Appendix A

Notice of Preparation and Comments Received

Appendix A

September 2019 Notice of Preparation

City of SACRAMENTO
Community Development

300 Richards Blvd., 3rd Floor
Sacramento, CA 95811

Help Line: 916-264-5011
CityofSacramento.org/dsd

REVISED NOTICE OF PREPARATION OF A MASTER ENVIRONMENTAL IMPACT REPORT FOR THE 2040 GENERAL PLAN UPDATE AND CLIMATE ACTION PLAN

October 3, 2019

INTRODUCTION

The City of Sacramento ("City") released a Notice of Preparation (NOP) for its 2040 General Plan Update and Climate Action Plan (or General Plan Update) in January 2019. The 30-day public comment period ran from January 28, 2019 to February 28, 2019. A scoping meeting for the City's Master Environmental Impact Report (EIR) was previously held on February 13, 2019. The City is releasing this Revised NOP to provide responsible agencies, interested parties, and organizations with updated information regarding the General Plan Update as further described in this notice. The updated information is presented in this Revised NOP in italicized text. An updated graphic is provided as Exhibit 1 attached to this notice.

The City is not reopening the public comment period on the NOP released in January 2019, and all comments previously submitted will be taken into consideration and are part of the Environmental Impact Report record. As such, previously submitted comments do not need to be resubmitted. However, if you wish to make comments related solely to the updated information presented in this revised NOP, you may do so anytime between ***October 3, 2019 and November 4, 2019 by 4:00 p.m****.*

Please provide your comments to:

Scott Johnson, Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218
Email: SRJohnson@cityofsacramento.org

As environmental documentation for this project becomes available, it will be available for review at the City's Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, California 95811, and online at: http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx.

The City of Sacramento ("City") is the lead agency for preparation of a Master Environmental Impact Report (MEIR) to evaluate changes in the physical environment that could occur as a result of adoption of the proposed City of Sacramento 2040 General Plan Update and Climate Action Plan (or proposed project), which includes a focused update of the City's 2035 General Plan and development of a standalone Climate Action Plan. The MEIR is being prepared by the City in compliance with the California Environmental Quality Act (CEQA) to evaluate potential significant environmental effects associated with implementation of the 2040 General Plan Update and Climate Action Plan and to recommend mitigation measures, as required. A MEIR will be prepared to enable review of future proposed projects pursuant to Sections 21157, 21157.1, 21157.5, and 21157.6 of the Public Resources Code (PRC).

Under CEQA, upon deciding to prepare a MEIR, the City, as lead agency, is required to issue a Notice of Preparation (NOP) to inform trustee and responsible agencies, and the public, of the decision to undertake preparation of a MEIR. The purpose of the NOP is to provide information describing the proposed project and its potential environmental effects to those who may wish to comment regarding the scope and content of the information to be considered in the MEIR.

The City is releasing this Revised NOP to provide information and clarification for the General Plan Update and MEIR as to the existing designated Special Study Areas that are in physical proximity to the city limits. These study areas on the edge of the city were previously defined by the City over a decade ago as unincorporated areas that are of interest to the City, as the planning of the areas necessitates inter-jurisdictional cooperation with Sacramento County and other entities. These Special Study Areas are further described in the Project Description below.

PROJECT LOCATION

The project location is the City of Sacramento and adjacent areas, collectively defined as the General Plan Policy Area (see Exhibit 1). *The City's Sphere of Influence and 2035 General Plan designated Special Study Areas located outside the city limits are also depicted in Exhibit 1.* Regionally, Sacramento is in the center of California's Central Valley, roughly halfway between San Francisco to the west and Lake Tahoe to the east. The General Plan Policy Area covers a total area of approximately 102 square miles. Sacramento is the seventh most populous city in California, with a 2017 population estimate of 501,901 (2017 U.S. Census, not yet updated for 2018). Major highways providing regional access to and through Sacramento include Interstate 80 and U.S. Highway 50 (east/west), and Interstate 5 and U.S. Highway 99 (north/south). Amtrak serves Sacramento's passenger rail needs, while Sacramento International Airport provides domestic and international flights through most major airlines. Within the city and surrounding region, Sacramento Regional Transit is the primary transit provider of bus and light rail service.

PROJECT BACKGROUND

A general plan is a state-required legal document (Government Code Section 65300) that guides decisions of local elected officials (decision makers) when making determinations about the allocation of resources and the future physical form and character of development in cities and counties. It is the official statement of a jurisdiction regarding the extent and types of development needed to achieve a community's vision for physical, economic, social, and environmental goals.

California state law requires that the general plan include an integrated and internally consistent set of goals, policies, standards, programs, and diagrams. State law and state guidelines require that general plans should be maintained and amended or updated periodically as conditions and needs change.

The 2030 General Plan was the City's first comprehensive revision of the city's 1998 General Plan and was adopted on March 3, 2009. The 2030 General Plan included an implementation program that calls for the City to thoroughly review the General Plan and revise and update it as necessary (2030 General Plan; Part 4; Table 4-1, Program 2) every five years.

The Sacramento City Council adopted the existing 2035 General Plan on March 3, 2015, after a two-year General Plan Update process. The 2035 General Plan set forth a roadmap to achieving Sacramento's vision to be the most livable city in America. Underlying the vision and connecting it to the roadmap is a set of six themes that thread through the General Plan: Making Great Places, Growing Smarter, Maintaining a Vibrant Economy, Creating a Healthy City, Living Lightly-Reducing Our "Carbon Footprint", and Developing a Sustainable Future. The 2035 General Plan sets out policies for land use, housing, circulation, open space, conservation, noise, and safety for the entire city. The City adopted the Sacramento Climate Action Plan (CAP) in 2012. In 2015, the Sacramento CAP was incorporated into the 2035 General Plan and in 2016, the CAP for internal city operations was updated and adopted.

The key changes in the 2035 General Plan included updating the planning timeframe through 2035; integrating the 2012 CAP into the General Plan; addressing State-mandated flood risk and flood protection requirements; updating City traffic levels of service; and incorporating urban agriculture policies.

PROJECT DESCRIPTION

The City is initiating the 2040 General Plan Update and Climate Action Plan, consistent with the city's requirement to revise and update the General Plan every five years, as necessary, to address significant emerging trends, recent state statutes, new issues, and to update the status of implementation measures. This review and update process encompasses the entire General Plan, including the goals, policies, and implementation programs.

As a part of the 2040 General Plan Update, a standalone community-wide CAP will be prepared that meets the CEQA requirements for a qualified CAP, including providing a framework for programmatic greenhouse gas emissions (GHG) reduction plans.

Specifically, the proposed project will address the following:

- **Update existing conditions information and data**. The 2035 General Plan and MEIR were based on information gathered from 2012 through 2014. Since that time, the conditions under which the 2035 General Plan was prepared have changed and several new State laws have been enacted. The 2040 General Plan and Climate Action Plan and MEIR will be updated to reflect the latest available information.

- **Update the planning horizon and revise projected growth estimates**. The 2035 General Plan and MEIR evaluated projected growth through the year 2035. Based on the Sacramento Area Council of Governments (SACOG) draft regional growth projections, between 2016 and 2040 the City is estimated to grow by an additional 72,369 dwelling units and 56,695 additional jobs.

- **Address recent State mandates**. Several new laws affecting general plans have been enacted since the 2035 General Plan, including but not limited to: environmental justice [SB 1000], Vehicle Miles Traveled [SB 743], climate adaptation and resiliency [SB 379], annexation of disadvantaged communities [SB 244], and consultation with California Native American tribes [AB 52], which must be reflected in the General Plan in order for it to remain compliant with State law.

- **Update Community Plans**. There are ten existing community plans: Arden Arcade, Central City, East Sacramento, Fruitridge Broadway, Land Park, North Natomas, North Sacramento, Pocket, South Area, and South Natomas. These community plans will be updated as part of the 2040 General Plan and will include policies to address issues or conditions unique to the community plan area.

- ***Update the Special Study Areas.*** *Adjacent to the city limits there are five existing Special Study Areas: Natomas Joint Vision, Arden Arcade, East, Fruitridge Florin, and the Town of Freeport (see Exhibit 1). These existing Special Study Areas will be updated as part of the General Plan Update and will include a brief description of existing conditions, background information, and information related to City and County coordination in managing the future of these areas, as applicable.*

- **Revisions to the Land Use and Urban Design Element**. The 2040 General Plan Update will include preparation of a land use map, land use and urban design policies, identify Transit Oriented Development (TOD) policies, and adjust building heights, densities, and floor area ratio (FAR) to accommodate SACOG 2040 growth projections, and the market demand for different housing and employment types.

- **Incorporate age-friendly policies.** The 2040 General Plan Update and Climate Action Plan will incorporate policies to allow older residents to remain in their communities as they age. The 2040 General Plan Update and Climate Action Plan will take initial steps for the city to join AARP's Network of Age-Friendly Communities and the World Health Organization's Global Network of Age-Friendly Cities and Communities.

- **Develop policies to address social equity, environmental justice, and community resilience.** In accordance with SB 1000, the 2040 General Plan Update and Climate Action Plan will identify the City's disadvantaged communities and will develop policies that address social equity, environmental justice and community resilience in these communities.

- **Reflect past accomplishments and incorporate adopted amendments**. Since adopting the 2035 General Plan the City has completed many of the Plan's implementation programs and amended the plan several times. All prior amendments will be incorporated into the 2040 General Plan.

- **Support adopted and ongoing plans and initiatives**. Recent 2035 General Plan implementation efforts (e.g., Planning and Development Code) and regional planning efforts (e.g., SACOG MTP/SCS) have resulted in identification of new issues and opportunities that require updates to policies and implementation programs.

REQUESTED APPROVALS

The City Council actions that would be considered for the proposed project include, but are not limited to:

- Adopt a resolution adopting and implementing the 2040 General Plan Update
- Adopt a resolution adopting and implementing the Climate Action Plan

MASTER ENVIRONMENTAL IMPACT REPORT

To appropriately evaluate potential environmental impacts associated with the proposed 2040 General Plan Update and Climate Action Plan pursuant to CEQA, the City is preparing a MEIR, which will use and update information from the 2015 MEIR, as appropriate. The same as the 2015 MEIR, the updated MEIR will incorporate by reference existing setting information from the General Plan Background Report, which is being prepared simultaneously with the General Plan. The updated MEIR will extend the streamlining utility for another five years. Streamlining will include use of the MEIR for listed subsequent projects, and other CEQA opportunities, such as for Transit Priority Projects under SB 375, infill projects under Section 15183.3 of the CEQA Guidelines, and to reduce the need for a project-level traffic study.

The City will coordinate the updates of the General Plan and MEIR, such that the environmental setting updates and impact analysis can both inform the General Plan and respond to the updated policy direction to create a General Plan that mitigates physical impacts on the environment, to the extent feasible, through General Plan policies and implementation programs.

PROBABLE ENVIRONMENTAL EFFECTS AND SCOPE OF THE MEIR

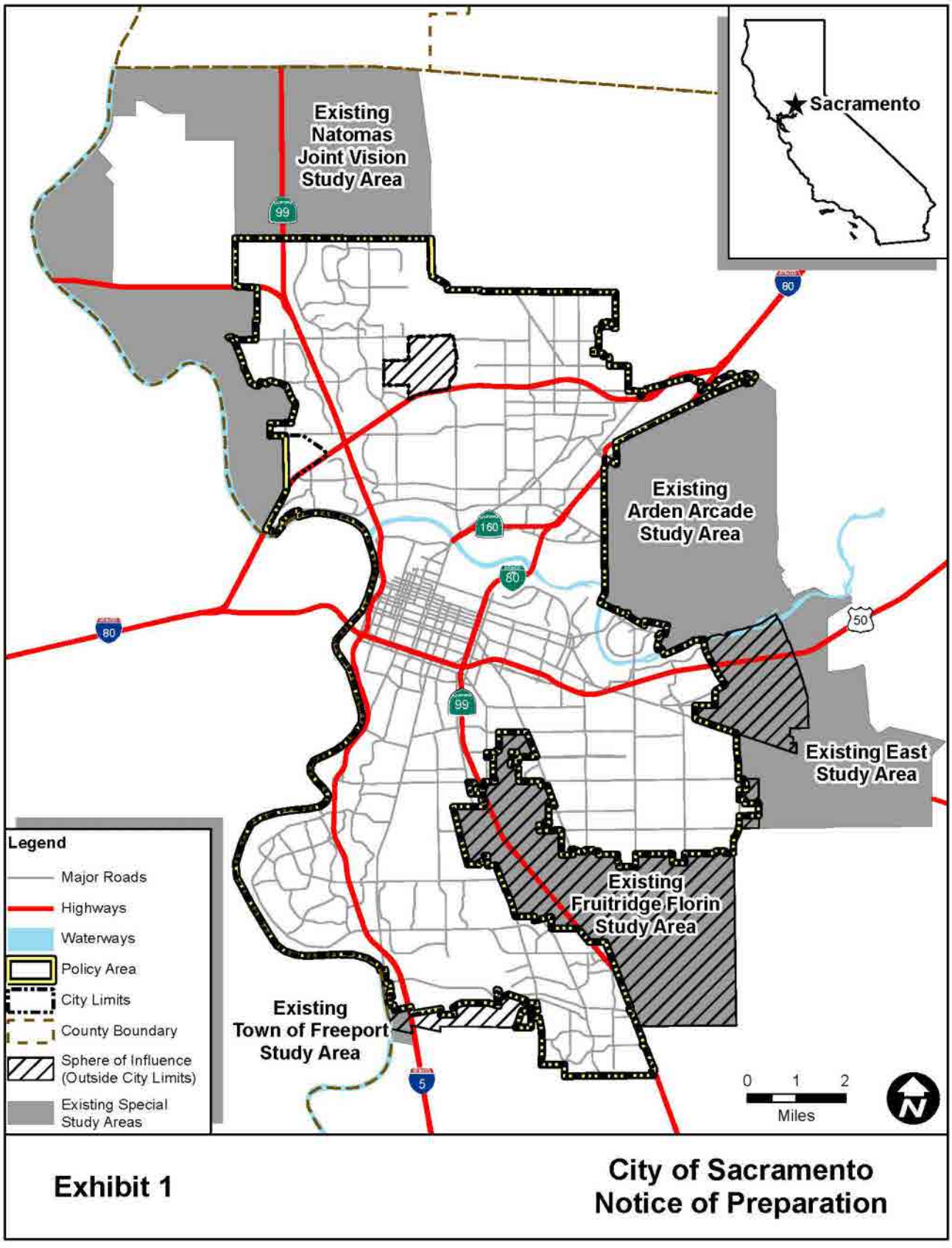
The MEIR will identify and describe the potential environmental effects associated with implementing the 2040 General Plan and Climate Action Plan. The environmental analyses presented in the MEIR will

describe the existing conditions in the City's General Plan Policy Area. Relevant federal, state, and local laws and regulations, including the City's updated General Plan policies, will be summarized. The methods of analysis and standards of significance used to determine project-related impacts will be described in each of the environmental analysis sections of the MEIR, including any assumptions that are important to understand the conclusions of the analysis. The standards for determining impact significance will be based on the City's current standards of significance. The standards will be used to determine both whether an impact is significant and the effectiveness of recommended mitigation.

