mitigated	2.6145	0.1545	0.0000	5.8593

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3.68	0.7470	0.0442	0.0000	1.6741
Mobile Home Park	9.2	1.8675	0.1104	0.0000	4.1852
Total		**2.6145**	**0.1545**	**0.0000**	**5.8593**

Napa Housing Element - Central Napa

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	83.00	Dwelling Unit	5.19	83,000.00	237
Condo/Townhouse	102.00	Dwelling Unit	6.38	102,000.00	292

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use - Project Specifics

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	45.65	57.27
tblFireplaces	NumberGas	56.10	70.38
tblFireplaces	NumberWood	11.62	0.00
tblFireplaces	NumberWood	14.28	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	7.55
tblVehicleTrips	ST_TR	7.16	6.42
tblVehicleTrips	SU_TR	6.07	7.55
tblVehicleTrips	SU_TR	6.07	6.42
tblVehicleTrips	WD_TR	6.59	7.55
tblVehicleTrips	WD_TR	6.59	6.42
tblWoodstoves	NumberCatalytic	1.66	0.00
tblWoodstoves	NumberCatalytic	2.04	0.00
tblWoodstoves	NumberNoncatalytic	1.66	0.00
tblWoodstoves	NumberNoncatalytic	2.04	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	0.8953	0.0159	1.3783	7.0000e-005		8.0100e-003	8.0100e-003		8.0000e-003	8.0000e-003	0.0000	8.3807	8.3807	2.3100e-003	1.1000e-004	8.4640
Energy	0.0123	0.1054	0.0449	6.7000e-004		8.5200e-003	8.5200e-003		8.5200e-003	8.5200e-003	0.0000	286.1682	286.1682	9.6800e-003	3.9100e-003	287.5827
Mobile	0.7004	1.5369	7.2090	0.0153	1.0604	0.0205	1.0808	0.2840	0.0189	0.3028	0.0000	1,083.3151	1,083.3151	0.0461	0.0000	1,084.2833
Waste						0.0000	0.0000		0.0000	0.0000	17.2745	0.0000	17.2745	1.0209	0.0000	38.7133
Water						0.0000	0.0000		0.0000	0.0000	3.0592	17.2054	20.2646	0.3149	7.5800e-003	29.2294
Total	**1.6080**	**1.6582**	**8.6321**	**0.0160**	**1.0604**	**0.0370**	**1.0974**	**0.2840**	**0.0354**	**0.3193**	**20.3337**	**1,395.0693**	**1,415.4030**	**1.3939**	**0.0116**	**1,448.2726**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	0.7004	1.5369	7.2090	0.0153	1.0604	0.0205	1.0808	0.2840	0.0189	0.3028	0.0000	1,083.3151	1,083.3151	0.0461	0.0000	1,084.2833
Unmitigated	0.7004	1.5369	7.2090	0.0153	1.0604	0.0205	1.0808	0.2840	0.0189	0.3028	0.0000	1,083.3151	1,083.3151	0.0461	0.0000	1,084.2833

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	626.65	626.65	626.65	1,398,912	1,398,912
Condo/Townhouse	654.84	654.84	654.84	1,461,843	1,461,843
Total	1,281.49	1,281.49	1,281.49	2,860,755	2,860,755

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3
Condo/Townhouse	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	164.0697	164.0697	7.3400e-003	1.6700e-003	164.7412
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	166.2138	166.2138	7.4400e-003	1.6900e-003	166.8940
NaturalGas Mitigated	0.0123	0.1054	0.0449	6.7000e-004		8.5200e-003	8.5200e-003		8.5200e-003	8.5200e-003	0.0000	122.0984	122.0984	2.3400e-003	2.2400e-003	122.8415
NaturalGas Unmitigated	0.0155	0.1328	0.0565	8.5000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	153.7557	153.7557	2.9500e-003	2.8200e-003	154.6914

5.2 Energy by Land Use - NaturalGas

Mitigated

	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					
Condo/Townhouse	1.56506e+006	8.4400e-003	0.0721	0.0307	4.6000e-004		5.8300e-003	5.8300e-003		5.8300e-003	5.8300e-003	0.0000	83.5175	83.5175	1.6000e-003	1.5300e-003	84.0257
Apartments Low Rise	722980	3.9000e-003	0.0333	0.0142	2.1000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	38.5810	38.5810	7.4000e-004	7.1000e-004	38.8158
Total		**0.0123**	**0.1054**	**0.0449**	**6.7000e-004**		**8.5200e-003**	**8.5200e-003**		**8.5200e-003**	**8.5200e-003**	**0.0000**	**122.0984**	**122.0984**	**2.3400e-003**	**2.2400e-003**	**122.8415**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	300666	67.0511	3.0000e-003	6.8000e-004	67.3255
Condo/Townhouse	435044	97.0186	4.3400e-003	9.9000e-004	97.4156
Total		**164.0697**	**7.3400e-003**	**1.6700e-003**	**164.7412**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.8953	0.0159	1.3783	7.0000e-005		8.0100e-003	8.0100e-003		8.0000e-003	8.0000e-003	0.0000	8.3807	8.3807	2.3100e-003	1.1000e-004	8.4640
Unmitigated	0.8953	0.0159	1.3783	7.0000e-005		8.0100e-003	8.0100e-003		8.0000e-003	8.0000e-003	0.0000	8.3807	8.3807	2.3100e-003	1.1000e-004	8.4640

6.2 Area by SubCategory

Mitigated

	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	0.1302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7225					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.2000e-004	0.0000	3.0000e-005	0.0000		4.3000e-004	4.3000e-004		4.2000e-004	4.2000e-004	0.0000	6.1368	6.1368	1.2000e-004	1.1000e-004	6.1742
Landscaping	0.0420	0.0159	1.3782	7.0000e-005		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	2.2438	2.2438	2.1900e-003	0.0000	2.2898
Total	**0.8953**	**0.0159**	**1.3782**	**7.0000e-005**		**8.0100e-003**	**8.0100e-003**		**8.0000e-003**	**8.0000e-003**	**0.0000**	**8.3807**	**8.3807**	**2.3100e-003**	**1.1000e-004**	**8.4640**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	20.2646	0.3149	7.5800e-003	29.2294
Unmitigated	24.3002	0.3937	9.4800e-003	35.5069

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	4.32623 / 3.20129	9.0917	0.1413	3.4000e-003	13.1137
Condo/Townhouse	5.31657 / 3.93412	11.1729	0.1736	4.1800e-003	16.1157
Total		**20.2646**	**0.3149**	**7.5800e-003**	**29.2294**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	17.2745	1.0209	0.0000	38.7133
Mitigated	17.2745	1.0209	0.0000	38.7133

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	38.18	7.7502	0.4580	0.0000	17.3687
Condo/Townhouse	46.92	9.5243	0.5629	0.0000	21.3447
Total		**17.2745**	**1.0209**	**0.0000**	**38.7133**

Napa Housing Element - Linda Vista

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	14.00	Dwelling Unit	0.88	14,000.00	40

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use - Project Specifics

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	7.70	9.66
tblFireplaces	NumberWood	1.96	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	6.65
tblVehicleTrips	SU_TR	6.07	6.65
tblVehicleTrips	WD_TR	6.59	6.65
tblWoodstoves	NumberCatalytic	0.28	0.00
tblWoodstoves	NumberNoncatalytic	0.28	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	0.0678	1.2100e-003	0.1043	1.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	0.6342	0.6342	1.7000e-004	1.0000e-005	0.6405
Energy	6.6000e-004	5.6200e-003	2.3900e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	17.8175	17.8175	6.3000e-004	2.3000e-004	17.9034
Mobile	0.0509	0.1117	0.5237	1.1100e-003	0.0770	1.4900e-003	0.0785	0.0206	1.3700e-003	0.0220	0.0000	78.7026	78.7026	3.3500e-003	0.0000	78.7730
Waste						0.0000	0.0000		0.0000	0.0000	1.3073	0.0000	1.3073	0.0773	0.0000	2.9297
Water						0.0000	0.0000		0.0000	0.0000	0.2315	1.3020	1.5335	0.0238	5.7000e-004	2.2120
Total	**0.1193**	**0.1185**	**0.6304**	**1.1600e-003**	**0.0770**	**2.5500e-003**	**0.0796**	**0.0206**	**2.4300e-003**	**0.0231**	**1.5388**	**98.4563**	**99.9951**	**0.1052**	**8.1000e-004**	**102.4585**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	0.0509	0.1117	0.5237	1.1100e-003	0.0770	1.4900e-003	0.0785	0.0206	1.3700e-003	0.0220	0.0000	78.7026	78.7026	3.3500e-003	0.0000	78.7730
Unmitigated	0.0509	0.1117	0.5237	1.1100e-003	0.0770	1.4900e-003	0.0785	0.0206	1.3700e-003	0.0220	0.0000	78.7026	78.7026	3.3500e-003	0.0000	78.7730

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	93.10	93.10	93.10	207,833	207,833
Total	93.10	93.10	93.10	207,833	207,833

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11.3098	11.3098	5.1000e-004	1.2000e-004	11.3561
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11.4948	11.4948	5.1000e-004	1.2000e-004	11.5418
NaturalGas Mitigated	6.6000e-004	5.6200e-003	2.3900e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	6.5076	6.5076	1.2000e-004	1.2000e-004	6.5472
NaturalGas Unmitigated	8.1000e-004	6.9600e-003	2.9600e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0548	8.0548	1.5000e-004	1.5000e-004	8.1038

5.2 Energy by Land Use - NaturalGas

Mitigated

	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	121948	6.6000e-004	5.6200e-003	2.3900e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	6.5076	6.5076	1.2000e-004	1.2000e-004	6.5472
Total		**6.6000e-004**	**5.6200e-003**	**2.3900e-003**	**4.0000e-005**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**6.5076**	**6.5076**	**1.2000e-004**	**1.2000e-004**	**6.5472**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	50714.8	11.3098	5.1000e-004	1.2000e-004	11.3561
Total		**11.3098**	**5.1000e-004**	**1.2000e-004**	**11.3561**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.0678	1.2100e-003	0.1043	1.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	0.6342	0.6342	1.7000e-004	1.0000e-005	0.6405
Unmitigated	0.0678	1.2100e-003	0.1043	1.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	0.6342	0.6342	1.7000e-004	1.0000e-005	0.6405

6.2 Area by SubCategory

Mitigated

	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	9.8600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0547					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.0000e-005	0.0000	0.0000	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4644	0.4644	1.0000e-005	1.0000e-005	0.4672
Landscaping	3.1800e-003	1.2100e-003	0.1043	1.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	0.1698	0.1698	1.7000e-004	0.0000	0.1733
Total	**0.0678**	**1.2100e-003**	**0.1043**	**1.0000e-005**		**6.0000e-004**	**6.0000e-004**		**6.0000e-004**	**6.0000e-004**	**0.0000**	**0.6342**	**0.6342**	**1.8000e-004**	**1.0000e-005**	**0.6405**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.5335	0.0238	5.7000e-004	2.2120
Unmitigated	1.8389	0.0298	7.2000e-004	2.6870

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.729725 / 0.539977	1.5335	0.0238	5.7000e-004	2.2120
Total		**1.5335**	**0.0238**	**5.7000e-004**	**2.2120**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.3073	0.0773	0.0000	2.9297
Unmitigated	1.3073	0.0773	0.0000	2.9297

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	6.44	1.3073	0.0773	0.0000	2.9297
Total		**1.3073**	**0.0773**	**0.0000**	**2.9297**

Napa Housing Element - Pueblo

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	18.00	Dwelling Unit	1.13	18,000.00	51
Condo/Townhouse	34.00	Dwelling Unit	2.13	34,000.00	97