The MEIR will also evaluate potential cumulative effects and potential growth-inducing impacts of the proposed project *while also considering the adjacent existing Special Study Areas due to their physical proximity to the city limits. This Revised NOP is providing notice that the City considers these existing designated Special Study Areas as important to policy and CEQA review because of their close geographic proximity to the city and the future growth being considered by Sacramento County.* The MEIR will compare impacts of the project to a range of reasonable alternatives, including a No Project Alternative, and will identify an environmentally superior alternative.

Pursuant to Section 15063 (a), of the CEQA Guidelines, an Initial Study has not been prepared because the City has determined a MEIR is clearly required to evaluate potential impacts of the proposed project. The MEIR will evaluate the full range of environmental issues contemplated for consideration under CEQA and the CEQA Guidelines. Major issues for the MEIR update include, but are not limited to:

- Aesthetics/Visual Resources
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Geology, Soils and Seismicity
- Noise and Vibration
- Public Services, Energy and Recreation
- Population and Housing
- Public Utilities and Service Systems
- Transportation and Circulation
- Tribal Cultural Resources


Existing Natomas Joint Vision Study Area
Sacramento
Existing Arden Arcade Study Area
Existing East Study Area
Existing Fruitridge Florin Study Area
Existing Town of Freeport Study Area
Legend
Major Roads
Highways
Waterways
Policy Area
City Limits
County Boundary
Sphere of Influence (Outside City Limits)
Existing Special Study Areas
0 1 2
Miles
Exhibit 1
City of Sacramento
Notice of Preparation

Appendix A

September 2019 Notice of Preparation Comments

DEPARTMENT OF TRANSPORTATION
DISTRICT 3
703 B STREET
MARYSVILLE, CA 95901
PHONE (530) 741-4233
FAX (530) 741-4245
TTY 711
www.dot.ca.gov/dist3

Making Conservation a California Way of Life.

November 1, 2019

GTS# 03-SAC-2019-00551

Mr. Scott Johnson
Senior Planner
City of Sacramento, Community Development Department
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811

City of Sacramento 2040 General Plan Update & Climate Action Plan – Revised NOP

Dear Mr. Johnson:

We thank you for taking the time to coordinate with Caltrans on the City of Sacramento 2040 General Plan (General Plan) update. We appreciate the City of Sacramento (City) shifting to a vehicle mile traveled (VMT) analysis while also strategically utilizing level of service (LOS) analysis for roadway and intersection locations.

Caltrans requests coordination at the General Plan level to analyze impacts to local and state facilities. A partnership for planning analysis at the General Plan level will allow us to better streamline and support infill development through the local development process. As the Governor's Office of Planning and Research (OPR) stated, "The coordination and harmonization of land use and transportation is a foundation of sustainable development and smart investment."[OPR, webpage June 2019]. As the City updates its General Plan, now is the time to ensure the transportation system moves people efficiently and safely.

We request coordination with the City to identify projected growth areas within the General Plan's horizon years. The City indicated it is using LOS analysis to re-analyze the same roadway segments as done in the prior General Plan. We are monitoring the following facilities and request the City to perform a comparable performance analysis. This level of analysis will allow us to understand whether new growth may impact bicycle, pedestrian, transit, or vehicle movements at:

- Interstate 5 (I-5)/Richards Boulevard interchange
- I-5/J Street off ramps
- I-5/Del Paso Boulevard interchange
- I-5/El Camino Avenue interchange
- I-5/Garden Highway interchange
- Interstate 80 (I-80)/El Camino Avenue interchange
- US Highway 50 (US-50)/Howe Avenue interchange
- State Route 99 (SR-99)/Elkhorn Boulevard interchange
- SR 99/Fruitridge Road interchange

Caltrans intends to use a three-step process to address any issues at these facilities. First, improvement strategies are considered in a manner that avoids degradation of bicycle and pedestrian movement (for example, signing, striping, intersection control, or signal coordination teamed with bike/ped improvements). After those are exhausted, coordination with the City is desired to discuss how to move people more efficiently between neighborhoods and destinations (for example with additional transit and bicycle infrastructure). Lastly, capacity increasing modifications that improve the entire transportation system (not just vehicles at one location) may be considered

To further assist and promote VMT reduction, the City and Caltrans should consider bicycle and pedestrian movements at these locations, especially if new development is planned around them:

- SR-99 interchange/12th Avenue
- SR-99 interchange/Florin Road
- SR-99 interchange/Cosumnes River Boulevard

Moreover, the City of Elk Grove in their recent General Plan Update performed a similar level of analysis where they included a performance evaluation analysis for intersection operations near interchanges at all Caltrans facilities. This level of analysis will allow Caltrans to work with the City of Elk Grove to prioritize improvement strategies before capacity increasing modifications are necessary. We recommend the City reference the recent City of Elk Grove General Plan Update and conduct a similar analysis in the General Plan update.

Thank you for your time and coordination.

Sincerely,

DAVID J. SMITH
Acting Branch Chief, Transportation Planning – South
Planning, Local Assistance, and Sustainability

c: Sue Takhar, Acting Deputy of Planning, Local Assistance, and Sustainability, Caltrans District 3
Alex Fong, Acting Asst. Deputy of Planning, Local Assistance, and Sustainability, Caltrans District 3
Jas Randhawa, Freeway Operations Branch Chief, Caltrans District 3
Alyssa Begley, SB 743 Program Implementation Coordinator, Caltrans
Christian Bushong, Local Development & Intergovernmental Review Branch Chief, Caltrans
Ryan Kohagura, Forecasting and Modeling, Caltrans District 3

Department of Toxic Substances Control

Jared Blumenfeld
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Acting Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

October 24, 2019

Mr. Scott Johnson, Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard
Sacramento, California 95811-0218

REVISED NOTICE OF PREPARATION OF A MASTER ENVIRONMENTAL IMPACT REPORT FOR THE 2040 GENERAL PLAN UPDATE AND CLIMATE ACTION PLAN – DATED OCTOBER 3, 2019 (STATE CLEARINGHOUSE NUMBER: 2019012048)

Dear Mr. Johnson:

The Department of Toxic Substances Control (DTSC) received a Revised Notice of Preparation for the City of Sacramento 2040 General Plan Update and Climate Action Plan Draft Environmental Impact Report (EIR).

The proposed project plan is to update the City's 2035 General Plan and develop a standalone Climate Action Plan.

DTSC recommends that the following issues be evaluated in the EIR, Hazards and Hazardous Materials section:

1. The forthcoming EIR should acknowledge the potential for project site activities to have resulted in the release of hazardous wastes/substances. In instances in which releases have occurred, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.

2. If buildings or other structures are to be demolished on any project sites included in the General Plan, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned

chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers* (https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance_Lead_Contamination_050118.pdf).

3. If any projects initiated as part of the General Plan require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to *DTSC's 2001 Information Advisory Clean Imported Fill Material* (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP_FS_Cleanfill-Schools.pdf).

4. If any sites included as part of the General Plan have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)* (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Ag-Guidance-Rev-3-August-7-2008-2.pdf).

5. DTSC appreciates the opportunity to review the Notice of Preparation. Should you need any assistance with an environmental investigation, please submit a request for Lead Agency Oversight Application, which can be found at: https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/VCP_App-1460.doc. Additional information regarding voluntary agreements with DTSC can be found at: https://dtsc.ca.gov/brownfields/.

If you have any questions, please contact me at (916) 255-3710 or via email at Gavin.McCreary@dtsc.ca.gov.

Sincerely,

Gavin McCreary
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (see next page)

cc: Governor's Office of Planning and Research
State Clearinghouse
State.clearinghouse@opr.ca.gov

Ms. Lora Jameson, Chief
Site Evaluation and Remediation Unit
Department of Toxic Substances Control
Lora.Jameson@dtsc.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereasis@dtsc.ca.gov

From:	Smith, David J@DOT
To:	Scott Johnson
Cc:	Takhar, Sukhvinder@DOT; Fong, Alexander Y@DOT; Randhawa, Jasdeep S@DOT; Kohagura, Ryan S@DOT; Bushong, Christian M@DOT; Begley, Alyssa M@DOT
Subject:	City of Sacramento 2040 General Plan Update & Climate Action Plan - Revised NOP Comment Letter GTS# 03-SAC-2019-00551
Date:	Monday, November 4, 2019 7:53:00 AM
Attachments:	image001.png image002.png 03-SAC-2019-00551 Comment Letter.pdf

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Dear Mr. Johnson:

Thank you for including the California Department of Transportation (Caltrans) in the review process for the project referenced above. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

Please provide our office with copies of any further actions regarding this project or future development of the property. We would appreciate the opportunity to review and comment on any changes related to this development.

If you have any question regarding these comments or require additional information, please contact me.

Sincerely,

David J. Smith
Acting Branch Chief, Transportation Planning - South
California Department of Transportation, District 3
703 B Street | Marysville, CA 95901
Office: (530) 634-7799
Cell: (530) 682-3791
Email: david.j.smith@dot.ca.gov
www.dot.ca.gov/d3/
For real-time highway conditions: http://quickmap.dot.ca.gov/

Natomas Unified School District
Connecting students to their future

November 4, 2019

Scott Johnson, Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218

Subject: City of Sacramento 2040 General Plan Update, Climate Action Plan, and Master Environmental Impact Report

Dear Mr. Johnson:

This letter is a follow up to our February 28th, 2019 response to the City's General Plan Update Master Environmental Impact Report Notice of Preparation.

As you know, the Natomas Unified School District operates schools within the City's Planning Area. During the planning horizon for this General Plan update, the District anticipates both new construction and improvements to existing schools. Obviously, the District's planning for school services is dependent on the nature, location, and extent of residential development within the city. For this reason, the District would like to partner with the City throughout this process.

We wanted to follow up with you on our February 28th request to be partners with the City during this process. We have not received an invitation to join City planners regarding the inclusion of planning for school facilities. We want to emphasize that the District would be interested in meeting with City staff at the appropriate time to discuss mitigating policies and programs that could be a part of an updated General Plan.

As previously mentioned, the NOP notes that the General Plan will need to account for updated growth projections, but does not mention whether the Planning Area would be expanded to accommodate growth projections. We understand that it is likely premature to identify whether the Planning Area would be expanded as a part of this General Plan update, but the District is strongly interested in this topic, since this will affect our master planning. A previous version of the North Natomas Community Plan identified the need for a school site west of Interstate 5, but did not locate this site on a map. Looking forward, there may be the need for a school within this Community Plan Area, and the District would like to work with the City to ensure that adequate sites can be provided. Depending on the location and amount of future residential development, the District may have a need for school sites elsewhere, as well.

With respect to the Project Description for the Master EIR, the District would be interested in discussing with City staff whether it would be possible for school projects to be included. While the District will continue to serve as the CEQA lead agency for school projects, there may be mutual advantages in reviewing land use change within the City's Planning Area and District improvement projects in a holistic fashion.

Relative to the scope of analysis, the Master EIR should study impacts of residential development on school services and facilities, as well as impacts that can be caused when there are insufficient school sites in close proximity to students' homes. Such impacts may include greenhouse gas emissions, air quality effects, transportation noise impacts, and other impacts related to students not being able to safely and conveniently walk or bike to school, as well as parents driving relatively longer distances to get students to school. The City should consider policies and programs to help ensure that land is set aside in growing areas of the City for school sites in order to prevent against such impacts. This would include policies and programs that address challenges associated with planning and phasing school facilities and residential development in the face of turbulence associated with business cycles occurring between present and the City's planning horizon.

In addition to considering policies and programs to mitigate impacts to school services and facilities, the District would invite a discussion of proactive programs that could have mutual environmental and other benefits. This could include, but would not be limited to collaborating on Safe Routes to Schools projects, other projects that enhance safe, non-vehicular transportation options for students and staff, renewable energy projects, and environmental education programs and facilities.

The District looks forward to coordinating with the City throughout this important planning process.

Sincerely,

Lalanya Rothenberger

Lalanya Rothenberger
Executive Director
Facilities and Strategic Planning

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

October 24, 2019

SENT VIA E-MAIL ONLY

Scott Johnson, Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218

RE: Revised Notice of Preparation of a Master Environmental Impact Report for the 2040 General Plan Update and Climate Action Plan

Dear Mr. Johnson:

Thank you for providing the Revised Notice of Preparation of a Master Environmental Impact Report (MEIR) for the 2040 General Plan Update and Climate Action Plan to the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District) for review. The City of Sacramento ("City") is the lead agency for preparation of a MEIR to evaluate changes in the physical environment that could occur as a result of adoption of the proposed City of Sacramento 2040 General Plan Update and Climate Action Plan, which includes a focused update of the City's 2035 General Plan and development of a stand-alone Climate Action Plan. The Sac Metro Air District reviews and provides comments through the lead agency planning, environmental and entitlement processes with the goal of reducing adverse air quality impacts and ensuring compliance with the California Environmental Quality Act. Our comments follow.

Consistency with Existing Plans

The Sac Metro Air Districts requests that you evaluate the GPU's consistency with existing plans, especially those that reduce criteria air pollutants and greenhouse gases (GHGs). Such plans include, but are not limited to, the Metropolitan Transportation Plan/Sustainable Communities Strategy, the California Air Resources Board's Climate Change Scoping Plan, the City's Bicycle and Pedestrian Master Plans, the City's Electric Vehicle Strategy, the final report and recommendations from the Mayors' Commission on Climate Change (in progress and to be completed by 2020), and the City's Urban Forest Master Plan (in progress and to be completed by 2020).

Air Quality Impacts

The NOP states that the impacts of the plan on air quality and GHG emissions will be analyzed. Please examine the types and levels of emissions generated by the project, the existing air quality conditions, and neighboring land uses. Analyze the impact of the GPU on emissions of particulate matter, ozone precursors, nitrogen oxides (NOx), and reactive organic gases (ROG). All phases of the project planning, construction and operation, as well as cumulative impacts on, should be studied. Please see our California Environmental Quality Act (CEQA) Guidance, which provides direction on analyzing topics such as emissions of particulate matter, ozone precursors, NOx and ROG. Included are thresholds of significance for particulate matter and other criteria pollutants.

Analyze the impact of proposed new land use developments and roadway construction on the urban heat island effect, as well as the alternative scenarios of deploying cool roofs and cool pavements on the urban heat island effect. Evaluate the impact of policies to update Public Works subdivision standards and street standards, for example to require the use of cool pavements, on reducing urban heat island effect. The urban heat island effect contributes to increased air pollution by accelerating ozone formation and increasing the use of air-conditioning for cooling. The widespread use of cool roofs, tree shading, cool pavements, and other strategies can help to lower building energy use, cool ambient air temperatures, and protect public health, including for pedestrians and cyclists. In addition, shaded parking spaces help reduce emissions of volatile organic compounds – ozone precursors – from conventional, internal combustion engine vehicles by as much as 20 percent.

Environmental Justice

The Sac Metro Air District has identified nine communities within or partly within the City of Sacramento that are the focus of the AB 617 Community Air Protection Program. These communities currently experience an increased exposure to toxic air contaminants (TACs) compared to other areas in the city. Please evaluate the impact of the GPU on the exposure of these communities to TACs, as well as measures that can reduce exposures, such as vegetative barriers, tree canopy, and sound walls.

Many residents of these communities live in multifamily housing or in older homes without HVAC systems that are equipped with protective air filters rated MERV 13 or greater. To reduce resident exposure to TACs, please ensure that HVAC systems in these communities are fitted with air filters rated MERV 13 or greater, through mechanisms such as HVAC replacement requirements, an inspection ordinance, or title transfer standards.

Climate Change

Please study the impact of the GPU on emissions of GHGs. The analysis should include GHG emissions from energy, transportation, waste, wastewater, and water for the residential, commercial, industrial, and government operations sectors. Analysis of the GPU's impact on GHG emissions from the waste sector should reflect changes associated with AB 1826 and SB 1383, which aim to increase local organics recycling, as well as anticipated recycling changes due to China's National Sword policy,[1] which restricted the import of contaminated materials for recycling. Evaluate the loss of carbon sequestered through new development and growth planned on converted wild or agricultural lands.

Establish GHG emissions targets that are consistent with the California 2017 Climate Change Scoping Plan's target of 40 percent below 1990 levels by 2030, the Mayors' Commission on Climate Change's target of net zero emissions by 2045, and the Under2 Memorandum of Understanding (Under2 MOU), which the City signed on to in 2016, committing to reduce GHG emissions to 2 metric tons per capita or 80 to 95 percent below 1990 levels by 2050. These targets are not conflicting, as the Mayors' Commission on Climate Change aims for *net* zero emissions by 2045, while the Under2 MOU focuses on total emissions. Consistency with the Mayors' Commission target will simplify and streamline planning efforts, and demonstrate committed, focused climate leadership on the part of the

[1] CalRecycle: https://www.calrecycle.ca.gov/markets/nationalsword

City. Moreover, the Mayors' Commission will be producing strategies, data, and recommendations that can be incorporated into the Climate Action Plan.

Analyze the impact of the GPU on tree canopy citywide, consider expanding the City's existing tree policies, and evaluate tree canopy as a climate adaption measure. The air quality benefits of shade trees include removing particulate matter from the atmosphere and reducing the urban heat island effect, which in turn lowers summertime temperatures, cools buildings, and reduces ozone formation. Tree shade in parking lots also cool individual parked cars and reduce their emissions of volatile organic compounds, an ozone precursor. Other benefits of tree canopy include reduced energy use, reduced storm water runoff, increased wildlife habitat, carbon sequestration, and improved property values. Greater neighborhood tree canopy has been correlated to improvement of overall human health, primarily healthier weight, social cohesion, and mental health.[2] Studies have correlated neighborhood tree shade to increased use of active transportation.[3]

Evaluate the effect of the GPU on climate resilience and adaptation, considering climate impacts that the City of Sacramento will likely face in 2040 and 2050. More wintertime precipitation is likely to fall as rain rather than snow and earlier spring snowmelt in the Sierra Nevada mountains could increase the risk of flooding on the American River. More intense atmospheric river storm events in the winter could deliver high volumes of rainfall within a short time frame, challenging local stormwater systems and creeks, bringing the risk of localized flooding. General Plan policies could help to mitigate flood risks with the incorporation of green infrastructure and "sponge city" design features to channel, absorb, and capture stormwater during intense rainfall events. In addition, new growth could be sited out of areas of high flood risk. Also, more frequent and longer-lasting wildfires may trigger air alerts and cause extended periods of extremely poor air quality. Analyze the impact of fires on air quality.

The increased incidence of extreme heat and heat waves will be another challenge for the City of Sacramento, as the City is projected to experience, on average, 40 days over 100F and six heat waves annually by 2040 to 2060. The average length of a heat wave will also more than double, from 4 days to 11. General Plan policies could exacerbate heat by amplifying heat island effects, or could help to reduce the localized heat island effect and reduce resident heat exposure through the adoption of CalGreen Tier 1 or Tier 2 building codes, including cool roofs as a prescriptive measure; policies supportive of a healthy, climate-resilient, drought-tolerant tree canopy; promoting energy efficiency home upgrades; adopting cool and light-colored pavements; and accelerating the adoption of electric and fuel cell vehicles.

Other climate impacts to consider include drought, due to smaller Sierra Nevada snowpacks and greater extremes of precipitation between wet and dry, severe wildfires that will generate local smoke and air quality challenges, and potential constraints on electricity generation and supply, due to potentially cascading factors such as reduced hydroelectric generation, summer peak demand, and transportation electrification.

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[2]Multiple health benefits of urban tree canopy: The mounting evidence for a green prescription, Health and Place , November 2016

[3] Green Prescription: The Link Between Urban Tree Canopy Cover & Health Behaviors and Outcomes, Greenprint Summit , January 2017

Finally, climate adaptation and resilience should be considered with SB 1000 as a critical lens. Climate adaptation solutions should prioritize the needs and challenges of environmental justice and low-income communities, who will be the most vulnerable to climate impact such as extreme heat. Environmental justice communities may not be able to access or understand City-provided information, education, and resources, as well as warnings and alerts. Lack of financial capacity will limit communities' ability to evacuate as well as to recover. In addition, climate change impacts such as wildfires, sea level rise, and drought elsewhere in California or the United States may increase migration to the City of Sacramento and the greater metropolitan region.

Land Use and Planning

The City has invested in public infrastructure such as roads, sewer, and water lines which require regular maintenance and upkeep, whether or not the land nearby it is utilized. These upkeep activities generate emissions of criteria pollutants and GHGs. Development on infill or vacant lands, intensification of existing uses, and redevelopment can maximize use of existing public infrastructure including roads, water, and sewer lines, and thereby reduce emissions of criteria pollutants and GHGs. Analyze the plan's efficiency in utilization of public infrastructure by evaluating whether the unused capacity of existing infrastructure, such as existing neighborhoods, structures, and public infrastructure is fully utilized before investing in new infrastructure for growth outside of existing developed areas.

Transportation

Examine vehicle miles traveled (VMT) and associated air quality impacts, including induced VMT, and any impacts that may result outside of City boundaries. Analysis should include VMT quantification and all associated model runs, and should evaluate VMT against a threshold of significance. For guidance, we recommend referring to the California Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA (Dec. 2018).

Evaluate how GPU either supports or impacts transit-oriented development (TOD), and the associated benefits or impacts to air quality, multimodal transportation, and health from mixed-use TOD developments, commercial corridors, increased property values and sales taxes, and increased vitality of the urban core.

Analyze how the GPU supports or impacts locating affordable housing near transit stations. Adding affordable housing to infill locations generally improves jobs-housing balance, in turn shortening commutes and reducing VMT. Analyze the impact of the GPU on housing affordability overall, considering the costs of both transportation and housing. Higher housing costs in California lead many people to move to more affordable options further away from job centers, and to commute longer distances to work.[4]

Analyze the impact of the GPU on transit use, walking and biking, and their associated health outcomes. This should include an analysis of any VMT increases identified. Locating more housing near transit, as well as existing development and job centers, can help to increase active transportation as people choose to walk, bike, or use transit for commuting, grocery trips, errands, entertainment, and other trips. This can result in improved health outcomes through decreasing obesity, diabetes, and other chronic illnesses, as well as improved air

[4] While the cost of housing may be higher in existing urbanized areas accessible to transit, transportation costs are far lower.

quality. As part of the analysis, consider increased heat as a barrier to active transportation and mitigation measures such as tree canopy that the City can incorporate to encourage walking and biking.

Consider the impacts or benefits of GPU parking policies and transportation pricing strategies such as VMT pricing and roadway tolling on air quality. Parking policies such as unbundling parking from rents, parking cash-out, eliminating minimum parking requirements, and strategic street meter programs can significantly reduce motor vehicle emissions, as can transportation pricing.

Evaluate how GPU policies designed to support or impact the development of transportation network companies (TNC) will affect VMT throughout the City. TNCs have been demonstrated to increase congestion elsewhere in California, for example in San Francisco, where they are responsible for as much as 50 percent of the growth in congestion between 2010 and 2016. Analyze how GPU policies may support alternative mobility modes, such as Bikeshare, that can replace trips with more sustainable modes.

Study a plan option that would minimize the need for motor vehicle use or ownership within the City of Sacramento. Research indicates that the people with the lowest VMT are those that don't own cars.

Whether adopting a threshold of significance, or evaluating transportation impacts on a case-by-case basis, the City should ensure that the analysis addresses:

- Direct, indirect and cumulative effects of the transportation project (CEQA Guidelines, § 15064, subds. (d), (h))
- Near-term and long-term effects of the transportation project (CEQA Guidelines, §§ 15063, subd. (a)(1), 15126.2, subd. (a))
- The transportation project's consistency with state greenhouse gas reduction goals (Pub. Resources Code, § 21099)34
- The impact of the transportation project on the development of multimodal transportation networks (Pub. Resources Code, § 21099)
- The impact of the transportation project on the development of a diversity of land uses (Pub. Resources Code, § 21099)

The State of California has created many provisions for CEQA streamlining for specific project types. For example, under SB 375, projects built in Transit Priority Areas (TPAs) can be subject to streamlined CEQA clearance, including a full exemption, a Sustainable Communities Environmental Assessment, or traffic mitigation. The Sac Metro Air District recommends that the Master Environmental Impact Report (MEIR) clearly identify these and other CEQA streamlining opportunities and should clarify that these projects or plans can undergo a more abbreviated environmental clearance based on specific project or plan qualities such as location. It may be helpful to coordinate with SACOG to obtain a pre-clearance letter specifying the areas of the city that can receive the streamlined approach to CEQA clearance. This would work to eliminate the possibility of challenges to the SCEAs. Ensure the environmental document is comprehensive enough to address potential impacts so that project-level checklists can be applied to streamline development processes.