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use - Project Specifics

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	9.90	12.42
tblFireplaces	NumberGas	18.70	23.46
tblFireplaces	NumberWood	2.52	0.00
tblFireplaces	NumberWood	4.76	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	6.65
tblVehicleTrips	ST_TR	7.16	7.40
tblVehicleTrips	SU_TR	6.07	6.65
tblVehicleTrips	SU_TR	6.07	7.40
tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	6.59	7.40
tblWoodstoves	NumberCatalytic	0.36	0.00
tblWoodstoves	NumberCatalytic	0.68	0.00
tblWoodstoves	NumberNoncatalytic	0.36	0.00
tblWoodstoves	NumberNoncatalytic	0.68	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	0.2517	4.4800e-003	0.3874	2.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	2.3556	2.3556	6.5000e-004	3.0000e-005	2.3791
Energy	3.6600e-003	0.0313	0.0133	2.0000e-004		2.5300e-003	2.5300e-003		2.5300e-003	2.5300e-003	0.0000	83.0869	83.0869	2.7900e-003	1.1400e-003	83.4991
Mobile	0.2029	0.4453	2.0887	4.4300e-003	0.3072	5.9300e-003	0.3132	0.0823	5.4700e-003	0.0877	0.0000	313.8806	313.8806	0.0134	0.0000	314.1612
Waste						0.0000	0.0000		0.0000	0.0000	4.8555	0.0000	4.8555	0.2870	0.0000	10.8816
Water						0.0000	0.0000		0.0000	0.0000	0.8599	4.8361	5.6960	0.0885	2.1300e-003	8.2158
Total	**0.4582**	**0.4810**	**2.4894**	**4.6500e-003**	**0.3072**	**0.0107**	**0.3179**	**0.0823**	**0.0103**	**0.0925**	**5.7154**	**404.1592**	**409.8747**	**0.3923**	**3.3000e-003**	**419.1367**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	0.2029	0.4453	2.0887	4.4300e-003	0.3072	5.9300e-003	0.3132	0.0823	5.4700e-003	0.0877	0.0000	313.8806	313.8806	0.0134	0.0000	314.1612
Unmitigated	0.2029	0.4453	2.0887	4.4300e-003	0.3072	5.9300e-003	0.3132	0.0823	5.4700e-003	0.0877	0.0000	313.8806	313.8806	0.0134	0.0000	314.1612

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	119.70	119.70	119.70	267,214	267,214
Condo/Townhouse	251.60	251.60	251.60	561,663	561,663
Total	371.30	371.30	371.30	828,878	828,878

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3
Condo/Townhouse	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46.8807	46.8807	2.1000e-003	4.8000e-004	47.0726
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	47.4678	47.4678	2.1200e-003	4.8000e-004	47.6620
NaturalGas Mitigated	3.6600e-003	0.0313	0.0133	2.0000e-004		2.5300e-003	2.5300e-003		2.5300e-003	2.5300e-003	0.0000	36.2061	36.2061	6.9000e-004	6.6000e-004	36.4265
NaturalGas Unmitigated	4.6200e-003	0.0395	0.0168	2.5000e-004		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003	0.0000	45.6903	45.6903	8.8000e-004	8.4000e-004	45.9683

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					
Condo/Townhouse	662137	3.5700e-003	0.0305	0.0130	1.9000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.3341	35.3341	6.8000e-004	6.5000e-004	35.5492
Apartments Low Rise	194066	1.0500e-003	8.9400e-003	3.8100e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3561	10.3561	2.0000e-004	1.9000e-004	10.4192
Total		**4.6200e-003**	**0.0395**	**0.0168**	**2.5000e-004**		**3.1900e-003**	**3.1900e-003**		**3.1900e-003**	**3.1900e-003**	**0.0000**	**45.6903**	**45.6903**	**8.8000e-004**	**8.4000e-004**	**45.9683**

Mitigated

	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					
Condo/Townhouse	521686	2.8100e-003	0.0240	0.0102	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8392	27.8392	5.3000e-004	5.1000e-004	28.0086
Apartments Low Rise	156791	8.5000e-004	7.2200e-003	3.0700e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	8.3670	8.3670	1.6000e-004	1.5000e-004	8.4179
Total		**3.6600e-003**	**0.0313**	**0.0133**	**2.0000e-004**		**2.5200e-003**	**2.5200e-003**		**2.5200e-003**	**2.5200e-003**	**0.0000**	**36.2061**	**36.2061**	**6.9000e-004**	**6.6000e-004**	**36.4265**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	66270.8	14.7790	6.6000e-004	1.5000e-004	14.8394
Condo/Townhouse	146581	32.6888	1.4600e-003	3.3000e-004	32.8226
Total		**47.4678**	**2.1200e-003**	**4.8000e-004**	**47.6620**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	65204.7	14.5412	6.5000e-004	1.5000e-004	14.6007
Condo/Townhouse	145015	32.3395	1.4500e-003	3.3000e-004	32.4719
Total		**46.8807**	**2.1000e-003**	**4.8000e-004**	**47.0726**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.2517	4.4800e-003	0.3874	2.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	2.3556	2.3556	6.5000e-004	3.0000e-005	2.3791
Unmitigated	0.2517	4.4800e-003	0.3874	2.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	2.3556	2.3556	6.5000e-004	3.0000e-005	2.3791

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	0.0366					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7000e-004	0.0000	1.0000e-005	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7250	1.7250	3.0000e-005	3.0000e-005	1.7355
Landscaping	0.0118	4.4800e-003	0.3874	2.0000e-005		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	0.6307	0.6307	6.1000e-004	0.0000	0.6436
Total	**0.2517**	**4.4800e-003**	**0.3874**	**2.0000e-005**		**2.2500e-003**	**2.2500e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**2.3557**	**2.3557**	**6.4000e-004**	**3.0000e-005**	**2.3791**

Mitigated

	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	0.0366					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7000e-004	0.0000	1.0000e-005	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7250	1.7250	3.0000e-005	3.0000e-005	1.7355
Landscaping	0.0118	4.4800e-003	0.3874	2.0000e-005		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	0.6307	0.6307	6.1000e-004	0.0000	0.6436
Total	**0.2517**	**4.4800e-003**	**0.3874**	**2.0000e-005**		**2.2500e-003**	**2.2500e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**2.3557**	**2.3557**	**6.4000e-004**	**3.0000e-005**	**2.3791**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.6960	0.0885	2.1300e-003	8.2158
Unmitigated	6.8303	0.1107	2.6700e-003	9.9803

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.17277 / 0.739357	2.3643	0.0383	9.2000e-004	3.4547
Condo/Townhouse	2.21524 / 1.39656	4.4660	0.0724	1.7400e-003	6.5256
Total		**6.8303**	**0.1107**	**2.6600e-003**	**9.9803**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.938218 / 0.694256	1.9717	0.0306	7.4000e-004	2.8439
Condo/Townhouse	1.77219 / 1.31137	3.7243	0.0579	1.3900e-003	5.3719
Total		**5.6960**	**0.0885**	**2.1300e-003**	**8.2158**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	4.8555	0.2870	0.0000	10.8816
Mitigated	4.8555	0.2870	0.0000	10.8816

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	8.28	1.6808	0.0993	0.0000	3.7667
Condo/Townhouse	15.64	3.1748	0.1876	0.0000	7.1149
Total		**4.8556**	**0.2870**	**0.0000**	**10.8816**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	8.28	1.6808	0.0993	0.0000	3.7667
Condo/Townhouse	15.64	3.1748	0.1876	0.0000	7.1149
Total		**4.8556**	**0.2870**	**0.0000**	**10.8816**

Napa Housing Element - Gasser Master Plan

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	489.00	Dwelling Unit	30.56	489,000.00	1399

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use - Project Specifics

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	268.95	337.40
tblFireplaces	NumberWood	68.46	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	6.31
tblVehicleTrips	SU_TR	6.07	6.31
tblVehicleTrips	WD_TR	6.59	6.31
tblWoodstoves	NumberCatalytic	9.78	0.00
tblWoodstoves	NumberNoncatalytic	9.78	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	2.3666	0.0421	3.6430	1.9000e-004		0.0212	0.0212		0.0212	0.0212	0.0000	22.1516	22.1516	6.0900e-003	3.0000e-004	22.3718
Energy	0.0230	0.1963	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159	0.0000	622.3386	622.3386	0.0220	8.1800e-003	625.3385
Mobile	1.6863	3.7005	17.3579	0.0368	2.5532	0.0493	2.6024	0.6837	0.0454	0.7291	0.0000	2,608.4216	2,608.4216	0.1110	0.0000	2,610.7528
Waste						0.0000	0.0000		0.0000	0.0000	45.6608	0.0000	45.6608	2.6985	0.0000	102.3288
Water						0.0000	0.0000		0.0000	0.0000	8.0863	45.4780	53.5642	0.8325	0.0201	77.2604
Total	**4.0759**	**3.9389**	**21.0845**	**0.0383**	**2.5532**	**0.0863**	**2.6395**	**0.6837**	**0.0825**	**0.7662**	**53.7470**	**3,298.3897**	**3,352.1368**	**3.6701**	**0.0285**	**3,438.0523**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	1.6863	3.7005	17.3579	0.0368	2.5532	0.0493	2.6024	0.6837	0.0454	0.7291	0.0000	2,608.4216	2,608.4216	0.1110	0.0000	2,610.7528
Unmitigated	1.6863	3.7005	17.3579	0.0368	2.5532	0.0493	2.6024	0.6837	0.0454	0.7291	0.0000	2,608.4216	2,608.4216	0.1110	0.0000	2,610.7528

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	3,085.59	3,085.59	3085.59	6,888,166	6,888,166
Total	3,085.59	3,085.59	3,085.59	6,888,166	6,888,166

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	395.0362	395.0362	0.0177	4.0200e-003	396.6529
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	401.4951	401.4951	0.0180	4.0800e-003	403.1381
NaturalGas Mitigated	0.0230	0.1963	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159	0.0000	227.3023	227.3023	4.3600e-003	4.1700e-003	228.6856
NaturalGas Unmitigated	0.0284	0.2429	0.1034	1.5500e-003		0.0196	0.0196		0.0196	0.0196	0.0000	281.3414	281.3414	5.3900e-003	5.1600e-003	283.0536

5.2 Energy by Land Use - NaturalGas

Mitigated

	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	4.25948e+006	0.0230	0.1963	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159	0.0000	227.3023	227.3023	4.3600e-003	4.1700e-003	228.6856
Total		**0.0230**	**0.1963**	**0.0835**	**1.2500e-003**		**0.0159**	**0.0159**		**0.0159**	**0.0159**	**0.0000**	**227.3023**	**227.3023**	**4.3600e-003**	**4.1700e-003**	**228.6856**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.77139e+006	395.0362	0.0177	4.0200e-003	396.6529
Total		**395.0362**	**0.0177**	**4.0200e-003**	**396.6529**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	2.3666	0.0421	3.6430	1.9000e-004		0.0212	0.0212		0.0212	0.0212	0.0000	22.1516	22.1516	6.0900e-003	3.0000e-004	22.3718
Unmitigated	2.3666	0.0421	3.6430	1.9000e-004		0.0212	0.0212		0.0212	0.0212	0.0000	22.1516	22.1516	6.0900e-003	3.0000e-004	22.3718

6.2 Area by SubCategory

Mitigated

	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	0.3442					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9098					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6400e-003	0.0000	9.0000e-005	0.0000		1.1300e-003	1.1300e-003		1.1200e-003	1.1200e-003	0.0000	16.2207	16.2207	3.1000e-004	3.0000e-004	16.3194
Landscaping	0.1109	0.0421	3.6430	1.9000e-004		0.0200	0.0200		0.0200	0.0200	0.0000	5.9310	5.9310	5.7800e-003	0.0000	6.0524
Total	**2.3666**	**0.0421**	**3.6430**	**1.9000e-004**		**0.0212**	**0.0212**		**0.0212**	**0.0212**	**0.0000**	**22.1516**	**22.1516**	**6.0900e-003**	**3.0000e-004**	**22.3718**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	53.5642	0.8325	0.0201	77.2604
Unmitigated	64.2313	1.0406	0.0251	93.8535

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	25.4883 / 18.8606	53.5642	0.8325	0.0201	77.2604
Total		**53.5642**	**0.8325**	**0.0201**	**77.2604**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	45.6608	2.6985	0.0000	102.3288
Unmitigated	45.6608	2.6985	0.0000	102.3288

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	224.94	45.6608	2.6985	0.0000	102.3288
Total		**45.6608**	**2.6985**	**0.0000**	**102.3288**

Napa Housing Element - Terrace Shurtleff

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	105.00	Dwelling Unit	6.56	105,000.00	300

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use - Project Specifics

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	57.75	72.45
tblFireplaces	NumberWood	14.70	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	7.24
tblVehicleTrips	SU_TR	6.07	7.24
tblVehicleTrips	WD_TR	6.59	7.24
tblWoodstoves	NumberCatalytic	2.10	0.00
tblWoodstoves	NumberNoncatalytic	2.10	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	0.5082	9.0500e-003	0.7823	4.0000e-005		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003	0.0000	4.7566	4.7566	1.3100e-003	6.0000e-005	4.8039
Energy	4.9300e-003	0.0421	0.0179	2.7000e-004		3.4100e-003	3.4100e-003		3.4100e-003	3.4100e-003	0.0000	133.6310	133.6310	4.7300e-003	1.7600e-003	134.2751
Mobile	0.4155	0.9117	4.2765	9.0700e-003	0.6290	0.0121	0.6412	0.1684	0.0112	0.1796	0.0000	642.6395	642.6395	0.0274	0.0000	643.2139
Waste						0.0000	0.0000		0.0000	0.0000	9.8045	0.0000	9.8045	0.5794	0.0000	21.9724
Water						0.0000	0.0000		0.0000	0.0000	1.7363	9.7652	11.5015	0.1788	4.3000e-003	16.5897
Total	**0.9286**	**0.9629**	**5.0767**	**9.3800e-003**	**0.6290**	**0.0201**	**0.6491**	**0.1684**	**0.0192**	**0.1876**	**11.5408**	**790.7923**	**802.3331**	**0.7916**	**6.1200e-003**	**820.8550**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	0.4155	0.9117	4.2765	9.0700e-003	0.6290	0.0121	0.6412	0.1684	0.0112	0.1796	0.0000	642.6395	642.6395	0.0274	0.0000	643.2139
Unmitigated	0.4155	0.9117	4.2765	9.0700e-003	0.6290	0.0121	0.6412	0.1684	0.0112	0.1796	0.0000	642.6395	642.6395	0.0274	0.0000	643.2139