Thank you for your consideration of these comments. If you have any questions, please contact me at 916-874-4816 or tduarte@airquality.org.

Sincerely,

Teri Duarte, MPH
Planner/Analyst

Cc: Paul Philley, AICP, SMAQMD

SMUD®

Sent Via E-Mail

November 4, 2019

Scott Johnson
City of Sacramento
300 Richards Blvd., 3rd Floor
Sacramento, CA 95811
SRJohnson@cityofsacramento.org

Subject: 2040 General Plan Update and Climate Action Plan / Notice of Preparation

To Scott Johnson,

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Notice of Preparation (NOP) for the 2040 General Plan Update and Climate Action Plan. SMUD is the primary energy provider for Sacramento County and the proposed Project area. SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region. As a Responsible Agency, SMUD aims to ensure that the proposed Project limits the potential for significant environmental effects on SMUD facilities, employees, and customers.

It is our desire that the Project EIR will acknowledge any Project impacts related to the following:

- Overhead and or underground transmission and distribution line easements.
- Utility line routing
- Electrical load needs/requirements
- Energy Efficiency
- Climate Change
- Cumulative impacts related to the need for increased electrical delivery

Per the NOP, the project will include updating 10 community plans and revisions to the Land Use and Urban Design Element. SMUD will need the updated information to evaluate the impact to existing and/or future electrical facilities to support these areas with the exception of Central City which has already been reviewed based on the latest information made available to SMUD.

More specifically, SMUD would like to have the following details related to the electrical infrastructure for the Central City Plan Area incorporated into the project description, and the Energy and Public Utilities sections:

Estimated Proposed Facilities for the Central City Plan Area Only[1]:

- SMUD will require a new 230 and/or 115/21 kV substation site within the plan area. The area of need covers, approximately, from Interstate 5 to the west, Bercut Dr and Vine St to the north, Dos Rios St to the east and Railyards Blvd to the south. This substation is needed to support expected growth and align with the City of Sacramento's General Plan for the area through 2040.
- The needed size of this substation site is approximately five (5) to ten (10) acres.
- SMUD will require new 115 and/or 230 kV transmission routes to the finalized substation site. The exact route is yet to be determined, however the exact extent, quantity and location of any proposed transmission routes will not be finalized until the substation site is identified.
- SMUD will likely require extensive underground 21 kV distribution circuit extensions and other distribution infrastructure in the plan area to support growth and align with the City of Sacramento's General Plan for the area through 2040. The majority of this construction will likely occur in the road right-of-way.
- SMUD may require additional infrastructure and facilities not explicitly stated here as needed depending on specific development demands and/or requirements.

General Note on Areas Not Explicitly Described Here:

- SMUD may require additional infrastructure and facilities, including and up to new substation sites and transmission line routes, in any area covered in the City of Sacramento's 2040 General Plan. Such facilities will be dependent on area capacity needs and specific development demands and/or requirements.

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable delivery of the proposed Project. Please ensure that the information included in this response is conveyed to the Project planners and the appropriate Project proponents.

[1] The indicated estimated facilities are SUBJECT TO CHANGE.

Environmental leadership is a core value of SMUD and we look forward to collaborating with you on this Project. Again, we appreciate the opportunity to provide input on this NOP. If you have any questions regarding this letter, please contact SMUD's Environmental Management Specialist, Rob Ferrera, at rob.ferrera@smud.org or 916.732.6676.

Sincerely,

Nicole Goi
Regional & Local Government Affairs
Sacramento Municipal Utility District
6301 S Street, Mail Stop A313
Sacramento, CA 95817
Nicole.goi@smud.org

Cc: Rob Ferrera

From:	Bryan Ginter
To:	Scott Johnson
Cc:	"Leslie Ginter"
Subject:	2040 General Plan
Date:	Monday, October 7, 2019 2:56:28 PM

Hello Mr. Johnson,

My wife and I attended one of the community meetings held by the City regarding the 2040 plan. I received the notice of the updated plan. My wife and I voiced our opinion at the meeting, but I thought it may be prudent to do it here as well, even though I don't anticipate it will do much: We do not want to see any more housing in Natomas. We don't want any more crowding. At the very least, if more housing was to be added to Natomas, we would want minimum lot size requirements, preferably ½ acre or ¼ acre lots. I know this doesn't bring in as much property taxes and those houses may not be as affordable, but I strongly feel we need to look beyond the dollar. More housing equals more congestion, more pollution and potentially more crime, to name a few. The proposed housing division is very close to the Sacramento International Airport, where we have already experienced a drastic increase in noise pollution recently coming from frequent and low-flying aircraft in Natomas, where we reside. I don't like opening my windows, only to see into my neighbor's kitchen…the houses are just too close together. I don't see an issue with increased lot sizes since the market will determine the price point…if people can't afford a $750,000 home, then the price will come down, in my opinion. It is my family's preference to minimize the additional housing for Natomas and surrounding areas as much as possible.

Regards,

Bryan Ginter

Family Law Attorney & Mediator
www.GinterFamilyLaw.com
(916) 419-1160
Ginter Family Law News

From: Paul Pannu
To: Scott Johnson
Subject: Fwd: Revised Notice of Preparation of a MEIR: 2040 General Plan Update & CAP
Date: Saturday, October 5, 2019 5:52:10 PM

Hi Scott,

Does this mean I can finally start getting services (like sewer and water) from Sacramento at my property?

3670 El Centro Road
Sacramento, CA 95834

APN: 225-0122-001-0000 (and 225-0122-002-0000)

I'd like to build my house here, and prefer not to use septic and well... please advise.

Best,
Paul

* *
Regards,

Paul Pannu
Cell / Text: (916) 710-3561
Email: paulpannu@gmail.com
* *

---------- Forwarded message ---------
From: **City of Sacramento** <talk@email.cityofsacramento.org>
Date: Thu, Oct 3, 2019 at 12:01 PM
Subject: Revised Notice of Preparation of a MEIR: 2040 General Plan Update & CAP
To: <paulpannu@gmail.com>

Revised Notice of Preparation of a MEIR

This email is to inform you that the City of Sacramento, as lead agency, has issued a Revised Notice of Preparation (NOP) of a Master Environmental Impact Report (MEIR) for the City of Sacramento 2040 General Plan Update and Climate Action Plan.

The City is initiating the 2040 General Plan Update and Climate Action Plan, consistent with the City's requirement to revise and update the General Plan every five years, as necessary, to address significant emerging trends, recent state statutes, new issues, and to update the status of implementation measures.

As lead agency, the City of Sacramento has issued a Revised NOP to inform trustee and responsible agencies, and the public, of the decision to undertake preparation of a MEIR and to *provide information and clarification for the General Plan Update and MEIR as to the existing designated Special Study Areas that are in physical proximity to the city limits. These study areas on the edge of the city were previously defined by the City over a decade ago as unincorporated areas that are of interest to the City, as the planning of the areas necessitates interjurisdictional cooperation with Sacramento County and other entities.*

The Revised NOP is available on the City's Community Development Department webpage.

The Revised NOP circulation period is from October 3, 2019 to November 4, 2019. Written comments on the scope of the MEIR will be accepted until 4 p.m. on Monday, November 4, 2019.

Please submit comments to:
Scott Johnson, Senior Planner
Community Development Department
300 Richards Boulevard, Third Floor
Sacramento, CA 95811
Email: srjohnson@cityofsacramento.org

Additional information on the 2040 General Plan Update and Climate Action Plan is available here.

DELTA STEWARDSHIP COUNCIL
A California State Agency

980 NINTH STREET, SUITE 1500
SACRAMENTO, CALIFORNIA 95814
HTTP://DELTACOUNCIL.CA.GOV
(916) 445-5511

November 4, 2019

Scott Johnson, Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218

Email: SRJohnson@cityofsacramento.org

RE: Comments on the Revised Notice of Preparation (NOP) of a Master Environmental Impact Report (MEIR) for the City of Sacramento 2040 General Plan Update and Climate Action Plan, SCH #2019012048

Dear Mr. Johnson:

Thank you for the opportunity to comment on the City of Sacramento 2040 General Plan Update and Climate Action Plan Revised Notice of Preparation (NOP) of a Master Environmental Impact Report (MEIR). The Delta Stewardship Council (Council) recognizes the City of Sacramento's (City's) objectives to determine the extent and types of development needed to achieve the community's vision for physical, economic, social, and environmental goals. The Council submitted comments on the City's initial NOP on February 28, 2019. This letter updates those comments to reflect the new project description provided in the Revised NOP, released on October 3, 2019.

The Council is an independent State of California agency established by the Sacramento-San Joaquin Delta Reform Act of 2009 (SBX7 1; Delta Reform Act). As stated in the Delta Reform Act, the State has coequal goals for the Delta: providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place (Water Code §85054). The Council is charged with furthering California's coequal goals for the Delta through the adoption and implementation of the Delta Plan, regulatory portions of which became effective on September 1, 2013.

Covered Action Determination and Certification of Consistency with the Delta Plan
Through the Delta Reform Act, the Council was granted specific regulatory and appellate authority over certain actions that take place in whole or in part in the Delta and Suisun Marsh, which are referred to as "covered actions". The Council exercises that authority through

development and implementation of the Delta Plan. **State and local agencies are required to demonstrate consistency with 14 regulatory policies identified in the Delta Plan when carrying out, approving, or funding a covered action.**

Based on the project description and exhibits in the NOP, the proposed City of Sacramento 2040 General Plan Update and Climate Action Plan may meet the definition of a covered action. Portions of the project location (i.e., the Pocket community within the General Plan Policy Area and the town of Freeport in the City's Sphere of Influence) fall within the boundaries of the Legal Delta (Water Code section 12220).

According to the Delta Reform Act, it is the State or local agency approving, funding, or carrying out the project that ultimately must determine if that project is a covered action and, if so, file a Certification of Consistency with the Delta Plan (Water Code section 85225) prior to project implementation. As the City proceeds with planning and environmental impact analysis, we invite you to engage Council staff in early consultation to discuss General Plan policies and programs, Climate Action Plan measures, and MEIR mitigation measures that would enable consistency with the Delta Plan. More information on covered actions, early consultation, and the certification process can be found on the Council website at: http://deltacouncil.ca.gov/delta-plan/covered-actions.

Comments Regarding Delta Plan Policies and Potential Consistency Certification

The following section describes regulatory Delta Plan policies that may apply to the proposed project based on the NOP. This information is offered to assist the City to prepare environmental documents that can be used to support the project's eventual Certification of Consistency. This information may also assist the City to describe the relationship between the proposed project and the Delta Plan in the MEIR.

General Policy 1: Detailed Findings to Establish Consistency with the Delta Plan

Delta Plan Policy **G P1** (23 CCR section 5002) specifies what must be addressed in a Certification of Consistency by a proponent of a project that is a covered action. The following is a subset of these requirements that are relevant to the General Plan Update and Climate Action Plan. A covered action must fulfill these requirements to demonstrate consistency with the Delta Plan:

Mitigation Measures

Delta Plan Policy **G P1** (23 CCR section 5002(b)(2)) requires that actions not exempt from the California Environmental Quality Act (CEQA) and subject to Delta Plan regulations must include applicable feasible mitigation measures consistent with those identified in the Delta Plan as amended April 26, 2018 or substitute mitigation measures that are equally or more effective. Mitigation measures in the Delta Plan's Mitigation Monitoring and Reporting Program (Delta Plan MMRP) are available at: http://deltacouncil.ca.gov/pdf/delta-plan/2018-appendix-o-mitigation-monitoring-and-reporting-program.pdf. Please note that this regulatory requirement has been amended since the date of the Council's previous letter.

The Notice of Completion identifies 28 resource areas in which the General Plan Update and Climate Action Plan could result in potentially significant environmental impacts that may require mitigation, with 16 areas specifically identified in the NOP as major issues for the MEIR update. Council staff recommends that the City review the mitigation measures in the Delta Plan MMRP for each of these resource areas. If the Draft MEIR identifies significant impacts that require mitigation, Council staff recommends that the City apply the mitigation measures identified in the Delta Plan MMRP, when applicable and feasible.

Best Available Science
Delta Plan Policy **G P1** (23 CCR section 5002(b)(3)) states that actions subject to Delta Plan regulations must document use of best available science as relevant to the purpose and nature of the project. The regulatory definition of "best available science" is provided in Appendix 1A of the Delta Plan (http://deltacouncil.ca.gov/pdf/delta-plan/2015-appendix-1a.pdf).

Best available science is defined in the Delta Plan as the best scientific information and data for informing management and policy decisions. Six criteria are used to define best available science: relevance, inclusiveness, objectivity, transparency and openness, timeliness, and peer review. (23 CCR section 5001(f)). This policy generally requires that the process used by the City to analyze project alternatives, impacts, and mitigation measures for the General Plan Update and Climate Action Plan be clearly documented in the MEIR and supporting record, and effectively communicated to foster improved understanding and decision making.

Delta as Place Policy 1: Locate New Urban Development Wisely
Delta Plan Policy **DP P1** (23 CCR section 5010) places certain limits on new development within the Delta. As it relates to General Plan Update and Climate Action Plan, Policy DP P1 states that new residential, commercial, or industrial development must be limited to areas that city or county general plans as of the date of the Delta Plan's adoption (May 2013) designate for residential, commercial, and industrial development in cities or their spheres of influence. This policy is intended to strengthen existing Delta communities while protecting farmland and open space, providing land for ecosystem restoration needs, and reducing flood risk.

The Revised NOP clarifies that the General Plan Update will include an update to numerous Special Study Areas, including the Town of Freeport Special Study Area. Exhibit 1 of the Revised NOP shows that the Town of Freeport Study Special Area extends beyond the City's Sphere of Influence. Please analyze the extent to which implementation of the General Plan Update and Climate Action Plan would result in land use changes within portions of the City and Sphere of Influence located within the Delta relative to designations that were in place in May 2013 within the Land Use section of the MEIR as well as in the growth inducement and cumulative impact discussions. Please include an analysis of the extent to which implementation of the General Plan Update and Climate Action Plan would result in land use changes within the Town of Freeport Special Study Area that is outside of the City and its Sphere of Influence. The Council seeks to ensure that these updated plans would continue to

avoid the potential to induce new residential, commercial, or industrial development that would be inconsistent with Policy DP P1 in the Delta.

Risk Reduction Policy RR P1: Prioritization of State Investments
Delta Plan Policy **RR P1** (23 CCR section 5012) requires that discretionary State investments in Delta flood risk management be prioritized to address emergency preparedness, response, and recovery. On April 26 2018, the Council adopted amendments to Policy RR P1 which identified a set of islands or tracts that are a very high priority for state investments, two of which fall within the City of Sacramento[1]. (http://deltacouncil.ca.gov/pdf/delta-plan/2018-04-26-amended-chapter-7.pdf). These are Maintenance Area 9 North and Maintenance Area 9 South, which are located next to the Pocket community and near the town of Freeport. The City's updated Safety Element and the updated Pocket area Community Plan should identify goals, strategies, measures, policies, or objectives that reflect the resources and risks identified in these areas.

Closing Comments

We invite the City to engage with Council staff in early consultation to collaborate and discuss potential General Plan policies and programs, Climate Action Plan measures, and MEIR mitigation measures as the planning and environmental impact analysis processes proceed prior to submittal of a Certification of Consistency. Please contact Avery Livengood at (916) 445-0782 (Avery.Livengood@deltacouncil.ca.gov) with any questions.

Sincerely,

Jeff Henderson, AICP
Deputy Executive Officer
Delta Stewardship Council

[1] To implement the change to Policy RR P1, the Council is currently conducting rulemaking under the Administrative Procedure Act to amend 23 CCR section 5012

Environmental Council of Sacramento
P.O. Box 1526, Sacramento, California 95812
Phone: 916-444-0022

November 11, 2019

Scott Johnson, Senior Planner
Community Development Department
300 Richards Boulevard, Third floor
Sacramento, CA 95811

Email: srjohnson@cityofsacramento.org

Subject: ECOS/Habitat 2020 Homegrown Habitat program comments for inclusion in the City of Sacramento's General Plan and Climate Change strategy updates

Dear Mr. Johnson,

The Environmental Council of Sacramento (ECOS) is a 501(c)(3) nonprofit organization working to achieve regional and community sustainability and a healthy environment for existing and future residents. ECOS member organizations include: 350 Sacramento, Breathe California Sacramento Region, Friends of Stone Lakes National Wildlife Refuge, International Dark-Sky Association, Physicians for Social Responsibility Sacramento Chapter, Sacramento Citizens' Climate Lobby, Sacramento Electric Vehicle Association, Environmental Democrats of Sacramento County, Sacramento Housing Alliance, Sacramento Natural Foods Coop, Sacramento Audubon Society, Sacramento Valley Chapter of the California Native Plant Society, Sacramento Vegetarian Society, Save Our Sandhill Cranes, Save the American River Association, Service Employees International Union (SEIU) Local 1000 and the Sierra Club Sacramento Group.

Members of Habitat 2020, a committee of ECOS, include: Friends of Stone Lakes National Wildlife Refuge, Friends of Swainson's Hawk, International Dark-Sky Association Sacramento Chapter, Sacramento Area Creeks Council, Sacramento Audubon Society, Sacramento Valley Chapter California Native Plant Society, Save Our Sandhill Cranes, Save the American River Association, Sierra Club Sacramento Group and Sacramento Heron and Egret Rescue.

The Sacramento Chapter of the California Native Plant Society (CNPS), in coordination with State CNPS, ECOS and Habitat 2020, has embarked upon an ambitious regional campaign, called Homegrown Habitat, to promote the preferential use of California Native Plants in home and civic landscaping. Local native plants provide habitat within the build environment that promote regional biodiversity and help create pathways for local insects, pollinators, birds and animals through our built environment. CNPS's Homegrown Habitat team has prepared a list of appropriate annual and perennial plants, shrubs and trees (HH Plant List) for use in the City of Sacramento's private and public landscapes. CNPS is currently building the capacity to ensure that these landscaping options are widely available locally.

Environmental Council of Sacramento
P.O. Box 1526, Sacramento, California 95812
Phone: 916-444-0022

City wide utilization of these plants will directly contribute to several of the City's major long-term goals including climate change adaptation and regional biodiversity. Utilization of the local native plants found on the HH Plant List in public spaces, residential areas, and commercial/industrial landscapes within the City will lower water consumption, provide carbon sequestration benefits (even during extended periods of drought when many non-native plants, shrubs, and trees perish), and contribute to regional biodiversity by providing homes and year-round food for pollinators and beneficial insects, local and migratory birds, and animal populations. Nearly all the region's beneficial insect populations are in decline and many of our bird and animal populations that depend on them are suffering the same fate. We urge the City of Sacramento to adopt the goal of the Homegrown Habitat program and the HH Plant List within the relevant parts of the City's general plan and climate action plan, and in so doing, take the steps listed in the attached comment document to ensure the planting of these local native plants throughout the City.

Chris Lewis CNPS's Homegrown Habitat program chair would be pleased to meet with you to more fully describe the program's goals, objectives, and activities, and to discuss how the program can be implemented within the City. Chris will be following up within the week to set up a meeting with you to further explore implementation of the program within the City of Sacramento.

Sincerely,

Ralph Propper
President, ECOS

Sean Wirth
Co-Chair, Habitat 2020

Cc: Chris Lewis, Homegrown Habitat Program Chair

Attachment 1 of 1

City of Sacramento General Plan Update Comments Regarding CNPS' Homegrown Habitat

The Sacramento Chapter of the California Native Plant Society (CNPS), in coordination with State CNPS, ECOS and Habitat 2020, has embarked upon an ambitious regional campaign, called Homegrown Habitat, to promote the preferential use of California Native Plants in home and civic landscaping. CNPS has prepared a list of appropriate annual and perennial plants, shrubs and trees (HH Plant List) for use in the City of Sacramento. CNPS is currently building the capacity to ensure that these landscaping options are widely available locally. City wide utilization of these plants will directly contribute to several of the City's major long-term goals. Utilization of the local native plants found on the HH Plant List in public spaces, residential areas, and commercial/industrial landscapes will lower water consumption, provide carbon sequestration benefits (even during extended periods of drought when many non-native plants, shrubs and trees perish), and contribute to regional biodiversity by providing homes and food for pollinators and beneficial insects, local and migratory birds, and animal populations. We urge the City of Sacramento to adopt the HH Plant List that has been prepared by CNPS and take the following steps to incorporate the planting of these local native plants throughout the City.

1. Set an example for the public regarding the environmental benefits and importance to biodiversity of planting local, native plants by publicly modifying the city's landscaping protocols and plant specifications to incorporate the HH Plant List and by initiating efforts to replace City landscaping with these plants.
2. Initiate an assessment of City landscaping to prioritize the incorporation of HH Plant List plantings in parks, public spaces, medians, and other spaces to assist in linking up or forming networks of green corridors and habitat waystations that facilitate the movement of native plants, insects, birds, and animals to and from the delta across the valley through the City's built environment.
3. Replace 50% or more of the City's public space lawn landscapes with selected palates of local native plants selected from the HH Plant List.
4. Work with water agencies to target residential and commercial water conservation programs to replace 50% or more of lawn landscapes with local native plants from the HH Plant List.
5. Place conditions on the landscaping used in future developments and infill projects to require the use of local native plants from the HH Plant List and significantly restrict the use of turf and artificial lawns.
6. Promote public awareness of the importance of local native plants to the region's future through public information and education initiatives, and advance practices and actions they can take to promote the growth and health of native plants including how to plant them and the appropriate applications of water, pesticides and fertilizers.
7. Educate the public on the importance of local biodiversity and how local native plants provide a basic building block for native insects and pollinators, bird populations, and personal wellbeing. Promote practices and actions, including management of nighttime lighting, that contribute to the City's continued biodiversity.

Residential landscaping accounts for more than 50% of the average household's daily water usage (Regional Water Authority Waterwise data). Additionally, during the summer when landscaping water demands are at their highest, 30% of this water is lost to evaporation from turf lawns (Regional Water Authority Waterwise data). This water loss also occurs in City controlled landscaping that includes turf. Unfortunately, in long periods of drought such as the Sacramento region experienced in 2012-15, City residents and City government operations can lose significant landscaping investments because plant colonies and turf typically in use cannot withstand the valley's high temperatures coupled with reduced water availability. Both individual homeowners and the City are hit with a double impact in these situations. Both lose landscaping functionality (shade and privacy), and its beauty and health benefits; coupled with the inherent cost of time and money to replace it when milder weather returns. The City also loses landscape habitat, carbon sequestration and fire protection; and the associated loss of local insects, including pollinators, local and migratory birds, and animal populations that depend on plants. Unfortunately, climate change is promising more frequent and severe regional droughts, and this means the potential exists for a continuing cycle of boom and bust for landscaping within the City.

This cycle is broken when the City of Sacramento and its residents, landscape with local native plants found on the HH Plant List instead of turf lawns and non-local, higher water use plants that also don't support local insect populations. A traditionally landscaped home in Sacramento can save up to 60% or more of its watering costs and a significant amount of landscape maintenance cost by converting to a landscape of plants from the HH Plant List (Sacramento Valley Chapter, California Native Plant Society). These local native plants typically require low or very low amounts of water to thrive and have adapted to grow and thrive in the Sacramento region's native soils and climate for thousands of years. Gardening and maintenance costs are significantly lower with these plants because they do not require fertilizer, pesticides or special soil amendments. Plant palletes can be selected for any shade or sun condition and can provide blooms and color throughout the year. Local insects, birds and animals thrive on these plants, so the use of these plants contributes to the City's carbon sequestration and biodiversity. The ability of local native plants to withstand climate change will contribute to homeowner shade, prosperity, and overall improved quality of life.

Carbon sequestration is achieved and maintained throughout the City's built environment through the broad use of the local native plants on the HH Plant List. Many of the trees and shrubs found on the list are long lived and woody which translates into sustained carbon sequestration. These plants are equipped to survive prolonged periods of low, very low or even no supplemental irrigation and, therefore, continue to sequester carbon when other non-drought tolerant plantings often perish thus reducing the City's ability to sequester carbon.

The HH Plant List provides palletes of local native plants that achieve the above benefits. Experts in biology, entomology, conservation, education, and landscape design joined with the

California Native Plant Society, Sacramento Valley Chapter, to develop the list for the Sacramento region. The listed plants support hundreds of butterflies, moths, native bees, and other pollinators. They are homes for other beneficial insects, which in turn support local and migratory birds and animal populations. Year-round habitat for pollinators supports residential agricultural activity. These plants already survive without human attention along the American river parkway and are celebrated for their beauty and resilience. They are equally at home in front and back yards, common HOA and developer spaces, commercial landscapes, public and institutional spaces, and medians and agricultural hedgerows.

From: Nicholas Avdis
To: Scott Johnson
Subject: NOP Comments - 2040 General Plan Update
Date: Wednesday, November 6, 2019 1:58:41 PM
Attachments: image001.png

Mr. Johnson,

This firm represents the interest of Upper Westside, LLC and the Upper Westside Master Plan Project ("Upper Westside"). Thank you for the opportunity to comment on the scope of the EIR being prepared to evaluate the 2040 General Plan Update and Climate Action Plan (the "EIR").

The Revised Notice of Preparation identifies specific updates to the General Plan related to the identified Special Study Areas and the evaluation of environmental impacts therefrom. While the Upper Westside project is located within one of these Special Study Areas (the Natomas Joint Vision Area) and is currently pursuing land use entitlements with the County of Sacramento, we assume that the reason for inclusion of these updates is in the context of possible annexation.

The Upper Westside project offers a unique infill opportunity within a few miles of the City's downtown core and very close proximity to hundreds of thousands of jobs, that would likely have a beneficial environmental effect on the region when compared to the other study areas in Arden Arcade East, Fruitridge Florin, and the Town of Freeport – from a greenhouse gas (GHG) and vehicle miles traveled (VMT) perspective. Additionally, with regards to water rights, the Upper Westside is located within the American River Place of Use – which presents a unique opportunity to preserve the City's water rights into the future. These environmental benefits of the Upper Westside merit further evaluation in the EIR.

Thank you for your consideration of these comments.