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	760.20	760.20	760.20	1,697,045	1,697,045
Total	760.20	760.20	760.20	1,697,045	1,697,045

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	84.8237	84.8237	3.8000e-003	8.6000e-004	85.1709
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	86.2106	86.2106	3.8600e-003	8.8000e-004	86.5634
NaturalGas Mitigated	4.9300e-003	0.0421	0.0179	2.7000e-004		3.4100e-003	3.4100e-003		3.4100e-003	3.4100e-003	0.0000	48.8073	48.8073	9.4000e-004	8.9000e-004	49.1043
NaturalGas Unmitigated	6.1000e-003	0.0522	0.0222	3.3000e-004		4.2200e-003	4.2200e-003		4.2200e-003	4.2200e-003	0.0000	60.4107	60.4107	1.1600e-003	1.1100e-003	60.7784

5.2 Energy by Land Use - NaturalGas

Mitigated

	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	914613	4.9300e-003	0.0421	0.0179	2.7000e-004		3.4100e-003	3.4100e-003		3.4100e-003	3.4100e-003	0.0000	48.8073	48.8073	9.4000e-004	8.9000e-004	49.1043
Total		**4.9300e-003**	**0.0421**	**0.0179**	**2.7000e-004**		**3.4100e-003**	**3.4100e-003**		**3.4100e-003**	**3.4100e-003**	**0.0000**	**48.8073**	**48.8073**	**9.4000e-004**	**8.9000e-004**	**49.1043**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	380361	84.8237	3.8000e-003	8.6000e-004	85.1709
Total		**84.8237**	**3.8000e-003**	**8.6000e-004**	**85.1709**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.5082	9.0500e-003	0.7823	4.0000e-005		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003	0.0000	4.7566	4.7566	1.3100e-003	6.0000e-005	4.8039
Unmitigated	0.5082	9.0500e-003	0.7823	4.0000e-005		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003	0.0000	4.7566	4.7566	1.3100e-003	6.0000e-005	4.8039

6.2 Area by SubCategory

Mitigated

	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	0.0739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.5000e-004	0.0000	2.0000e-005	0.0000		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.4831	3.4831	7.0000e-005	6.0000e-005	3.5043
Landscaping	0.0238	9.0500e-003	0.7822	4.0000e-005		4.3000e-003	4.3000e-003		4.3000e-003	4.3000e-003	0.0000	1.2735	1.2735	1.2400e-003	0.0000	1.2996
Total	**0.5082**	**9.0500e-003**	**0.7823**	**4.0000e-005**		**4.5400e-003**	**4.5400e-003**		**4.5400e-003**	**4.5400e-003**	**0.0000**	**4.7566**	**4.7566**	**1.3100e-003**	**6.0000e-005**	**4.8039**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.5015	0.1788	4.3000e-003	16.5897
Unmitigated	13.7920	0.2234	5.3800e-003	20.1526

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	5.47294 / 4.04983	11.5015	0.1788	4.3000e-003	16.5897
Total		**11.5015**	**0.1788**	**4.3000e-003**	**16.5897**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9.8045	0.5794	0.0000	21.9724
Unmitigated	9.8045	0.5794	0.0000	21.9724

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	48.3	9.8045	0.5794	0.0000	21.9724
Total		**9.8045**	**0.5794**	**0.0000**	**21.9724**

Napa Housing Element - Vintage V21 V24 and V37

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	155.00	Dwelling Unit	9.69	155,000.00	443

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use - Project Specifics

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	85.25	106.95
tblFireplaces	NumberWood	21.70	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	6.86
tblVehicleTrips	SU_TR	6.07	6.86
tblVehicleTrips	WD_TR	6.59	6.86
tblWoodstoves	NumberCatalytic	3.10	0.00
tblWoodstoves	NumberNoncatalytic	3.10	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	0.7502	0.0134	1.1548	6.0000e-005		6.7100e-003	6.7100e-003		6.7000e-003	6.7000e-003	0.0000	7.0216	7.0216	1.9300e-003	9.0000e-005	7.0914
Energy	7.2800e-003	0.0622	0.0265	4.0000e-004		5.0300e-003	5.0300e-003		5.0300e-003	5.0300e-003	0.0000	197.2648	197.2648	6.9800e-003	2.5900e-003	198.2157
Mobile	0.5811	1.2752	5.9816	0.0127	0.8798	0.0170	0.8968	0.2356	0.0157	0.2513	0.0000	898.8669	898.8669	0.0383	0.0000	899.6702
Waste						0.0000	0.0000		0.0000	0.0000	14.4733	0.0000	14.4733	0.8553	0.0000	32.4355
Water						0.0000	0.0000		0.0000	0.0000	2.5631	14.4153	16.9784	0.2639	6.3500e-003	24.4895
Total	**1.3385**	**1.3508**	**7.1628**	**0.0132**	**0.8798**	**0.0287**	**0.9085**	**0.2356**	**0.0274**	**0.2630**	**17.0364**	**1,117.5686**	**1,134.6050**	**1.1664**	**9.0300e-003**	**1,161.9023**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	0.5811	1.2752	5.9816	0.0127	0.8798	0.0170	0.8968	0.2356	0.0157	0.2513	0.0000	898.8669	898.8669	0.0383	0.0000	899.6702
Unmitigated	0.5811	1.2752	5.9816	0.0127	0.8798	0.0170	0.8968	0.2356	0.0157	0.2513	0.0000	898.8669	898.8669	0.0383	0.0000	899.6702

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,063.30	1,063.30	1063.30	2,373,675	2,373,675
Total	1,063.30	1,063.30	1,063.30	2,373,675	2,373,675

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	125.2160	125.2160	5.6000e-003	1.2700e-003	125.7284
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	127.2633	127.2633	5.6900e-003	1.2900e-003	127.7841
NaturalGas Mitigated	7.2800e-003	0.0622	0.0265	4.0000e-004		5.0300e-003	5.0300e-003		5.0300e-003	5.0300e-003	0.0000	72.0488	72.0488	1.3800e-003	1.3200e-003	72.4873
NaturalGas Unmitigated	9.0100e-003	0.0770	0.0328	4.9000e-004		6.2300e-003	6.2300e-003		6.2300e-003	6.2300e-003	0.0000	89.1778	89.1778	1.7100e-003	1.6300e-003	89.7205

5.2 Energy by Land Use - NaturalGas

Mitigated

	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	1.35014e+006	7.2800e-003	0.0622	0.0265	4.0000e-004		5.0300e-003	5.0300e-003		5.0300e-003	5.0300e-003	0.0000	72.0488	72.0488	1.3800e-003	1.3200e-003	72.4873
Total		**7.2800e-003**	**0.0622**	**0.0265**	**4.0000e-004**		**5.0300e-003**	**5.0300e-003**		**5.0300e-003**	**5.0300e-003**	**0.0000**	**72.0488**	**72.0488**	**1.3800e-003**	**1.3200e-003**	**72.4873**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	561485	125.2160	5.6000e-003	1.2700e-003	125.7284
Total		**125.2160**	**5.6000e-003**	**1.2700e-003**	**125.7284**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.7502	0.0134	1.1548	6.0000e-005		6.7100e-003	6.7100e-003		6.7000e-003	6.7000e-003	0.0000	7.0216	7.0216	1.9300e-003	9.0000e-005	7.0914
Unmitigated	0.7502	0.0134	1.1548	6.0000e-005		6.7100e-003	6.7100e-003		6.7000e-003	6.7000e-003	0.0000	7.0216	7.0216	1.9300e-003	9.0000e-005	7.0914

6.2 Area by SubCategory

Mitigated

	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	0.1091					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6054					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.2000e-004	0.0000	3.0000e-005	0.0000		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1417	5.1417	1.0000e-004	9.0000e-005	5.1730
Landscaping	0.0352	0.0134	1.1547	6.0000e-005		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	1.8800	1.8800	1.8300e-003	0.0000	1.9185
Total	**0.7501**	**0.0134**	**1.1548**	**6.0000e-005**		**6.7100e-003**	**6.7100e-003**		**6.7100e-003**	**6.7100e-003**	**0.0000**	**7.0216**	**7.0216**	**1.9300e-003**	**9.0000e-005**	**7.0914**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.9784	0.2639	6.3500e-003	24.4895
Unmitigated	20.3596	0.3298	7.9400e-003	29.7491

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	8.0791 / 5.97831	16.9784	0.2639	6.3500e-003	24.4895
Total		**16.9784**	**0.2639**	**6.3500e-003**	**24.4895**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.4733	0.8553	0.0000	32.4355
Unmitigated	14.4733	0.8553	0.0000	32.4355

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	71.3	14.4733	0.8553	0.0000	32.4355
Total		**14.4733**	**0.8553**	**0.0000**	**32.4355**

Napa Housing Element - Vintage V33H

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	57.00	Dwelling Unit	3.56	57,000.00	163

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use - Project Specifics

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	31.35	39.33
tblFireplaces	NumberWood	7.98	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	8.23
tblVehicleTrips	SU_TR	6.07	8.23
tblVehicleTrips	WD_TR	6.59	8.23
tblWoodstoves	NumberCatalytic	1.14	0.00
tblWoodstoves	NumberNoncatalytic	1.14	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	0.2759	4.9100e-003	0.4247	2.0000e-005		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	2.5822	2.5822	7.1000e-004	3.0000e-005	2.6078
Energy	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	72.5425	72.5425	2.5700e-003	9.5000e-004	72.8922
Mobile	0.2564	0.5626	2.6390	5.6000e-003	0.3882	7.4900e-003	0.3957	0.1039	6.9100e-003	0.1109	0.0000	396.5649	396.5649	0.0169	0.0000	396.9193
Waste						0.0000	0.0000		0.0000	0.0000	5.3224	0.0000	5.3224	0.3146	0.0000	11.9279
Water						0.0000	0.0000		0.0000	0.0000	0.9426	5.3011	6.2437	0.0970	2.3400e-003	9.0058
Total	**0.5349**	**0.5904**	**3.0734**	**5.7700e-003**	**0.3882**	**0.0118**	**0.4000**	**0.1039**	**0.0112**	**0.1152**	**6.2650**	**476.9907**	**483.2557**	**0.4317**	**3.3200e-003**	**493.3530**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	0.2564	0.5626	2.6390	5.6000e-003	0.3882	7.4900e-003	0.3957	0.1039	6.9100e-003	0.1109	0.0000	396.5649	396.5649	0.0169	0.0000	396.9193
Unmitigated	0.2564	0.5626	2.6390	5.6000e-003	0.3882	7.4900e-003	0.3957	0.1039	6.9100e-003	0.1109	0.0000	396.5649	396.5649	0.0169	0.0000	396.9193

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	469.11	469.11	469.11	1,047,225	1,047,225
Total	469.11	469.11	469.11	1,047,225	1,047,225

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46.0472	46.0472	2.0600e-003	4.7000e-004	46.2356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46.8000	46.8000	2.0900e-003	4.8000e-004	46.9916
NaturalGas Mitigated	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.4954	26.4954	5.1000e-004	4.9000e-004	26.6566
NaturalGas Unmitigated	3.3100e-003	0.0283	0.0121	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	32.7944	32.7944	6.3000e-004	6.0000e-004	32.9940

5.2 Energy by Land Use - NaturalGas

Mitigated

	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	496504	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.4954	26.4954	5.1000e-004	4.9000e-004	26.6566
Total		**2.6800e-003**	**0.0229**	**9.7400e-003**	**1.5000e-004**		**1.8500e-003**	**1.8500e-003**		**1.8500e-003**	**1.8500e-003**	**0.0000**	**26.4954**	**26.4954**	**5.1000e-004**	**4.9000e-004**	**26.6566**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	206482	46.0472	2.0600e-003	4.7000e-004	46.2356
Total		**46.0472**	**2.0600e-003**	**4.7000e-004**	**46.2356**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.2759	4.9100e-003	0.4247	2.0000e-005		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	2.5822	2.5822	7.1000e-004	3.0000e-005	2.6078
Unmitigated	0.2759	4.9100e-003	0.4247	2.0000e-005		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	2.5822	2.5822	7.1000e-004	3.0000e-005	2.6078