Nicholas S. Avdis
Of Counsel

THOMAS LAW GROUP
455 Capitol Mall, Suite 801, Sacramento, California 95814
One Kaiser Plaza, Suite 875, Oakland, California 94612
Phone: 916.287.9292
Fax: 916.737.5858
navdis@thomaslaw.com
www.thomaslaw.com

T|L|G Thomas Law Group

Appendix A

January 2019 Notice of Preparation

City of SACRAMENTO
Community Development

300 Richards Blvd., 3rd Floor
Sacramento, CA 95811

Help Line: 916-264-5011
CityofSacramento.org/dsd

NOTICE OF PREPARATION OF A MASTER ENVIRONMENTAL IMPACT REPORT AND SCOPING MEETING FOR THE 2040 GENERAL PLAN UPDATE AND CLIMATE ACTION PLAN

PUBLIC COMMENT PERIOD
January 28, 2019 to February 28, 2019

Scoping Meeting: Wednesday, February 13, 2019, 5:00 – 7:00 PM
Sacramento City Hall, 915 I Street, Room 1119, Sacramento, CA 95814

INTRODUCTION

The City of Sacramento ("City") is the lead agency for preparation of a Master Environmental Impact Report (MEIR) to evaluate changes in the physical environment that could occur as a result of adoption of the proposed City of Sacramento 2040 General Plan Update and Climate Action Plan (or proposed project), which includes a focused update of the City's 2035 General Plan and development of a standalone Climate Action Plan. The MEIR is being prepared by the City in compliance with the California Environmental Quality Act (CEQA) to evaluate potential significant environmental effects associated with implementation of the 2040 General Plan Update and Climate Action Plan and to recommend mitigation measures, as required. A MEIR will be prepared to enable review of future proposed projects pursuant to Sections 21157, 21157.1, 21157.5, and 21157.6 of the Public Resources Code (PRC).

Under CEQA, upon deciding to prepare a MEIR, the City, as lead agency, is required to issue a Notice of Preparation (NOP) to inform trustee and responsible agencies, and the public, of the decision to undertake preparation of a MEIR. The purpose of the NOP is to provide information describing the proposed project and its potential environmental effects to those who may wish to comment regarding the scope and content of the information to be considered in the MEIR.

PROJECT LOCATION

The project location is the City of Sacramento and adjacent areas, collectively defined as the General Plan Policy Area (see Exhibit 1). Regionally, Sacramento is in the center of California's Central Valley, roughly halfway between San Francisco to the west and Lake Tahoe to the east. The General Plan Policy

Area covers a total area of approximately 102 square miles. Sacramento is the seventh most populous city in California, with a 2017 population estimate of 501,901 (2017 U.S. Census, not yet updated for 2018). Major highways providing regional access to and through Sacramento include Interstate 80 and U.S. Highway 50 (east/west), and Interstate 5 and U.S. Highway 99 (north/south). Amtrak serves Sacramento's passenger rail needs, while Sacramento International Airport provides domestic and international flights through most major airlines. Within the city and surrounding region, Sacramento Regional Transit is the primary transit provider of bus and light rail service.

PROJECT BACKGROUND

A general plan is a state-required legal document (Government Code Section 65300) that guides decisions of local elected officials (decision makers) when making determinations about the allocation of resources and the future physical form and character of development in cities and counties. It is the official statement of a jurisdiction regarding the extent and types of development needed to achieve a community's vision for physical, economic, social, and environmental goals.

California state law requires that the general plan include an integrated and internally consistent set of goals, policies, standards, programs, and diagrams. State law and state guidelines require that general plans should be maintained and amended or updated periodically as conditions and needs change.

The 2030 General Plan was the City's first comprehensive revision of the city's 1998 General Plan and was adopted on March 3, 2009. The 2030 General Plan included an implementation program that calls for the City to thoroughly review the General Plan and revise and update it as necessary (2030 General Plan; Part 4; Table 4-1, Program 2) every five years.

The Sacramento City Council adopted the existing 2035 General Plan on March 3, 2015, after a two-year General Plan Update process. The 2035 General Plan set forth a roadmap to achieving Sacramento's vision to be the most livable city in America. Underlying the vision and connecting it to the roadmap is a set of six themes that thread through the General Plan: Making Great Places, Growing Smarter, Maintaining a Vibrant Economy, Creating a Healthy City, Living Lightly-Reducing Our "Carbon Footprint", and Developing a Sustainable Future. The 2035 General Plan sets out policies for land use, housing, circulation, open space, conservation, noise, and safety for the entire city. The City adopted the Sacramento Climate Action Plan (CAP) in 2012. In 2015, the Sacramento CAP was incorporated into the 2035 General Plan and in 2016, the CAP for internal city operations was updated and adopted.

The key changes in the 2035 General Plan included updating the planning timeframe through 2035; integrating the 2012 CAP into the General Plan; addressing State-mandated flood risk and flood protection requirements; updating City traffic levels of service; and incorporating urban agriculture policies.

PROJECT DESCRIPTION

The City is initiating the 2040 General Plan Update and Climate Action Plan, consistent with the city's requirement to revise and update the General Plan every five years, as necessary, to address significant emerging trends, recent state statutes, new issues, and to update the status of implementation measures. This review and update process encompasses the entire General Plan, including the goals, policies, and implementation programs.

As a part of the 2040 General Plan Update, a standalone community-wide CAP will be prepared that meets the CEQA requirements for a qualified CAP, including providing a framework for programmatic greenhouse gas emissions (GHG) reduction plans.

Specifically, the proposed project will address the following:

- **Update existing conditions information and data**. The 2035 General Plan and MEIR were based on information gathered from 2012 through 2014. Since that time, the conditions under which the 2035 General Plan was prepared have changed and several new State laws have been enacted. The 2040 General Plan and Climate Action Plan and MEIR will be updated to reflect the latest available information.

- **Update the planning horizon and revise projected growth estimates**. The 2035 General Plan and MEIR evaluated projected growth through the year 2035. Based on the Sacramento Area Council of Governments (SACOG) draft regional growth projections, between 2016 and 2040 the City is estimated to grow by an additional 72,369 dwelling units and 56,695 additional jobs.

- **Address recent State mandates**. Several new laws affecting general plans have been enacted since the 2035 General Plan, including but not limited to: environmental justice [SB 1000], Vehicle Miles Traveled [SB 743], climate adaptation and resiliency [SB 379], annexation of disadvantaged communities [SB 244], and consultation with California Native American tribes [AB 52], which must be reflected in the General Plan in order for it to remain compliant with State law.

- **Update Community Plans**. There are ten existing community plans: Arden Arcade, Central City, East Sacramento, Fruitridge Broadway, Land Park, North Natomas, North Sacramento, Pocket, South Area, and South Natomas. These community plans will be updated as part of the 2040 General Plan and will include policies to address issues or conditions unique to the community plan area.

- **Revisions to the Land Use and Urban Design Element**. The 2040 General Plan Update will include preparation of a land use map, land use and urban design policies, identify Transit Oriented Development (TOD) policies, and adjust building heights, densities, and floor area ratio (FAR) to accommodate SACOG 2040 growth projections, and the market demand for different housing and employment types.

- **Incorporate age-friendly policies.** The 2040 General Plan Update and Climate Action Plan will incorporate policies to allow older residents to remain in their communities as they age. The 2040

General Plan Update and Climate Action Plan will take initial steps for the city to join AARP's Network of Age-Friendly Communities and the World Health Organization's Global Network of Age-Friendly Cities and Communities.

- **Develop policies to address social equity, environmental justice, and community resilience.** In accordance with SB 1000, the 2040 General Plan Update and Climate Action Plan will identify the City's disadvantaged communities and will develop policies that address social equity, environmental justice and community resilience in these communities.

- **Reflect past accomplishments and incorporate adopted amendments**. Since adopting the 2035 General Plan the City has completed many of the Plan's implementation programs and amended the plan several times. All prior amendments will be incorporated into the 2040 General Plan.

- **Support adopted and ongoing plans and initiatives**. Recent 2035 General Plan implementation efforts (e.g., Planning and Development Code) and regional planning efforts (e.g., SACOG MTP/SCS) have resulted in identification of new issues and opportunities that require updates to policies and implementation programs.

REQUESTED APPROVALS

The City Council actions that would be considered for the proposed project include, but are not limited to:

- Adopt a resolution adopting and implementing the 2040 General Plan Update
- Adopt a resolution adopting and implementing the Climate Action Plan

MASTER ENVIRONMENTAL IMPACT REPORT

To appropriately evaluate potential environmental impacts associated with the proposed 2040 General Plan Update and Climate Action Plan pursuant to CEQA, the City is preparing a MEIR, which will use and update information from the 2015 MEIR, as appropriate. The same as the 2015 MEIR, the updated MEIR will incorporate by reference existing setting information from the General Plan Background Report, which is being prepared simultaneously with the General Plan. The updated MEIR will extend the streamlining utility for another five years. Streamlining will include use of the MEIR for listed subsequent projects, and other CEQA opportunities, such as for Transit Priority Projects under SB 375, infill projects under Section 15183.3 of the CEQA Guidelines, and to reduce the need for a project-level traffic study.

The City will coordinate the updates of the General Plan and MEIR, such that the environmental setting updates and impact analysis can both inform the General Plan and respond to the updated policy direction to create a General Plan that mitigates physical impacts on the environment, to the extent feasible, through General Plan policies and implementation programs.

PROBABLE ENVIRONMENTAL EFFECTS AND SCOPE OF THE MEIR

The MEIR will identify and describe the potential environmental effects associated with implementing the 2040 General Plan and Climate Action Plan. The environmental analyses presented in the MEIR will describe the existing conditions in the City's General Plan Policy Area. Relevant federal, state, and local laws and regulations, including the City's updated General Plan policies, will be summarized. The methods of analysis and standards of significance used to determine project-related impacts will be described in each of the environmental analysis sections of the MEIR, including any assumptions that are important to understand the conclusions of the analysis. The standards for determining impact significance will be based on the City's current standards of significance. The standards will be used to determine both whether an impact is significant and the effectiveness of recommended mitigation.

The MEIR will also evaluate potential cumulative effects and potential growth-inducing impacts of the proposed project. The MEIR will compare impacts of the project to a range of reasonable alternatives, including a No Project Alternative, and will identify an environmentally superior alternative.

Pursuant to Section 15063 (a), of the CEQA Guidelines, an Initial Study has not been prepared because the City has determined a MEIR is clearly required to evaluate potential impacts of the proposed project. The MEIR will evaluate the full range of environmental issues contemplated for consideration under CEQA and the CEQA Guidelines. Major issues for the MEIR update include, but are not limited to:

- Aesthetics/Visual Resources
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Geology, Soils and Seismicity
- Noise and Vibration
- Public Services, Energy and Recreation
- Population and Housing
- Public Utilities and Service Systems
- Transportation and Circulation
- Tribal Cultural Resources

SUBMITTING COMMENTS

Comments as to the appropriate scope of analysis in the MEIR are invited from all interested parties. Written comments on the scope of the MEIR will be accepted until 5:00 p.m. on Thursday, February 28, 2019. Please submit comments to:

Scott Johnson, Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218
Email: SRJohnson@cityofsacramento.org

SCOPING MEETING

A public scoping meeting will be held on Wednesday, February 13, 2019, from 5:00 p.m. to 7:00 p.m. at Sacramento City Hall, 915 I Street, Room 1119, Sacramento, California. Trustee and responsible agencies, as well as members of the public are invited to attend to learn more about the 2040 General Plan Update and Climate Action Plan and to provide written input on the scope of the MEIR. The scoping meeting will have an "open house" format, so participants can attend at any point during this two hour window. A brief presentation and project overview will be provided from 5:45 to 6:15 p.m. Written comments on the scope of the MEIR may be submitted at the meeting. Forms for providing comments will be available. No oral comments will be taken at this meeting, all comments are to be provided in writing.

As environmental documentation, including the NOP, for this project becomes available, it will be available for review at the City's Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, California 95811, and online at: http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx

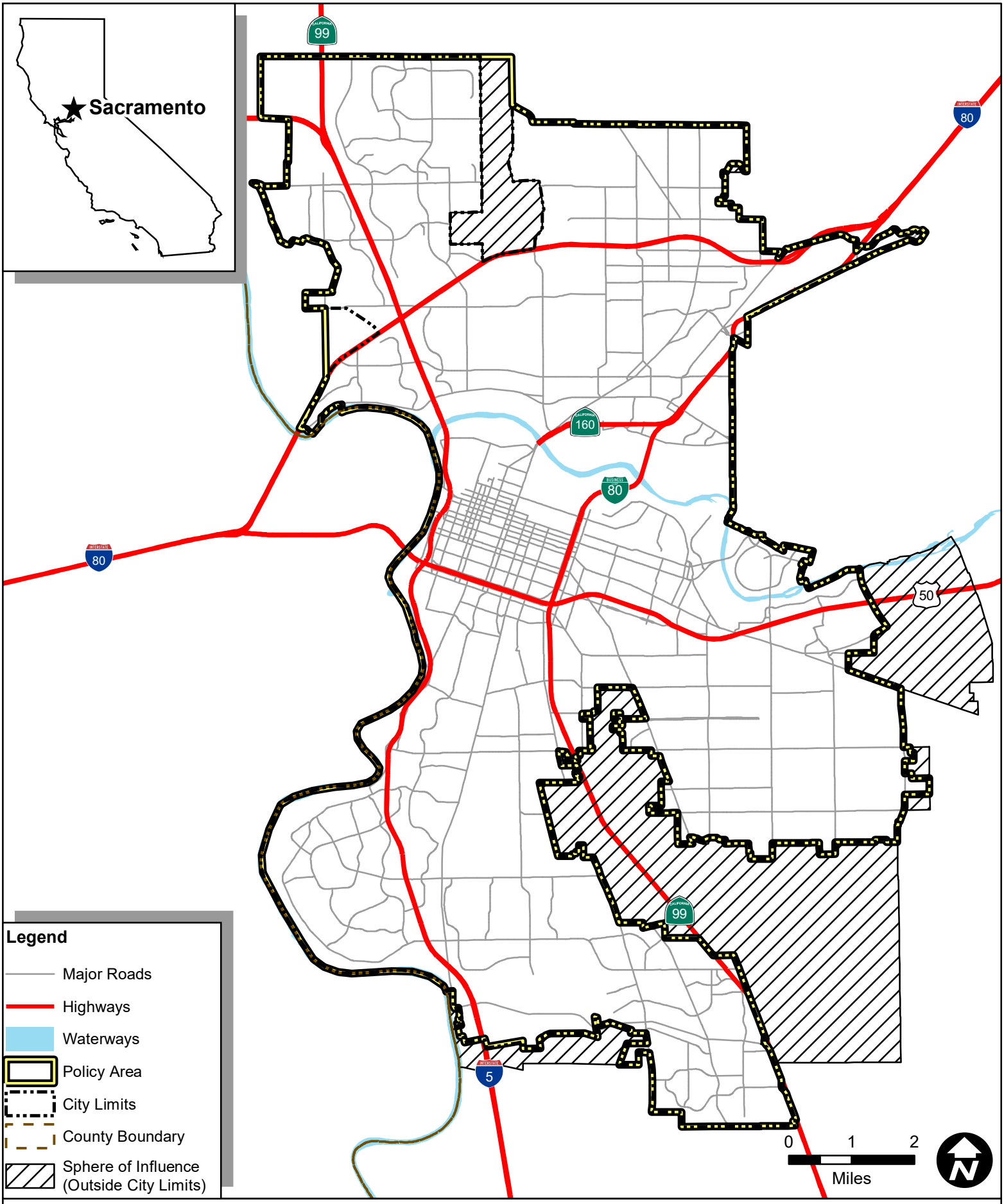

Exhibit 1

City of Sacramento General Plan Policy Area (Project Location)

Appendix A

January 2019 Notice of Preparation Comments

Sacramento Area
Council of
Governments

1415 L Street,
Suite 300
Sacramento, CA
95814

tel: 916.321.9000
fax: 916.321.9551
tdd: 916.321.9550
www.sacog.org

February 28, 2019

Mr. Scott R. Johnson
Senior Planner
City of Sacramento Community Development Dept.
300 Richard Blvd, 3rd Floor
Sacramento, CA 95811-0218

Re: Comments on the City of Sacramento 2040 General Plan Update

Dear Mr. Johnson:

Thank you for notifying the Sacramento Area Council of Governments (SACOG) that the City of Sacramento is initiating preparation of a Master Environmental Impact Report (MEIR) regarding a proposed 2040 General Plan Update and Climate Action Plan. Among SACOG's roles is to serve as the Airport Land Use Commission (ALUC) for Sacramento County. In this capacity, SACOG has adopted airport land use compatibility plans (ALUCPs) for four (4) airports that are located within or bordering the City of Sacramento and which have influence areas extending into the city limits. These airports include the following: Mather Field, Executive Airport. Sacramento International Airport, and McClellan Field. While the ALUC does not have a formal responsibility with respect to review or approval of California Environmental Quality Act (CEQA) documents, I am writing to note issues that the MEIR must address concerning the relationship between the proposed city plans and these ALUCPs for the respective airports.

CEQA Appendix G, Environmental Checklist Form, contains two questions pertinent to this topic that the MEIR must discuss. Under the topic of hazards and hazardous materials, Item VIII(e) states: "For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?" Similarly, under the noise heading, Item XII(e) states: "For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?" As the proposed city plans will have citywide applicability, these two questions must be addressed with respect to the ALUCP for each of the four airports referenced above. The compatibility criteria contained in the respective ALUCP's should serve as the basis for this analysis.

The MEIR should also acknowledge that Public Utilities Code Section 21676(b) requires that, "Prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission pursuant to Section 21675, the local agency shall first refer the proposed action to the commission." The timing of this referral is up to the city, the only requirement being that it must occur prior to the plans' adoption by the City Council. If the documents are in final draft form, they can be referred to the ALUC for a consistency determination at this time. However, if, as a result of the CEQA process, revisions are made that could affect the plans' consistency with the ALUCP criteria, then a subsequent ALUC review will be required. I will be happy to discuss these options with you further at your convenience.

If you have any further questions, please feel free to contact me at (916) 340-6227.

Sincerely,

Gregory R. Chew
Senior Planner
SACOG/Airport Land Use Commission

DEPARTMENT OF TRANSPORTATION
DISTRICT 3
703 B STREET
MARYSVILLE, CA 95901
PHONE (530) 634-7616
FAX (530) 741-4111
TTY 711
www.dot.ca.gov/dist3

Making Conservation a California Way of Life.

March 19, 2019

GTS# 03-SAC-2019-00381

Scott Johnson
Senior Planner
City of Sacramento
Community Development Department
300 Richards Blvd., 3rd Floor
Sacramento, CA 95811

Notice of Preparation (NOP) – City of Sacramento 2040 General Plan Update & Climate Action Plan

Dear Mr. Johnson:

Caltrans rescinds the comment letter dated March 7, 2019, regarding the NOP for the City of Sacramento 2040 General Plan Update & Climate Action Plan. This comment letter supersedes the comment letter dated March 7, 2019.

Thank you for including California Department of Transportation (Caltrans) in the application review for the project referenced above. Caltrans' new mission, vision, and goals signal a modernization of our approach to California's transportation system. We review this local development for impacts to the State Highway System (SHS) in keeping with our mission, vision and goals for sustainability/livability/economy, and safety/heath. We provide these comments consistent with the state's mobility goals that support a vibrant economy and build communities.

The City of Sacramento (City) has issued a NOP of a Master Environmental Impact Report (MEIR) to evaluate changes in the physical environment that could occur because of adoption of the proposed 2040 General Plan Update and Climate Action Plan, which includes a focused update of the City's 2035 General Plan and development of a standalone Climate Action Plan. The MEIR is being prepared by the City in compliance with the California Environmental Quality Act (CEQA). Under CEQA, upon deciding to prepare a MEIR, the City, as lead agency, is required to issue a NOP. Based on the information provided, Caltrans provides the following comments:

General Comments

It is suggested that the 2040 General Plan make clear that early coordination with Caltrans is required for any project proposal that would entail any ongoing ingress or egress; or work within, over, under, or adjacent to public transportation rights of way (for example: driveways; striping; shoulder enhancement; cut and fill sloping; drainage changes; debris removal; utility installations and maintenance; sound walls; fencing; signage; lighting; vegetation alteration; sidewalks; transit pullouts or shelters; traffic management during events; use of cranes, etc.) that might require an encroachment permit, airspace lease, traffic management plan, or outdoor advertising permit to mitigate direct physical impacts. As a rule of thumb, in accordance with most local jurisdiction land use development permit requirements, Caltrans should be notified of all proposals that will entail construction or facilities on parcels with boundaries that occur within 300 feet of State right of way.

As part of the circulation network, improvements to the SHS and the operation of the SHS are a shared responsibility between the City of Sacramento and Caltrans. This should be reflected in a policy statement.

Traffic Operations/Forecasting

Caltrans supports vehicle miles traveled (VMT) reduction and notes the 2040 General Plan MEIR will address SB 743. Regulatory changes to the CEQA Guidelines that implement SB 743 were approved on December 28, 2018. July 1, 2020 is the statewide implementation date and agencies may opt-in use of new metrics prior to that date. We suggest that the 2040 General Plan include a VMT based transportation analysis that assesses impacts and mitigates with transportation demand management, multimodal, and operational efficiency projects. Governor's Office of Planning and Research released a December 2018 Technical Advisory that contains recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures.

Caltrans is interested in where and how the General Plan's growth and travel may affect the SHS operationally. We'd like to meet with the city to discuss the VMT analysis and CEQA metric that will be used in the transportation section. We request the following analysis as information on how growth will affect the SHS:

- A freeway and SHS performance analysis that includes existing traffic volumes and future cumulative traffic volumes; trips generated; a merge/diverge analysis; and queue length.
- Analysis should be based upon A.M. and P.M. peak hour volumes. The analysis should include individual, not averaged, level of service and traffic volumes.

CEQA Streamlining

As part of SB 375, a streamlined process for CEQA review was established for certain types of developments. The Sacramento Area Council of Governments (SACOG) contained many of these policies in the Metropolitan Transportation Plan/Sustainable communities Strategy (MTP/SCS).

Since some streamlining provisions would essentially exempt project level analysis of impacts to the SHS, potential direct and cumulative SHS impacts should be analyzed and mitigated by the 2040 General Plan and associated documents. Caltrans has a common interest with the City to see that SHS safety impacts and other operation deficiencies are addressed to preserve mobility to, from, and within the City. By addressing impacts at the General Plan level, Caltrans and the City can ensure that those impacts are mitigated or avoided, while also providing streamlining benefits at the project level. Caltrans requests that coordination occur with the City on identifying impacts and determining appropriate mitigation measures, focusing on those which do not increase VMT.

Hydraulics

Any net increase to the current 100-year storm event peak discharge may impact drainage facilities within Caltrans right of way and/or Caltrans drainage facilities because of the 2040 general plan update and Climate Action Plan for the City. Any cumulative impacts to Caltrans drainage facilities arising from effects of the 2040 General Plan update and Climate Action Plan for the City on surface water runoff discharge from the 100-year storm event should be minimized through project drainage mitigation measures.

I-5 Subregional Corridor Mitigation Program (SCMP)

It is recommended the 2040 General Plan make a reference to the SCMP as a voluntary impact fee program for new developments within the Interstate 5 (I-5), SR 99, SR 51, and US Route 50 (US 50) corridors between the cities of Elk Grove, Sacramento, and West Sacramento. The SCMP was developed with each city in collaboration with Caltrans for promoting smart growth, reducing daily congested VMT and delay on the SHS, and reduce daily VMT on the regional transportation system through funding an array of projects that includes all modes.

Please provide our office with copies of any further actions regarding this project. We would appreciate the opportunity to review and comment on any changes related to this development.

If you have any questions regarding these comments or require additional information, please contact Uzma Rehman, Intergovernmental Review Coordinator for the City of Sacramento, by phone (530) 741-5173 or via email to uzma.rehman@dot.ca.gov.

Sincerely,

Alex Fong, Branch Chief
Office of Transportation Planning
Regional Planning Branch – South

CALIFORNIA
Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

19 February 2019

Scott Johnson
City of Sacramento
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218

CERTIFIED MAIL
7018 1830 0001 0062 4166

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, CITY OF SACRAMENTO 2040 GENERAL PLAN UPDATE AND CLIMATE ACTION PLAN PROJECT, SCH#2019012048, SACRAMENTO COUNTY

Pursuant to the State Clearinghouse's 28 January 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the City of Sacramento 2040 General Plan Update and Climate Action Plan Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan

amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

> *Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*
>
> *This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to

restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]
The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

For more information on the Water Quality Certification, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/ or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100**. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently $1,277 + $8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order.

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.

Jordan Hensley
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

DELTA PROTECTION COMMISSION
2101 Stone Blvd., Suite 240
West Sacramento, CA 95691
(916) 375-4800 / FAX (916) 376-3962
www.delta.ca.gov

March 6, 2019

Scott Johnson
City of Sacramento
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218

Re: Notice of Preparation of a Draft Environmental Impact Report for City of Sacramento 2040 General Plan Update and Climate Action Plan (SCH# 2019012048)

Dear Mr. Johnson:

Thank you for providing the Delta Protection Commission (Commission) the opportunity to review the Notice of Preparation of a Draft Environmental Impact Report (EIR) for the City of Sacramento 2040 General Plan Update and Climate Action Plan (Project). The Project involves the update of the general plan to address significant emerging trends, recent state statutes, and new issues, and to update the status of implementation measures.

The Commission is a state agency charged with ensuring orderly, balanced conservation and development of Delta land resources and improved flood protection. Proposed local government projects within the Primary Zone of the Legal Delta must be consistent with the Commission's Land Use and Resource Management Plan (LURMP). Although the city of Sacramento is not located in the Primary Zone, we submit these comments under Public Resource Code Sections 29770(d) and 5852-5855 (The Great California Delta Trail Act). These sections state that the Commission may comment on projects in the Secondary Zone that impact the Primary Zone, and direct the Commission to develop and adopt a plan and implementation program for a continuous regional recreational corridor extending throughout the five Delta counties linking to the San Francisco Bay Trail and Sacramento River Trail.