6.2 Area by SubCategory

Mitigated

	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	0.0401					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.9000e-004	0.0000	1.0000e-005	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.8908	1.8908	4.0000e-005	3.0000e-005	1.9023
Landscaping	0.0129	4.9100e-003	0.4246	2.0000e-005		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003	0.0000	0.6913	0.6913	6.7000e-004	0.0000	0.7055
Total	**0.2759**	**4.9100e-003**	**0.4247**	**2.0000e-005**		**2.4600e-003**	**2.4600e-003**		**2.4600e-003**	**2.4600e-003**	**0.0000**	**2.5822**	**2.5822**	**7.1000e-004**	**3.0000e-005**	**2.6078**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.2437	0.0970	2.3400e-003	9.0058
Unmitigated	7.4871	0.1213	2.9200e-003	10.9400

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	2.97102 / 2.19848	6.2437	0.0970	2.3400e-003	9.0058
Total		**6.2437**	**0.0970**	**2.3400e-003**	**9.0058**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5.3224	0.3146	0.0000	11.9279
Unmitigated	5.3224	0.3146	0.0000	11.9279

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	26.22	5.3224	0.3146	0.0000	11.9279
Total		**5.3224**	**0.3146**	**0.0000**	**11.9279**

Napa Housing Element - Westwood W113 W114 and W132

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	328.00	Dwelling Unit	20.50	328,000.00	938

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use - Project Specifics

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	180.40	226.32
tblFireplaces	NumberWood	45.92	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	6.44
tblVehicleTrips	SU_TR	6.07	6.44
tblVehicleTrips	WD_TR	6.59	6.44
tblWoodstoves	NumberCatalytic	6.56	0.00
tblWoodstoves	NumberNoncatalytic	6.56	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	1.5874	0.0283	2.4436	1.3000e-004		0.0142	0.0142		0.0142	0.0142	0.0000	14.8587	14.8587	4.0900e-003	2.0000e-004	15.0064
Energy	0.0154	0.1317	0.0560	8.4000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	417.4377	417.4377	0.0148	5.4900e-003	419.4500
Mobile	1.1544	2.5332	11.8828	0.0252	1.7478	0.0337	1.7816	0.4680	0.0311	0.4992	0.0000	1,785.6621	1,785.6621	0.0760	0.0000	1,787.2580
Waste						0.0000	0.0000		0.0000	0.0000	30.6273	0.0000	30.6273	1.8100	0.0000	68.6377
Water						0.0000	0.0000		0.0000	0.0000	5.4239	30.5047	35.9286	0.5584	0.0135	51.8229
Total	**2.7572**	**2.6932**	**14.3824**	**0.0262**	**1.7478**	**0.0586**	**1.8064**	**0.4680**	**0.0559**	**0.5240**	**36.0512**	**2,248.4631**	**2,284.5143**	**2.4633**	**0.0191**	**2,342.1749**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	1.1544	2.5332	11.8828	0.0252	1.7478	0.0337	1.7816	0.4680	0.0311	0.4992	0.0000	1,785.6621	1,785.6621	0.0760	0.0000	1,787.2580
Unmitigated	1.1544	2.5332	11.8828	0.0252	1.7478	0.0337	1.7816	0.4680	0.0311	0.4992	0.0000	1,785.6621	1,785.6621	0.0760	0.0000	1,787.2580

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	2,112.32	2,112.32	2112.32	4,715,471	4,715,471
Total	2,112.32	2,112.32	2,112.32	4,715,471	4,715,471

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	264.9732	264.9732	0.0119	2.6900e-003	266.0575
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	269.3055	269.3055	0.0121	2.7400e-003	270.4076
NaturalGas Mitigated	0.0154	0.1317	0.0560	8.4000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	152.4645	152.4645	2.9200e-003	2.8000e-003	153.3924
NaturalGas Unmitigated	0.0191	0.1630	0.0693	1.0400e-003		0.0132	0.0132		0.0132	0.0132	0.0000	188.7116	188.7116	3.6200e-003	3.4600e-003	189.8601

5.2 Energy by Land Use - NaturalGas

Mitigated

	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	2.85708e+006	0.0154	0.1317	0.0560	8.4000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	152.4645	152.4645	2.9200e-003	2.8000e-003	153.3924
Total		**0.0154**	**0.1317**	**0.0560**	**8.4000e-004**		**0.0106**	**0.0106**		**0.0106**	**0.0106**	**0.0000**	**152.4645**	**152.4645**	**2.9200e-003**	**2.8000e-003**	**153.3924**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.18817e+006	264.9732	0.0119	2.6900e-003	266.0575
Total		**264.9732**	**0.0119**	**2.6900e-003**	**266.0575**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	1.5874	0.0283	2.4436	1.3000e-004		0.0142	0.0142		0.0142	0.0142	0.0000	14.8587	14.8587	4.0900e-003	2.0000e-004	15.0064
Unmitigated	1.5874	0.0283	2.4436	1.3000e-004		0.0142	0.0142		0.0142	0.0142	0.0000	14.8587	14.8587	4.0900e-003	2.0000e-004	15.0064

6.2 Area by SubCategory

Mitigated

	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	0.2309					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2810					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.1000e-003	0.0000	6.0000e-005	0.0000		7.6000e-004	7.6000e-004		7.5000e-004	7.5000e-004	0.0000	10.8804	10.8804	2.1000e-004	2.0000e-004	10.9467
Landscaping	0.0744	0.0283	2.4435	1.3000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	3.9783	3.9783	3.8800e-003	0.0000	4.0597
Total	**1.5874**	**0.0283**	**2.4436**	**1.3000e-004**		**0.0142**	**0.0142**		**0.0142**	**0.0142**	**0.0000**	**14.8587**	**14.8587**	**4.0900e-003**	**2.0000e-004**	**15.0064**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	35.9286	0.5584	0.0135	51.8229
Unmitigated	43.0836	0.6980	0.0168	62.9528

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	17.0964 / 12.6509	35.9286	0.5584	0.0135	51.8229
Total		**35.9286**	**0.5584**	**0.0135**	**51.8229**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	30.6273	1.8100	0.0000	68.6377
Unmitigated	30.6273	1.8100	0.0000	68.6377

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	150.88	30.6273	1.8100	0.0000	68.6377
Total		**30.6273**	**1.8100**	**0.0000**	**68.6377**

Napa Housing Element - Westwood W126 MU475

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	32.00	Dwelling Unit	2.00	32,000.00	92
Condo/Townhouse	17.00	Dwelling Unit	1.06	17,000.00	49

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS In Effect. CO2 491.62, CH4 0.022, N2O 0.005

Land Use - Project Specifics

Construction Phase - Construction Not Assessed

Off-road Equipment - No Construction Activity

Vehicle Trips - Trip Rate from Kittelson & Associates

Woodstoves - Compliance with BAAQMD Reg 8, Rule 3 Wood-burning Devices. Assumes no woodburning Fireplaces or Wood Stoves

Energy Mitigation - 2013 Title 24 requirements are 25 percent more efficient than 2008 Title 24 for residential land uses

Water Mitigation - Green Building Standards requirements

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	17.60	22.08
tblFireplaces	NumberGas	9.35	11.73
tblFireplaces	NumberWood	4.48	0.00
tblFireplaces	NumberWood	2.38	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	6.65
tblVehicleTrips	ST_TR	7.16	5.81
tblVehicleTrips	SU_TR	6.07	6.65
tblVehicleTrips	SU_TR	6.07	5.81
tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	6.59	5.81
tblWoodstoves	NumberCatalytic	0.64	0.00
tblWoodstoves	NumberCatalytic	0.34	0.00
tblWoodstoves	NumberNoncatalytic	0.64	0.00
tblWoodstoves	NumberNoncatalytic	0.34	0.00

2.0 Emissions Summary

2.1 Overall Construction

Not Applicable

2.2 Overall Operational

Mitigated 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	0.2371	4.2200e-003	0.3651	2.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	2.2197	2.2197	6.1000e-004	3.0000e-005	2.2418
Energy	2.9100e-003	0.0249	0.0106	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	70.8150	70.8150	2.4300e-003	9.6000e-004	71.1622
Mobile	0.1703	0.3737	1.7527	3.7200e-003	0.2578	4.9700e-003	0.2628	0.0690	4.5900e-003	0.0736	0.0000	263.3875	263.3875	0.0112	0.0000	263.6229
Waste						0.0000	0.0000		0.0000	0.0000	4.5754	0.0000	4.5754	0.2704	0.0000	10.2538
Water						0.0000	0.0000		0.0000	0.0000	0.8103	4.5571	5.3674	0.0834	2.0100e-003	7.7418
Total	**0.4103**	**0.4027**	**2.1284**	**3.9000e-003**	**0.2578**	**9.1000e-003**	**0.2669**	**0.0690**	**8.7200e-003**	**0.0778**	**5.3857**	**340.9793**	**346.3650**	**0.3681**	**3.0000e-003**	**355.0225**

3.0 Construction Detail

Not Applicable

4.0 Operational Detail - Mobile

4.1 Mitigation Measures 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	tons/yr										MT/yr					
Mitigated	0.1703	0.3737	1.7527	3.7200e-003	0.2578	4.9700e-003	0.2628	0.0690	4.5900e-003	0.0736	0.0000	263.3875	263.3875	0.0112	0.0000	263.6229
Unmitigated	0.1703	0.3737	1.7527	3.7200e-003	0.2578	4.9700e-003	0.2628	0.0690	4.5900e-003	0.0736	0.0000	263.3875	263.3875	0.0112	0.0000	263.6229

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	212.80	212.80	212.80	475,047	475,047
Condo/Townhouse	98.77	98.77	98.77	220,491	220,491
Total	311.57	311.57	311.57	695,538	695,538

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	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3
Condo/Townhouse	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.476130	0.074094	0.173918	0.158558	0.057716	0.008272	0.014870	0.022412	0.002348	0.001218	0.006897	0.000698	0.002869

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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 Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	42.0208	42.0208	1.8800e-003	4.3000e-004	42.1928
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	42.6181	42.6181	1.9100e-003	4.3000e-004	42.7925
NaturalGas Mitigated	2.9100e-003	0.0249	0.0106	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	28.7942	28.7942	5.5000e-004	5.3000e-004	28.9694
NaturalGas Unmitigated	3.6500e-003	0.0312	0.0133	2.0000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	36.0780	36.0780	6.9000e-004	6.6000e-004	36.2975

5.2 Energy by Land Use - NaturalGas

Mitigated

	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					
Condo/Townhouse	260843	1.4100e-003	0.0120	5.1100e-003	8.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	13.9196	13.9196	2.7000e-004	2.6000e-004	14.0043
Apartments Low Rise	278739	1.5000e-003	0.0128	5.4700e-003	8.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003	0.0000	14.8746	14.8746	2.9000e-004	2.7000e-004	14.9651
Total		**2.9100e-003**	**0.0249**	**0.0106**	**1.6000e-004**		**2.0100e-003**	**2.0100e-003**		**2.0100e-003**	**2.0100e-003**	**0.0000**	**28.7942**	**28.7942**	**5.6000e-004**	**5.3000e-004**	**28.9694**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	115919	25.8510	1.1600e-003	2.6000e-004	25.9568
Condo/Townhouse	72507.3	16.1698	7.2000e-004	1.6000e-004	16.2359
Total		**42.0208**	**1.8800e-003**	**4.2000e-004**	**42.1928**

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.2371	4.2200e-003	0.3651	2.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	2.2197	2.2197	6.1000e-004	3.0000e-005	2.2418
Unmitigated	0.2371	4.2200e-003	0.3651	2.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	2.2197	2.2197	6.1000e-004	3.0000e-005	2.2418

6.2 Area by SubCategory

Mitigated

	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	0.0345					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1914					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6000e-004	0.0000	1.0000e-005	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.6254	1.6254	3.0000e-005	3.0000e-005	1.6353
Landscaping	0.0111	4.2200e-003	0.3650	2.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	0.5943	0.5943	5.8000e-004	0.0000	0.6065
Total	**0.2371**	**4.2200e-003**	**0.3651**	**2.0000e-005**		**2.1200e-003**	**2.1200e-003**		**2.1200e-003**	**2.1200e-003**	**0.0000**	**2.2197**	**2.2197**	**6.1000e-004**	**3.0000e-005**	**2.2418**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.3674	0.0834	2.0100e-003	7.7418
Unmitigated	6.4363	0.1043	2.5100e-003	9.4045

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.66794 / 1.23423	3.5052	0.0545	1.3100e-003	5.0559
Condo/Townhouse	0.886095 / 0.655686	1.8622	0.0289	7.0000e-004	2.6859
Total		**5.3674**	**0.0834**	**2.0100e-003**	**7.7418**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	4.5754	0.2704	0.0000	10.2538
Mitigated	4.5754	0.2704	0.0000	10.2538

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	14.72	2.9880	0.1766	0.0000	6.6964
Condo/Townhouse	7.82	1.5874	0.0938	0.0000	3.5574
Total		**4.5754**	**0.2704**	**0.0000**	**10.2538**

Appendix C: Noise Modeling Data

C.1 - FHWA Modeled Roadway Noise Contours

TABLE Existing-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 29 - North of Trancas Street
NOTES: Napa Housing Element - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 36000 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 78.46

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
257.6	553.1	1190.4	2563.8

TABLE Existing-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 29 - South of SR 20/W. Imola Avenue
NOTES: Napa Housing Element - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 56300 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 80.40

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
346.4	744.8	1603.7	3454.1

TABLE Existing-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 29 - South of SR 12/SR 121 Junction
NOTES: Napa Housing Element - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 52500 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 80.10

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
330.8	711.0	1530.7	3296.9

TABLE Existing-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: 1st Street - West of California Boulevard
NOTES: Napa Housing Element - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 77.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
182.9	393.8	848.2	1827.0

TABLE Existing-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Lincoln Avenue - West of Soscol Avenue
NOTES: Napa Housing Element - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12600 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.46

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
72.6	152.6	327.0	703.4

TABLE Existing-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Jefferson Street - North of Clay Street
NOTES: Napa Housing Element - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13600 SPEED (MPH): 35 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
90.0	190.8	409.5	881.5

TABLE Existing-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Soscol Avenue - North of 1st Street
NOTES: Napa Housing Element - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 22500 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 74.69

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
145.9	310.8	667.9	1438.0

TABLE Existing-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Silverado Trail (SR 121) - North of 1st Street
NOTES: Napa Housing Element - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12800 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 73.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
99.1	213.2	459.2	989.0

TABLE Existing-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: West Imola Avenue (SR 121) - East of Jefferson Street
NOTES: Napa Housing Element - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23200 SPEED (MPH): 35 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 73.82

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
128.1	272.1	584.3	1257.7

TABLE Existing-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 221 - South of SR 121/W. Imola Avenue
NOTES: Napa Housing Element - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 33000 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 76.36

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
187.3	400.7	862.0	1856.2

TABLE Existing plus Project-01

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 29 - North of Trancas Street
NOTES: Napa Housing Element - Existing plus Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 36500 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 78.52

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
260.0	558.2	1201.4	2587.5

TABLE Existing plus Project-02

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 29 - South of SR 20/W. Imola Avenue
NOTES: Napa Housing Element - Existing plus Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 57600 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 80.50

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
351.7	756.2	1628.3	3507.1

TABLE Existing plus Project-03

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 29 - South of SR 12/SR 121 Junction
NOTES: Napa Housing Element - Existing plus Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 53300 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 80.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
334.1	718.2	1546.2	3330.3

TABLE Existing plus Project-04

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: 1st Street - West of California Boulevard
NOTES: Napa Housing Element - Existing plus Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 77.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
183.4	394.8	850.4	1831.6

TABLE Existing plus Project-05

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Lincoln Avenue - West of Soscol Avenue
NOTES: Napa Housing Element - Existing plus Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13100 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.63

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
74.4	156.6	335.5	721.9

TABLE Existing plus Project-06

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Jefferson Street - North of Clay Street
NOTES: Napa Housing Element - Existing plus Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13800 SPEED (MPH): 35 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.99

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
90.8	192.6	413.5	890.1

TABLE Existing plus Project-07

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Soscol Avenue - North of 1st Street
NOTES: Napa Housing Element - Existing plus Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23200 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 74.83

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
148.8	317.2	681.7	1467.7

TABLE Existing plus Project-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Silverado Trail (SR 121) - North of 1st Street
NOTES: Napa Housing Element - Existing plus Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13000 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 73.82

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
100.2	215.5	464.0	999.3

TABLE Existing plus Project-09

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: West Imola Avenue (SR 121) - East of Jefferson Street
NOTES: Napa Housing Element - Existing plus Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23300 SPEED (MPH): 35 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 73.84

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
128.4	272.9	586.0	1261.3

TABLE Existing plus Project-10

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 221 - South of SR 121/W. Imola Avenue
NOTES: Napa Housing Element - Existing plus Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 33500 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 76.42

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
189.1	404.8	870.7	1874.9

TABLE Cumulative-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 29 - North of Trancas Street
NOTES: Napa Housing Element - Cumulative

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 43400 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 79.27

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
291.6	626.3	1348.4	2904.0

TABLE Cumulative-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 29 - South of SR 20/W. Imola Avenue
NOTES: Napa Housing Element - Cumulative

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 58900 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 80.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
357.0	767.6	1652.7	3559.7

TABLE Cumulative-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 29 - South of SR 12/SR 121 Junction
NOTES: Napa Housing Element - Cumulative

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 57700 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 80.51

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
352.1	757.1	1630.2	3511.1

TABLE Cumulative-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: 1st Street - West of California Boulevard
NOTES: Napa Housing Element - Cumulative

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 77.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
188.0	404.8	871.9	1878.0

TABLE Cumulative-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Lincoln Avenue - West of Soscol Avenue
NOTES: Napa Housing Element - Cumulative

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14600 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.10

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
79.7	168.2	360.6	776.0

TABLE Cumulative-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Jefferson Street - North of Clay Street
NOTES: Napa Housing Element - Cumulative

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15500 SPEED (MPH): 35 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.50

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
97.9	208.0	446.8	961.7

TABLE Cumulative-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Soscol Avenue - North of 1st Street
NOTES: Napa Housing Element - Cumulative

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25800 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 75.29

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
159.4	340.3	731.7	1575.3

TABLE Cumulative-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: Silverado Trail (SR 121) - North of 1st Street
NOTES: Napa Housing Element - Cumulative

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14100 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 74.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
105.7	227.4	489.8	1054.9

TABLE Cumulative-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: West Imola Avenue (SR 121) - East of Jefferson Street
NOTES: Napa Housing Element - Cumulative

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25100 SPEED (MPH): 35 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 74.16

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
134.8	286.6	615.7	1325.4

TABLE Cumulative-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2014
ROADWAY SEGMENT: SR 221 - South of SR 121/W. Imola Avenue
NOTES: Napa Housing Element - Cumulative

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 37300 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 76.89

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
202.9	434.7	935.3	2014.1

C.2 - Napa General Plan Roadway Noise Contours

Table 8 - 2
City of Napa Projected 2020 Roadway Noise Contours

Roadway Segment	ADT	Average Vehicle Speed	SPL at 50 feet	Perpendicular Distance from Roadway Centerline to Contour in feet (hard/soft)(†)			
				75 CNEL	70 CNEL	65 CNEL	60 CNEL
State of California Highways/Freeways							
SR 29							
Southern city limits to Trower	46500	60	79.6	144/101	456/218	1442/470	4560/1013
Trancas to Trower	49200	60	79.9	154/106	488/228	1545/492	4886/1060
Trower - northern city limits	38000	55	77.7	93/75	294/163	931/351	2944/756
SR 12 w/o SR 29	24000	55	75.4	54/53	173/114	548/246	1733/531
SR 121							
Silverado Trail s/o First Street	12800	35	67.9	-	-	97/78	308/168
Silverado Trail - First to Lincoln	16700	35	69.2	-	-	131/95	415/205
Silverado Trail n/o Lincoln	14200	35	68.4	-	-	109/84	345/181
SR 221 s/o Imola	35900	50	76.4	69/61	218/133	690/287	2182/619
Major Arterials							
Jefferson Street - Fifth to Trower Ave.	17100	35	69.3	-	-	134/96	425/208
Soscol Ave. - Silverado Trail to Trancas St.	32000	35	72.5	-	88/73	281/158	889/340
Redwood Road - Dry Creek Rd. to SR 29	10800	35	67.1	-	-	81/69	256/148
Trancas St. - SR 29 to eastern city limits	27800	35	71.8	-	75/65	239/142	756/305
Lincoln Ave. - SR 29 to Silverado Trail	7500	35	65.3	-	-	53/52	169/112
First Street - Browns Valley Rd. to California Blvd.	21000	35	70.3	-	53/52	169/112	535/243
Imola Ave. - SR 29 to Soscol Ave.	26500	35	71.5	-	70/62	223/135	706/292
Minor Arterials							
Dry Creek Rd. - Redwood Rd. to Trower Ave.	5500	30	63.3	-	-	-	106/82
Jefferson St. - Trower Ave. to Salvador Ave.	4700	30	62.6	-	-	-	90/74
Jefferson St. - Fifth St. to southern terminus	19100	30	69.2	-	-	131/95	415/205
Big Ranch Road - Trancas St. to northern city limits	6800	30	64.2	-	-	-	131/95
Browns Valley Rd. - Redwood Rd. to First St.	10200	30	66.1	-	-	64/59	203/127
Main Street - Fifth Street to Pearl St.	6700	30	64.2	-	-	-	131/95
Salvador Ave. - Linda Vista Ave. to Big Ranch Rd.	2800	30	60.3	-	-	-	53/52
Trower Ave. - Dry Creek Rd. to Sierra Ave.	6900	30	64.3	-	-	-	134/96
Redwood Rd. - western city limits to Dry Creek Rd.	6100	30	63.8	-	-	-	119/89
First Street - Silverado Trail to California Blvd.	14800	30	68.0	-	-	99/79	315/170
Second St. - California Blvd. to Main St.	11000	30	66.5	-	-	70/62	223/135
Third St. - Silverado Trail to California Blvd.	12500	30	67.1	-	-	81/69	256/148
Coombsville Rd. - Silverado Trail to eastern city limits	7100	30	64.4	-	-	-	137/98
Fourth St. - Third Street to Coombs St.	1200	30	57.0	-	-	-	-

Table 8 – 2 (cont.)
City of Napa Projected 2020 Roadway Noise Contours

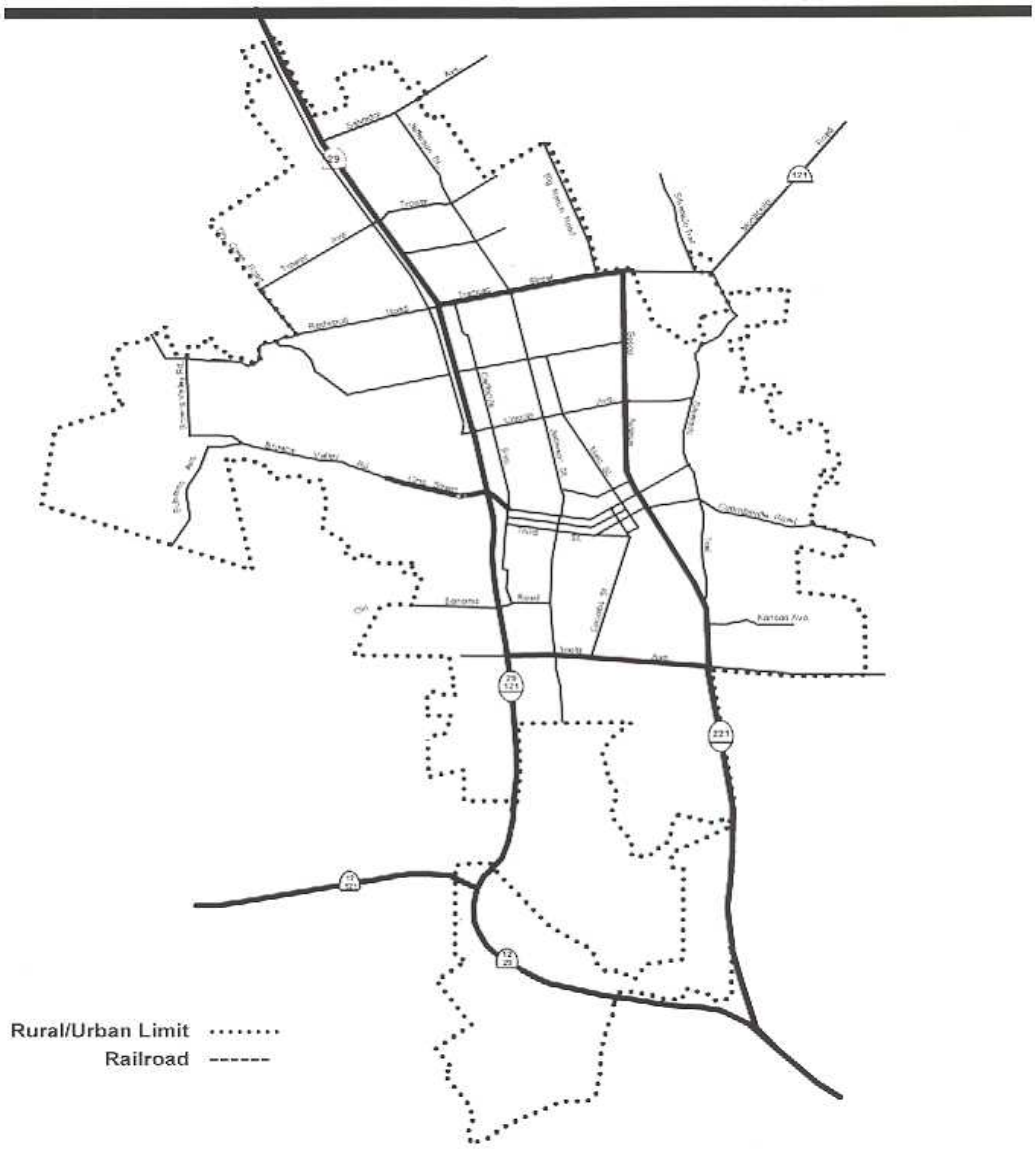
Roadway Segment	ADT	Average Vehicle Speed	SPL at 50 feet	Perpendicular Distance from Roadway Centerline to Contour in feet (hard/soft)(†)			
				75 CNEL	70 CNEL	65 CNEL	60 CNEL
Minor Arterials (continued)							
Old Sonoma Rd. - western city limits to Jefferson St.	5700	30	63.4	-	-	-	109/84
Imola Ave. - Foster Rd. to SR 29	11800	30	66.8	-	-	75/65	239/142
Imola Ave. - SR 221 to eastern city limits	6500	30	64.0	-	-	-	125/92
Collectors							
Austin Way / Pinewood Drive	900	25	54.6	-	-	-	-
Beard Rd.	*	*					
Brown St. - Vallejo St. to Coombs St.	*	*					
Browns Valley Rd. - Buhman Ave. to Redwood Rd.	2600	25	58.7	-	-	-	-
Buhman Ave.	5200	25	61.7	-	-	-	73/64
Byway East	300	25	51.4	-	-	-	-
California Blvd. / Ornduff St.	6800	25	62.9	-	-	-	97/78
Calistoga St.	5600	25	62.0	-	-	-	79/67
Clark St.	2400	25	58.3	-	-	-	-
Coombs St. - Brown St. to Imola Ave.	9300	25	64.4	-	-	-	137/98
East Ave.	2100	25	57.8	-	-	-	-
Dry Creek Rd. - RUL Line to Trower Ave.	1800	25	57.2	-	-	-	-
El Centro Ave.	1700	25	57.0	-	-	-	-
Fifth St. - Coombs St. to Main St.	*	*					
Foothill Blvd.	1100	25	55.3	-	-	-	-
Foster Rd.	2200	25	58.0	-	-	-	-
Franklin St.	*	*					
Golden Gate Dr.	300	25	51.4	-	-	-	-
Kansas Ave.	5400	25	61.8	-	-	-	75/65
Laurel St.	1500	25	56.5	-	-	-	-
Linda Vista Ave.	2700	25	58.8	-	-	-	-
Main St. - Pueblo Ave. to Pearl St.	4600	25	61.1	-	-	-	64/59
Montecito Blvd.	*	*					
Orchard Ave.	2300	25	58.2	-	-	-	-
Partrick Rd.	*	*					
Pearl St.	5600	25	62.0	-	-	-	79/67
Pueblo Ave.	7500	25	63.4	-	-	-	109/84
Randolph St. - Pearl St. to Fourth St.	*	*					
Robinson Ln.	5000	25	61.5	-	-	-	70/62
Seminary St. - Calistoga St. to Third St.	*	*					
Sierra Ave.	3800	25	60.3	-	-	-	53/52
Shetler Ave.	*	*					
Shurtleff Ave.	1600	25	56.7	-	-	-	-
Solano Ave.	3700	25	60.2	-	-	-	52/51
Sousa Ln.	1700	25	57.0	-	-	-	-
Spruce St.	*	*					
Stanley Ln.	*	*					

Table 8 – 2 (cont.)
City of Napa Projected 2020 Roadway Noise Contours

Roadway Segment	ADT	Average Vehicle Speed	SPL at 50 feet	Perpendicular Distance from Roadway Centerline to Contour in feet (hard/soft)(†)			
				75 CNEL	70 CNEL	65 CNEL	60 CNEL
Collectors (continued)							
Terrace Dr.	400	25	52.1	-	-	-	-
Terra Verde Dr.	*	*					
Thompson Ave.	1700	25	57.0	-	-	-	-
Vallejo St.	*	*					
Walnut St.	*	*					
West Pueblo Ave.	4000	25	60.5	-	-	-	56/53
West Salvador Dr. (now Wine Country Dr.)	2200	25	58.0	-	-	-	-
Westview Dr.	3200	25	59.6	-	-	-	-
Yajome St.	*	*					

All Sound Pressure Levels (SPL's) given in A-weighted decibels or dBA. Contour lines given to nearest foot.
Calculated using an assumed vehicle mix of 96% Cars, 2% Med. Trucks, 2% Heavy Trucks. Free flow vehicle speeds utilized.

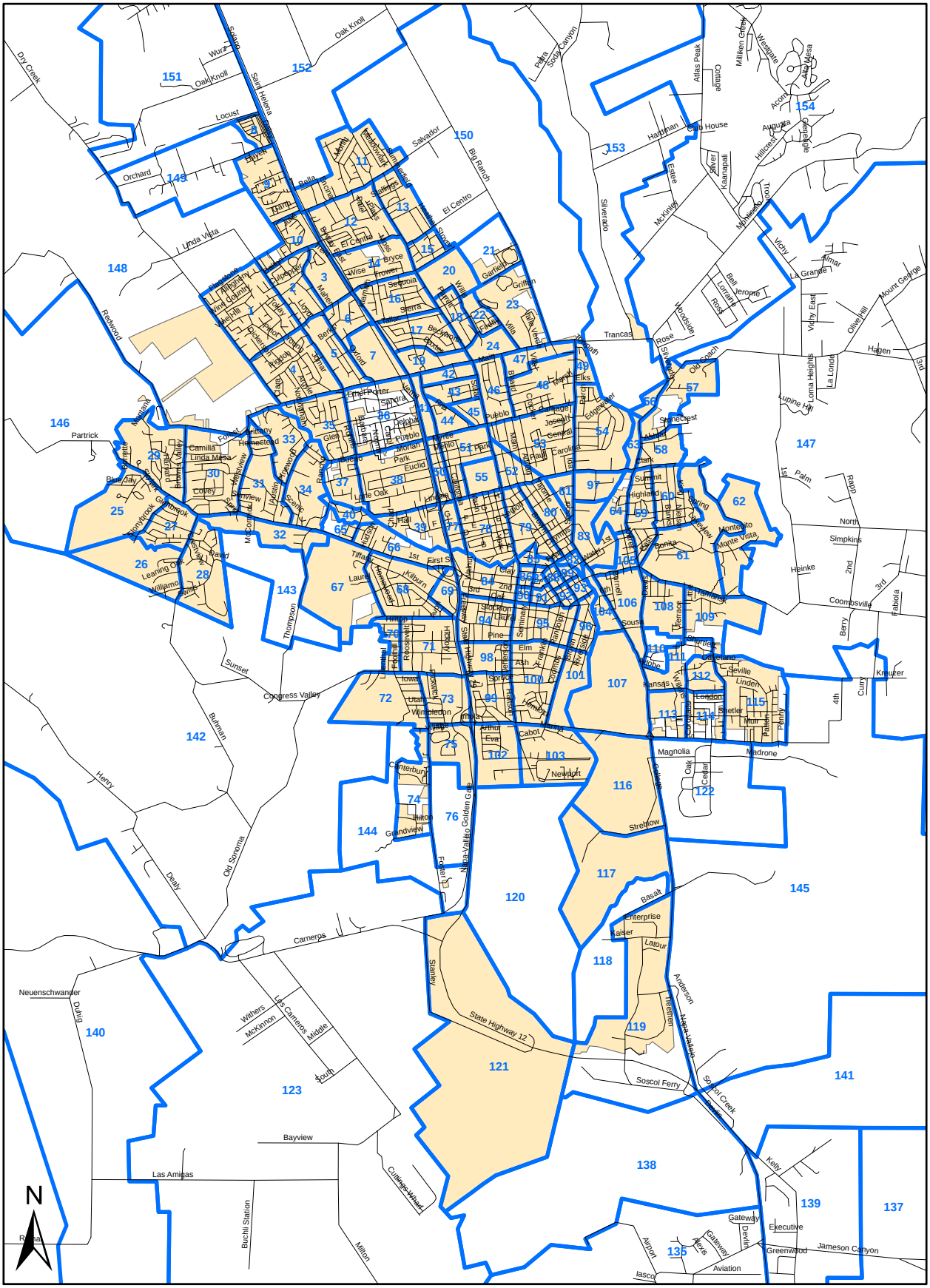
(†): Assumed to be line-of-sight distance. Upper values indicate hard-site propagation distance, lower values indicate soft-site propagation distance.
(*): Traffic data not available.
(-): Noise contour is coincident with traffic right-of-way taken as 50 feet from centerline.
Traffic Data Source: Dowling Associates. Inc., 1996.


Rural/Urban Limit
Railroad
City of Napa General Plan
Noise.DS4
12/98
Figure 8-11
2020 Representive
Roadway Noise Contours
(as detailed in Table 8-2)
North
Roads with over 70 SPL at 50' from CL
Roads with over 60 SPL at 50' from CL
725'
1/2 Mile
1 Mile
3 Miles
0
While every effort has been made to insure the accuracy of the information shown on this page, the City of Napa assumes no responsibility for liability from any errors or omissions.
envision
NAPA
2020

8-33

Appendix D: Traffic Modeling Data

Solano/Napa Travel Model Transportation Analysis Zones (TAZ)



HOUSING ELEMENT SITES ALLOCATED TO MODEL TAZS

Site ID	GP POD	Sites	Units	Model TAZ
Table 1 Summary of Larger Vacant and Underutilized Multi Family Housing Sites				
1	Alta Heights	AH104-1	37	64
2	Alta Heights	AH104-2	8	63
3	Beard	B77-1	34	48
4	Beard	B77-2	16	49
5	Beard	B77-3	42	48
6	Beard	B81-1	25	49
7	Beard	B81-2	8	48
8	Beard	B81-3	8	48
9	Beard	B81-4	71	48
10	Beard	B81-5	24	48
11	Beard	B81-6	8	48
12	Beard	B81-7	7	48
13	Beard	B84-1	8	44
14	Beard	B86-1	20	46
15	Central Napa	CN142	48	77
16	Central Napa	CN151	8	102
17	Central Napa	CN161-1	54	102
18	Central Napa	CN161-2	73	102
19	Central Napa	CN163	2	100
20	Linda Vista	LV13	14	7
21	Pueblo	P61-1	18	36
22	Pueblo	P61-2	34	36
23	Gasser Master Plan	MU532	489	107
24	Terrace Shurtleff	TS175-1	13	111
25	Terrace Shurtleff	TS177-1	7	113
26	Terrace Shurtleff	TS177-2	15	113
27	Terrace Shurtleff	TS177-6	31	113
28	Terrace Shurtleff	TS177-3	6	113
29	Terrace Shurtleff	TS177-4	7	113
30	Terrace Shurtleff	TS177-5	26	113
31	Vintage	V21-1	8	12
32	Vintage	V21-2	10	12
33	Vintage	V24-1	10	12
34	Vintage	V24-2	12	12
35	Vintage	V24-3	12	12
36	Vintage	V24-4	12	12
37	Vintage	V37-1	56	12
38	Vintage	V37-2	35	12
39	Vintage	V33H	57	23
40	Westwood	W113-1	41	66
41	Westwood	W113-2	39	66
42	Westwood	W113-3	19	66
43	Westwood	W113-4	44	66
44	Westwood	W113-5	15	66
45	Westwood	W114	69	66
46	Westwood	W132-1	23	66
47	Westwood	W132-2	28	66
48	Westwood	W132-3	50	66
49	Westwood	W126-1	17	75
50	Westwood	W126-2	10	73
51	Westwood	MU475	22	73
TOTAL			**1750**	

HOUSING ELEMENT SITES ALLOCATED TO MODEL TAZS

Site ID	GP POD	Sites	Units	Model TAZ
Longer Term Multi-Family Potentially After 2023				
52	2173 Soscol	B90-1	8	53
53	2263 Soscol	B90-2	8	53
54	725,737 Central	B90-3	139	53
55	B91-1	B91-1	132	54
56	602 Lincoln	B91-2	18	54
57	572 Lincoln	B91-3	10	54
58	640 Maplewood	B91-4	82	54
59	522 Lincoln	B91-5	142	54
60	570 Lincoln	B91-6	48	54
61	1200 Foster	W129	311	76
TOTAL			**898**	
Table 3 Selected General Plan Commercial and Mixed Use Sites with Development Potential				
62	Beard Community Commercial	B 440	24	42
63	Central Napa Outside Downtown SP	CN487-1	19	94
64	Central Napa Outside Downtown SP	MU487-2	55	94
65	Central Napa Outside Downtown SP	CC490	87	103
66	Soscol Mixed Use	MU532-1	21	106
67	Soscol Mixed Use	MU532-2	20	106
68	Soscol Mixed Use	MU532-3	21	106
69	Downtown Specific Plan Area	A	8	86
70	Downtown Specific Plan Area	B	40	86
71	Downtown Specific Plan Area	C	10	87
72	Downtown Specific Plan Area	D	22	87
73	Downtown Specific Plan Area	E	11	87
74	Downtown Specific Plan Area	I	32	82
75	Downtown Specific Plan Area	M	32	82
76	Downtown Specific Plan Area	N	5	82
77	Downtown Specific Plan Area	P	13	89
78	Downtown Specific Plan Area	W	26	91
79	Downtown Specific Plan Area	FF	50	83
TOTAL			**496**	
Total All Sites			**3144**	

COMPARE SITE TOTALS WITH MODEL INCREMENT 2010-2023 AND CITY'S 2040 POTENTIAL

If the 2023 model increment exceeds the 2010 to 2040 Potential, reduce the increment to be no more than the Potential.

If the 2023 model increment is less than the 2010 to 2040 Potential, no changes are recommended.

	Model 2010 Base			Model Increment 2010 to 2023			Housing Element Capacity				2010 to 2040	Recommended	2010 to 2023 Growth
TAZ	SF	MF	Total	SF	MF	Total	By 2023	After 2023	Mixed Use	Total	Potential	Changes to 2023 Model	w/ Revisions
1	776	3	779	25	0	25	0	0	0	0	46		25
2	347	0	347	31	0	31	0	0	0	0	8	Subtract 23 SF	8
3	48	52	99	-3	32	29	0	0	0	0	0		29
4	485	3	488	18	0	18	0	0	0	0	32		18
5	297	15	311	26	9	35	0	0	0	0	44		35
6	139	10	149	4	1	4	0	0	0	0	11		4
7	40	138	178	-2	80	78	14	0	0	14	12	Subtract 66 MF	12
8	264	0	264	6	0	6	0	0	0	0	0		6
9	564	3	567	91	0	91	0	0	0	0	33	Subtract 58 SF	33
10	280	0	280	13	0	13	0	0	0	0	35		13
11	528	0	528	15	0	15	0	0	0	0	0		15
12	492	36	527	23	20	43	155	0	0	155	33	Add 135 MF, Subtract 23 SF	155
13	209	11	220	19	0	20	0	0	0	0	15	Subtract 5 SF	15
14	368	32	400	55	5	60	0	0	0	0	285		60
15	118	0	118	3	0	3	0	0	0	0	0	Subtract 3 SF	0
16	408	0	408	9	0	9	0	0	0	0	0	Subtract 9 SF	0
17	430	3	433	10	0	10	0	0	0	0	0	Subtract 10 SF	0
18	305	0	305	7	0	7	0	0	0	0	0	Subtract 7 SF	0
19	27	14	41	1	0	1	0	0	0	0	0	Subtract 1 SF	0
20	45	0	45	28	0	28	0	0	0	0	0	Subtract 28 SF	0
21	128	0	128	27	0	27	0	0	0	0	162		27
22	282	0	282	98	0	98	0	0	0	0	0	Subtract 98 SF	0
23	491	80	570	91	-15	76	57	0	0	57	110	Add 72 MF, Subtract 38 SF	110
24	51	17	69	-15	11	-4	0	0	0	0	0		-4
25	149	0	149	24	0	24	0	0	0	0	1	Subtract 23 SF	1
26	53	0	53	18	0	18	0	0	0	0	12	Subtract 6 SF	12
27	332	0	332	11	0	11	0	0	0	0	0	Subtract 11 SF	0
28	352	0	352	10	0	10	0	0	0	0	0	Subtract 10 SF	0
29	310	0	310	21	0	21	0	0	0	0	35		21
30	413	3	416	17	0	17	0	0	0	0	9	Subtract 8 SF	9
31	369	0	369	20	0	20	0	0	0	0	46		20
32	154	11	166	38	0	39	0	0	0	0	34	Subtract 5 SF	34
33	192	0	192	8	0	8	0	0	0	0	0	Subtract 8 SF	0
34	274	4	278	-28	0	-28	0	0	0	0	12	Add 28 SF	0
35	365	148	513	13	93	105	0	0	0	0	12	Subtract 1 SF, 105 MF	12
36	701	84	784	20	9	29	52	0	0	52	66	Add 43 MF, Subtract 6 SF	66
37	195	0	195	8	0	8	0	0	0	0	10		8
38	460	60	520	25	1	26	0	0	0	0	45		26
39	177	34	210	16	1	16	0	0	0	0	30		16
40	68	0	68	3	0	3	0	0	0	0	0	Subtract 3 SF	0
41	0	2	2	0	1	1	0	0	0	0	0	Subtract 1 SF	0
42	0	0	0	0	0	0	0	0	24	24	24	Add 24 MF	24
43	118	0	118	3	0	3	0	0	0	0	0	Subtract 3 SF	0
44	187	77	263	5	2	6	8	0	0	8	7	Add 6 MF, Subtract 5 SF	7
45	124	77	201	3	2	5	0	0	0	0	0	Subtract 5 SF	0
46	332	75	406	8	2	9	20	0	0	20	19	Add 18 MF, Subtract 8 SF	19
47	31	117	148	1	21	21	0	0	0	0	17	Subtract 4 MF	17
48	399	288	687	10	128	138	202	0	0	202	213	Add 74 MF	212
49	145	3	148	3	0	3	41	0	0	41	27	Add 41 MF, Subtract 3 SF	41
50	152	20	173	4	9	13	0	0	0	0	0	Subtract 4 SF, 9 MF	0
51	248	64	312	6	18	25	0	0	0	0	0	Subtract 6 SF, 18 MF	0
52	119	173	293	11	39	51	0	0	0	0	0	Subtract 11 SF, 39 MF	0
53	633	295	928	19	170	189	0	155	0	155	142	Subtract 19 SF, 15 MF	155
54	332	368	699	8	-79	-71	0	432	0	432	656	Add 511 MF	440
55	0	0	0	0	0	0	0	0	0	0	0		0
56	11	0	11	6	0	6	0	0	0	0	14		6

COMPARE SITE TOTALS WITH MODEL INCREMENT 2010-2023 AND CITY'S 2040 POTENTIAL

If the 2023 model increment exceeds the 2010 to 2040 Potential, reduce the increment to be no more than the Potential.

If the 2023 model increment is less than the 2010 to 2040 Potential, no changes are recommended.

	Model 2010 Base			Model Increment 2010 to 2023			Housing Element Capacity				2010 to 2040	Recommended	2010 to 2023 Growth
TAZ	SF	MF	Total	SF	MF	Total	By 2023	After 2023	Mixed Use	Total	Potential	Changes to 2023 Model	w/ Revisions
57	107	0	107	28	0	28	0	0	0	0	48		28
58	148	0	148	11	0	11	0	0	0	0	27		11
59	330	34	363	18	1	19	0	0	0	0	8	Subtract 11 SF	8
60	427	0	427	-25	0	-25	0	0	0	0	0	Add 25 SF	0
61	253	13	266	11	0	11	0	0	0	0	24		11
62	76	0	76	2	0	2	0	0	0	0	0	Subtract 2 SF	0
63	36	13	49	1	1	2	8	0	0	8	0	Add 7 MF, Subtract 1 SF	8
64	16	166	182	0	10	10	37	0	0	37	0	Add 27 MF	37
65	58	0	58	12	0	12	0	0	0	0	17		12
66	151	327	478	19	40	60	328	0	0	328	157	Add 288 MF, Subtract 19 SF	328
67	108	170	279	26	18	44	0	0	0	0	151		44
68	699	33	731	22	7	29	0	0	0	0	94		29
69	0	0	0	0	0	0	0	0	0	0	0		0
70	154	4	158	5	0	5	0	0	0	0	0		5
71	457	447	904	12	17	29	0	0	0	0	26	Subtract 3 MF	26
72	269	0	269	42	0	42	0	0	0	0	61		42
73	220	143	362	5	4	9	32	0	0	32	0	Add 28 MF, Subtract 5 SF	32
74	134	0	134	5	0	5	0	0	0	0	11		5
75	376	55	430	20	6	26	17	0	0	17	0	Add 11 MF, Subtract 20 SF	17
76	117	82	199	71	51	122	0	311	0	311	851	Add 240 SF	362
77	51	29	80	1	6	7	48	0	0	48	40	Add 42 MF, Subtract 1 SF	48
78	596	129	725	19	3	22	0	0	0	0	5	Subtract 17 SF	5
79	298	192	490	8	5	13	0	0	0	0	0	Subtract 8 SF, 5 MF	0
80	180	64	244	5	2	7	0	0	0	0	0	Subtract 5 SF, 2 MF	0
81	10	0	10	0	0	0	0	0	0	0	0		0
82	0	0	0	0	0	0	0	0	69	69	0	Add 69 MF	69
83	14	70	84	0	42	42	0	0	50	50	107	Add 8 MF	50
84	253	233	486	7	3	10	0	0	0	0	0	Subtract 7 SF, 3 MF	0
85	69	106	176	2	2	4	0	0	0	0	0	Subtract 2 SF, 2 MF	0
86	24	18	42	1	0	1	0	0	48	48	43	Add 48 MF, Subtract 1 SF	48
87	17	0	17	1	0	1	0	0	43	43	43	Add 43 MF	43
88	1	0	1	0	0	0	0	0	0	0	84		0
89	0	1	1	0	1	1	0	0	13	13	84	Add 12 MF	13
90	9	0	10	1	0	1	0	0	0	0	85		1
91	6	38	44	0	2	2	0	0	26	26	41	Add 24 MF	26
92	0	4	4	0	0	0	0	0	0	0	41		0
93	0	0	0	0	0	0	0	0	0	0	85		0
94	341	37	378	10	5	15	0	0	74	74	72	Add 69 MF, Subtract 2 SF	74
95	344	343	687	8	8	16	0	0	0	0	0	Subtract 8 SF, 8 MF	0
96	102	185	287	2	5	8	0	0	0	0	0	Subtract 2 SF, 5 MF	0
97	3	0	3	0	0	0	0	0	0	0	107		0
98	259	41	300	7	17	24	0	0	0	0	0	Subtract 7 SF, 17 MF	0
99	199	53	252	6	1	7	0	0	0	0	0	Subtract 6 SF, 1 MF	0
100	625	104	729	20	2	22	2	0	0	2	6	Subtract 16 SF	6
101	30	249	279	2	25	27	0	0	0	0	161		27
102	264	154	419	51	14	65	135	0	0	135	61	Add 121 MF, Subtract 51 SF	139
103	501	109	611	-50	3	-47	0	0	87	87	89	Add 84 MF	37
104	104	9	113	2	6	8	0	0	0	0	0	Subtract 2 SF, 6 MF	0
105	53	25	78	2	4	5	0	0	0	0	22		5
106	31	46	77	1	15	16	0	0	62	62	298	Add 47 MF	63
107	0	0	0	0	0	0	489	0	0	489	440	Add 489 MF	489
108	281	7	288	48	0	48	0	0	0	0	32	Subtract 48 SF	0
109	258	11	269	42	0	42	0	0	0	0	46	Subtract 42 SF	0
110	162	23	185	39	6	46	0	0	0	0	85	Subtract 39 SF, 6 MF	0
111	182	0	182	15	0	15	13	0	0	13	13	Add 13 MF, Subtract 15 SF	13
112	209	10	218	7	1	7	0	0	0	0	0	Subtract 7 SF, 1 MF	0

COMPARE SITE TOTALS WITH MODEL INCREMENT 2010-2023 AND CITY'S 2040 POTENTIAL

If the 2023 model increment exceeds the 2010 to 2040 Potential, reduce the increment to be no more than the Potential.

If the 2023 model increment is less than the 2010 to 2040 Potential, no changes are recommended.

	Model 2010 Base			Model Increment 2010 to 2023			Housing Element Capacity				2010 to 2040	Recommended	2010 to 2023 Growth
TAZ	SF	MF	Total	SF	MF	Total	By 2023	After 2023	Mixed Use	Total	Potential	Changes to 2023 Model	w/ Revisions
113	130	341	471	5	23	28	92	0	0	92	94	Add 69 MF, Subtract 3 SF	94
114	421	31	451	9	1	10	0	0	0	0	0	Subtract 9 SF, 1 MF	0
115	588	23	611	29	1	29	0	0	0	0	84		29
116	1	0	1	0	0	0	0	0	0	0	0		0
117	0	0	0	0	0	0	0	0	0	0			0
118	0	0	0	0	0	0	0	0	0	0		Napa Pipe: Add 350 SF	350
119	0	0	0	0	0	0	0	0	0	0			0
120	0	0	0	0	0	0	0	0	0	0			0
121	318	0	318	199	0	199	0	0	0	0			199
122	0	0	0	0	0	0	0	0	0	0			0
123	376	3	379	17	0	17	0	0	0	0			17
124	1	0	1	0	0	0	0	0	0	0			0
125	57	0	57	21	0	21	0	0	0	0			21
126	5	2	7	-2	1	-1	0	0	0	0			-1
127	231	0	231	144	0	144	0	0	0	0			144
128	18	0	18	1	0	1	0	0	0	0			1
129	0	0	0	0	0	0	0	0	0	0			0
130	0	0	0	0	0	0	0	0	0	0			0
131	199	0	199	4	0	4	0	0	0	0			4
132	9	2	11	0	0	0	0	0	0	0			0
133	28	0	28	3	0	3	0	0	0	0			3
134	21	0	21	0	0	0	0	0	0	0			0
135	0	0	0	0	0	0	0	0	0	0			0
136	5	14	19	0	0	0	0	0	0	0			0
137	25	0	25	3	0	3	0	0	0	0			3
138	5	4	9	0	0	0	0	0	0	0			0
139	13	0	13	1	0	1	0	0	0	0			1
140	43	0	43	2	0	2	0	0	0	0			2
141	2	0	2	0	0	0	0	0	0	0			0
142	128	3	131	9	0	9	0	0	0	0			9
143	19	0	19	1	0	1	0	0	0	0			1
144	16	4	20	1	0	1	0	0	0	0			1
145	58	3	61	2	0	2	0	0	0	0			2
146	33	0	33	2	0	2	0	0	0	0			2
147	1061	49	1110	45	1	46	0	0	0	0			46
148	340	6	346	16	0	16	0	0	0	0			16
149	39	0	39	2	0	2	0	0	0	0			2
150	114	31	145	3	1	4	0	0	0	0			4
151	210	0	210	8	0	8	0	0	0	0			8
152	29	0	29	1	0	1	0	0	0	0			1
153	310	12	323	19	0	20	0	0	0	0			20
154	1046	385	1431	34	8	42	0	0	0	0			42
155	51	3	55	3	0	3	0	0	0	0			3
156	83	0	83	10	0	10	0	0	0	0			10
157	12	0	12	2	0	2	0	0	0	0			2
158	808	202	1010	-6	48	42	0	0	0	0			42
159	99	62	162	7	15	22	0	0	0	0			22
160	87	0	87	5	0	5	0	0	0	0			5
City of Napa 1-116	**25,268**	**6,490**	**31,758**	**1,478**	**918**	**2,396**	**1,750**	**898**	**496**	**3,144**			**3,993**

COMPARE EMPLOYMENT TOTALS WITH MODEL INCREMENT 2010-2023

	Model 2010 Base			Model Increment 2010 to 2023				Recommended	2010 to 2023 Growth	
TAZ	Ret	NonRet	Total	Ret	NonRet	Total	Project	Changes to 2023 Model	w/ Revisions	Notes
1	0	51	51	0	8	8			8	
2	0	17	17	0	2	2			2	
3	127	167	295	47	7	54			54	
4	0	121	121	0	9	9			9	
5	0	159	159	0	8	8			8	
6	0	8	8	0	0	0			0	
7	55	297	352	16	19	34	Solano Square 78 KSF	Add 110 Retail jobs	144	78 KSF * 1.6 emp/KSF = 125 Retail, 16 already in model
8	0	16	16	0	0	0			0	
9	14	90	104	1	8	8			8	
10	26	17	42	1	1	2			2	
11	0	61	61	0	1	1			1	
12	17	131	148	1	9	10			10	
13	0	19	19	0	2	2			2	
14	88	93	181	3	5	9			9	
15	0	7	7	0	0	0			0	
16	0	131	131	0	13	13			13	
17	3	91	95	0	9	9			9	
18	0	16	16	0	0	0			0	
19	471	158	629	23	6	29			29	
20	0	207	207	0	29	29			29	
21	0	67	67	0	4	4			4	
22	0	38	38	0	5	5			5	
23	31	444	474	1	32	33			33	
24	34	1329	1363	1	135	136			136	
25	0	17	17	0	3	3			3	
26	0	69	69	0	7	7			7	
27	0	40	40	0	1	1			1	
28	0	21	21	0	1	1			1	
29	0	37	37	0	3	3			3	
30	0	17	17	0	0	0			0	
31	0	9	9	0	1	1			1	
32	66	44	110	10	4	13			13	
33	0	5	5	0	0	0			0	
34	0	7	7	0	-1	-1			-1	
35	0	164	164	0	-6	-6			-6	
36	120	229	349	21	10	31			31	
37	0	33	33	0	2	2			2	
38	68	72	140	2	3	5			5	
39	0	6	6	0	1	1			1	
40	0	2	2	0	0	0			0	
41	59	193	252	4	37	41			41	
42	417	546	963	51	19	70			70	
43	80	224	304	4	23	27			27	
44	61	51	112	2	2	4			4	
45	54	88	142	1	41	41			41	
46	197	257	454	6	49	55			55	
47	257	1042	1299	30	52	83			83	
48	0	160	160	0	15	15			15	
49	0	17	17	0	0	0			0	
50	9	91	99	1	5	6			6	
51	44	65	109	2	-14	-12			-12	
52	136	239	375	7	11	19			19	
53	36	111	147	1	12	13			13	
54	15	81	96	1	-2	-1			-1	
55	0	316	316	0	17	17			17	

COMPARE EMPLOYMENT TOTALS WITH MODEL INCREMENT 2010-2023

	Model 2010 Base			Model Increment 2010 to 2023				Recommended	2010 to 2023 Growth	
TAZ	Ret	NonRet	Total	Ret	NonRet	Total	Project	Changes to 2023 Model	w/ Revisions	Notes
56	0	1	1	0	0	0			0	
57	0	17	17	0	2	2			2	
58	3	10	13	0	1	1			1	
59	108	42	150	6	2	8			8	
60	0	29	29	0	-2	-2			-2	
61	14	127	141	1	7	8			8	
62	0	5	5	0	0	0			0	
63	16	8	24	0	0	0			0	
64	31	15	46	4	1	5			5	
65	0	4	4	0	0	0			0	
66	10	44	54	1	3	3			3	
67	0	22	22	0	4	4			4	
68	32	125	156	1	7	8			8	
69	335	73	408	92	7	98			98	
70	0	9	9	0	0	0			0	
71	27	93	121	1	2	3			3	
72	0	11	11	0	2	2			2	
73	20	265	285	1	16	17			17	
74	0	6	6	0	0	0			0	
75	0	584	584	0	117	117			117	
76	0	100	100	0	9	9			9	
77	168	2	170	-17	0	-16			-16	
78	68	226	295	3	14	18			18	
79	212	402	615	7	13	20			20	
80	217	745	962	11	17	28			28	
81	82	537	619	3	153	156			156	
82	53	56	109	2	4	7			7	
83	329	270	599	12	40	52			52	
84	49	594	643	2	24	26			26	
85	0	68	68	0	3	3			3	
86	89	185	274	3	17	21			21	
87	133	88	221	6	7	14			14	
88	338	266	604	13	31	44	Archer Hotel 186 rooms	Add 100 service jobs	144	186 rooms * 0.72 emp/room = 134 Service, 31 already in model
89	295	218	513	17	85	102			102	
90	21	245	266	2	9	11			11	
91	81	440	520	3	48	51			51	
92	117	346	464	4	32	36			36	
93	67	610	677	2	88	91			91	
94	77	724	801	10	31	42			42	
95	19	217	235	1	8	8			8	
96	203	113	317	-22	4	-18			-18	
97	360	876	1236	10	27	37			37	
98	34	178	212	6	-94	-88			-88	
99	0	387	387	0	116	116			116	
100	11	118	129	2	4	6			6	
101	76	552	628	45	34	79			79	
102	26	184	210	0	1	1			1	
103	233	110	342	9	0	10			10	
104	67	305	372	-1	12	11			11	
105	134	77	211	14	3	17	Ritz Carlton	Add 50 retail, 250 service jobs	317	351 rooms * 0.72 emp/room = 253 Service, 40.5 KSF retail * 1.6 emp/KSF = 65 Retail
106	369	343	712	29	13	42			42	

COMPARE EMPLOYMENT TOTALS WITH MODEL INCREMENT 2010-2023

	Model 2010 Base			Model Increment 2010 to 2023				Recommended	2010 to 2023 Growth	
TAZ	Ret	NonRet	Total	Ret	NonRet	Total	Project	Changes to 2023 Model	w/ Revisions	Notes
107	810	174	984	-114	-24	-138	Hampton Inn	Add 150 service jobs	12	115 rooms * 0.72 emp/room = 83 Service, 38 KSF health club * 1.6 emp/KSF (assume retail density) = 61 Service
108	0	28	28	0	2	2			2	
109	6	126	132	0	11	11			11	
110	0	54	54	0	3	3			3	
111	80	37	116	19	2	20	Napa Crossings 83 KSF	Add 120 retail jobs	140	83 KSF retail * 1.6 emp/KSF = 133 Retail, 19 already in model
112	0	7	7	0	0	0			0	
113	101	31	132	3	2	5			5	
114	15	37	52	1	0	1			1	
115	0	72	72	0	5	5			5	
116	0	2237	2237	0	180	180			180	
117	0	0	0	0	0	0			0	
118	1	199	200	1	152	152	Napa Pipe Ph 1&2	Add 310 retail jobs	462	(154 KSF Costco + 40 KSF Retail) * 1.6 emp/KSF = 310 Retail, 150 bed * 1 emp/bed = 150 Service, 152 already in model
119	310	4341	4652	13	1399	1412			1412	
120	0	0	0	0	0	0			0	
121	49	1193	1242	38	166	204	St. Regis	No changes	204	150 rooms * 0.72/room = 108 Service, + winery - model has enough growth
122	0	4665	4665	0	-236	-236			-236	
123	16	464	480	0	11	12			12	
124	0	0	0	0	0	0			0	
125	0	52	52	0	-5	-5			-5	
126	0	0	0	0	0	0			0	
127	0	10	10	0	8	8			8	
128	0	40	40	0	1	1			1	
129	0	3	3	0	1	1			1	
130	0	0	0	0	0	0			0	
131	31	31	62	23	0	23			23	
132	38	734	772	0	163	163			163	
133	0	1113	1113	0	77	77			77	
134	3	2642	2645	0	1881	1880			1880	
135	185	2116	2301	26	383	409			409	
136	84	1612	1696	4	123	127			127	
137	0	50	50	0	1	1			1	
138	122	964	1085	60	327	387			387	
139	65	756	821	3	56	59			59	
140	0	182	182	0	4	4			4	
141	0	0	0	0	0	0			0	
142	14	170	183	0	5	5			5	
143	0	3	3	0	0	0			0	
144	0	5	5	0	0	0			0	
145	0	86	86	0	37	37	Napa County Jail	Add 94 Service jobs	131	Per EIR: 131 staff, 554 Daily, 132 AM pk hr trips, 164 PM pk hr trips
146	0	38	38	0	1	1			1	
147	23	347	370	0	11	11			11	
148	5	324	329	0	9	9			9	
149	0	18	18	0	0	0			0	
150	0	82	82	0	2	2			2	
151	54	234	288	1	6	7			7	
152	33	165	198	1	4	5			5	

COMPARE EMPLOYMENT TOTALS WITH MODEL INCREMENT 2010-2023

TAZ	Model 2010 Base			Model Increment 2010 to 2023			Project	Recommended Changes to 2023 Model	2010 to 2023 Growth w/ Revisions	Notes
	Ret	NonRet	Total	Ret	NonRet	Total				
153	2	232	235	0	7	7			7	
154	102	618	720	2	16	19			19	
155	0	55	55	0	1	1			1	
156	0	74	74	0	3	3			3	
157	28	213	241	2	5	7			7	
158	408	1439	1847	34	27	61			61	
159	44	65	109	19	8	28			28	
160	19	400	419	0	10	11			11	
City of Napa 1-116	**8,022**	**21,859**	**29,881**	**429**	**1,713**	**2,142**			**2,921**	