We encourage the Project EIR to consider the LURMP and its policies when assessing the General Plan Update's consistency with applicable land use plans, policies, and regulations, particularly with respect to the unincorporated town of Freeport, and to discuss the Delta Trail in the recreation and transportation setting. The Commission is currently preparing the Great California Delta Trail Blueprint Report for Sacramento, San Joaquin, and Yolo counties and will be beginning work on the Delta Trail Master Plan.

Thank you for the opportunity to provide input. Please contact Blake Roberts, Senior Environmental Planner, at (916) 375-4237 for any questions regarding the comments provided.

Sincerely,

Erik Vink
Executive Director

cc: Don Nottoli, Sacramento County Board of Supervisors and Commission Vice-Chair

DELTA STEWARDSHIP COUNCIL
A California State Agency

980 NINTH STREET, SUITE 1500
SACRAMENTO, CALIFORNIA 95814
HTTP://DELTACOUNCIL.CA.GOV
(916) 445-5511

February 28, 2019

Scott Johnson, Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218

Email: SRJohnson@cityofsacramento.org

RE: Comments on Notice of Preparation (NOP) of a Master Environmental Impact Report (MEIR) for the City of Sacramento 2040 General Plan Update and Climate Action Plan, SCH #2019012048

Dear Mr. Johnson:

Thank you for the opportunity to comment on the City of Sacramento 2040 General Plan Update and Climate Action Plan Notice of Preparation (NOP) of a Master Environmental Impact Report (MEIR). The Delta Stewardship Council (Council) recognizes the City of Sacramento's (City's) objectives to determine the extent and types of development needed to achieve the community's vision for physical, economic, social, and environmental goals.

The Council is an independent State of California agency established by the Sacramento-San Joaquin Delta Reform Act of 2009 (SBX7 1; Delta Reform Act). As stated in the Delta Reform Act, the State has coequal goals for the Delta: providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place (Water Code §85054). The Council is charged with furthering California's coequal goals for the Delta through the adoption and implementation of the Delta Plan, regulatory portions of which became effective on September 1, 2013.

Covered Action Determination and Certification of Consistency with the Delta Plan

Through the Delta Reform Act, the Council was granted specific regulatory and appellate authority over certain actions that take place in whole or in part in the Delta and Suisun Marsh, which are referred to as "covered actions". The Council exercises that authority through development and implementation of the Delta Plan. **State and local agencies are required to demonstrate consistency with 14 regulatory policies identified in the Delta Plan when carrying out, approving, or funding a covered action.**

Based on the project description and exhibits in the NOP, the proposed City of Sacramento 2040 General Plan Update and Climate Action Plan may meet the definition of a covered action. Portions of the project location, specifically the Pocket community within the General Plan Policy Area and the town of Freeport in the City's Sphere of Influence, fall within the boundaries of the Legal Delta (Water Code section 12220).

According to the Delta Reform Act, it is the State or local agency approving, funding, or carrying out the project that ultimately must determine if that project is a covered action and, if so, file a Certification of Consistency with the Delta Plan (Water Code section 85225) prior to project implementation. As the City proceeds with planning and environmental impact analysis, we invite you to engage Council staff in early consultation to discuss General Plan policies and programs, Climate Action Plan measures, and MEIR mitigation measures that would enable consistency with the Delta Plan. More information on covered actions, early consultation, and the certification process can be found on the Council website at http://deltacouncil.ca.gov/covered-actions.

Comments Regarding Delta Plan Policies and Potential Consistency Certification

The following section describes regulatory Delta Plan policies that may apply to the proposed project based on the NOP. This information is offered to assist the City to prepare environmental documents that can be used to support the project's eventual Certification of Consistency. This information may also assist the City to describe the relationship between the proposed project and the Delta Plan in the MEIR.

General Policy 1: Detailed Findings to Establish Consistency with the Delta Plan

Delta Plan Policy **G P1** (23 CCR section 5002) specifies what must be addressed in a Certification of Consistency by a proponent of a project that is a covered action. The following is a subset of these requirements relevant to the General Plan Update and Climate Action Plan. A covered action must fulfill these requirements to demonstrate consistency with the Delta Plan:

Mitigation Measures

Delta Plan Policy **G P1** (23 CCR section 5002(b)(2)) requires that actions not exempt from the California Environmental Quality Act (CEQA) and subject to Delta Plan regulations must include applicable feasible mitigation measures consistent with those

identified in the Delta Plan Program EIR or substitute mitigation measures that are equally or more effective. Mitigation measures in the Delta Plan's Mitigation Monitoring and Reporting Program (Delta Plan MMRP) are available at: http://deltacouncil.ca.gov/sites/default/files/documents/files/Agenda%20Item%206a_attach%202.pdf

The NOP identifies 28 resource areas in which the General Plan Update and Climate Action Plan could result in potentially significant environmental impacts that may require mitigation. Council staff recommends that the City review the mitigation measures in the Delta Plan MMRP for each of these resource areas. If the Draft MEIR identifies significant impacts that require mitigation, Council staff recommends that the City apply the mitigation measures identified in the Delta Plan MMRP, when applicable and feasible.

Best Available Science

Delta Plan Policy **G P1** (23 CCR section 5002(b)(3)) states that actions subject to Delta Plan regulations must document use of best available science as relevant to the purpose and nature of the project. The regulatory definition of "best available science" is provided in Appendix 1A of the Delta Plan (http://deltacouncil.ca.gov/sites/default/files/2015/09/Appendix%201A.pdf).

Best available science is defined in the Delta Plan as the best scientific information and data for informing management and policy decisions. Six criteria are used to define best available science: relevance, inclusiveness, objectivity, transparency and openness, timeliness, and peer review. (23 CCR section 5001(f)). This policy generally requires that the process used by the City to analyze project alternatives, impacts, and mitigation measures for the General Plan Update and Climate Action Plan be clearly documented in the MEIR and supporting record, and effectively communicated to foster improved understanding and decision making.

Delta as Place Policy 1: Locate New Urban Development Wisely

Delta Plan Policy **DP P1** (23 CCR section 5010) places certain limits on new development within the Delta. As it relates to General Plan Update and Climate Action Plan, Policy DP P1 states that new residential, commercial, or industrial development must be limited to areas that city or county general plans as of the date of the Delta Plan's adoption (May 2013) designate for residential, commercial, and industrial development in cities or their spheres of influence. This policy is intended to strengthen existing Delta communities while protecting farmland and open space, providing land for ecosystem restoration needs, and reducing flood risk.

Please analyze the extent to which implementation of the General Plan Update and Climate Action Plan would result in land use changes within portions of the City and Sphere of Influence located within the Delta relative to designations that were in place in May 2013 within the Land Use section of the MEIR as well as in the growth inducement discussion. The Council seeks to ensure that these updated plans would continue to avoid the potential to induce new

residential, commercial, or industrial development that would be inconsistent with Policy DP P1 in the Delta.

Risk Reduction Policy RR P1: Prioritization of State Investments
Delta Plan Policy **RR P1** (23 CCR section 5012) requires that discretionary State investments in Delta flood risk management be prioritized to address emergency preparedness, response, and recovery. On April 26 2018, the Council adopted amendments to Policy RR P1 which identified a set of islands or tracts that are a very high priority for state investments, two of which fall within the City of Sacramento. (http://deltacouncil.ca.gov/docs/delta-plan/delta-plan-amended-chapter-7-reduce-risk-people-property-and-state-interests-delta). These are Maintenance Area 9 North and Maintenance Area 9 South, which are located next to the Pocket community and near the town of Freeport. To implement the change to Policy RR P1, the Council is currently conducting rulemaking under the Administrative Procedure Act to amend 23 CCR section 5012. State funds awarded to reclamation districts for Delta levee improvements are linked to the benefits provided by the improvements.

To demonstrate consistency with Policy RR P1, the City's updated Safety Element and the updated Pocket area Community Plan should identify goals, strategies, measures, policies, or objectives that reflect the resources and risks identified in these areas.

Closing Comments

We invite the City to engage with Council staff in early consultation to collaborate and discuss potential General Plan policies and programs, Climate Action Plan measures, and MEIR mitigation measures as the planning and environmental impact analysis processes proceed prior to submittal of a Certification of Consistency. Please contact Kate Anderson at (916) 445-5028 (Kate.Anderson@deltacouncil.ca.gov) with any questions.

Sincerely,

Jeff Henderson, AICP
Deputy Executive Officer
Delta Stewardship Council

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

February 12, 2019

Scott Johnson
City of Sacramento
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811-0218

RE: SCH# 2019012048 City of Sacramento 2040 General Plan Update and Climate Action Plan, Sacramento County

Dear Mr. Johnson:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
   a. A brief description of the project.
   b. The lead agency contact information.
   c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
   d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
   a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
   a. Alternatives to the project.
   b. Recommended mitigation measures.
   c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
   a. Type of environmental review necessary.
   b. Significance of the tribal cultural resources.
   c. Significance of the project's impacts on tribal cultural resources.
   d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
   a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
   b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
    a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
    b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
        i. Planning and construction to avoid the resources and protect the cultural and natural context.
        ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
        i. Protecting the cultural character and integrity of the resource.
        ii. Protecting the traditional use of the resource.
        iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
    a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
    b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
    c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:

Sharaya.Souza@nahc.ca.gov.

Sincerely,

for Sharaya Souza
Staff Services Analyst

cc: State Clearinghouse

Natomas Unified School District
Connecting students to their future

February 28, 2019

Scott Johnson, Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218

Dear Mr. Johnson:

Thank you very much for providing notice of the forthcoming General Plan update and Master Environmental Impact Report (MEIR).

As you know, the Natomas Unified School District operates schools within the City's Planning Area. During the planning horizon for this General Plan update, the District anticipates both new construction and improvements to existing schools. Obviously, the District's planning for school services is dependent on the nature, location, and extent of residential development within the city. For this reason, the District would like to partner with the City throughout this process.

We understand that this is the initial noticing of the City's work on the General Plan update, and that you are inviting input on the scope of analysis for the Master EIR. Although not mentioned in the City's Notice of Preparation (NOP), it is also important at this stage for the City to get input on potential mitigation measures that could address adverse environmental effects, as well as alternatives that could reduce potential effects. The District would be interested in meeting with City staff at the appropriate time to discuss mitigating policies and programs that could be a part of an updated General Plan.

The NOP notes that the General Plan will need to account for updated growth projections, but does not mention whether the Planning Area would be expanded to accommodate growth projections. We understand that it is likely premature to identify whether the Planning Area would be expanded as a part of this General Plan update, but the District is strongly interested in this topic, since this will affect our master planning. A previous version of the North Natomas Community Plan identified the need for a school site west of Interstate 5, but did not locate this site on a map. Looking forward, there may be the need for a school within this Community Plan Area, and the District would like to work with the City to ensure that adequate sites can be provided. Depending on the location and amount of future residential development, the District may have a need for school sites elsewhere, as well.

With respect to the Project Description for the Master EIR, the District would be interested in discussing with City staff whether it would be possible for school projects to be included. While the District will continue to serve as the CEQA lead agency for school projects, there may be mutual advantages in reviewing land use change within the City's Planning Area and District improvement projects in a holistic fashion.

Relative to the scope of analysis, the Master EIR should study impacts of residential development on school services and facilities, as well as impacts that can be caused when there are insufficient school sites in close proximity to students' homes. Such impacts may include greenhouse gas emissions, air quality effects, transportation noise impacts, and other impacts related to students not being able to safely and conveniently walk or bike to school, as well as parents driving

relatively longer distances to get students to school. The City should consider policies and programs to help ensure that land is set aside in growing areas of the City for school sites in order to prevent against such impacts. This would include policies and programs that address challenges associated with planning and phasing school facilities and residential development in the face of turbulence associated with business cycles occurring between present and the City's planning horizon.

In addition to considering policies and programs to mitigate impacts to school services and facilities, the District would invite a discussion of proactive programs that could have mutual environmental and other benefits. This could include, but would not be limited to partnering on Safe Routes to Schools projects, other projects that enhance safe, non-vehicular transportation options for students and staff, renewable energy projects, and environmental education programs and facilities.

The District looks forward to coordinating with the City throughout this important planning process.

Sincerely,

Lalanya Rothenberger

Lalanya Rothenberger
Executive Director
Facilities and Strategic Planning

REGIONALSAN
TAKING THE WASTE OUT OF WATER
Sacramento Regional County Sanitation District

Main Office
10060 Goethe Road
Sacramento, CA 95827-3553
Tel: 916.876.6000
Fax: 916.876.6160

Treatment Plant
8521 Laguna Station Road
Elk Grove, CA 95758-9550
Tel: 916.875.9000
Fax: 916.875.9068

www.regionalsan.com

February 15, 2019

Mr. Scott Johnson
City of Sacramento, Community Development Department
300 Richards Boulevard, Third Floor
Sacramento, CA 95811

Subject: Notice of Preparation (NOP) for a Master Environmental Impact Report (MEIR) for the City of Sacramento 2040 General Plan Update and Climate Action Plan

Dear Mr. Johnson,

The Sacramento Regional County Sanitation District (Regional San) and the Sacramento Area Sewer District (SASD) have the following comments regarding the Notice of Preparation (NOP) for a Master Environmental Impact Report (MEIR) for the City of Sacramento 2040 General Plan Update and Climate Action Plan:

Portions of the areas identified within the City of Sacramento's General Plan will receive sewer service from SASD. The most current SASD planning document, the 2010 System Capacity Plan Update (SCP) was approved by the SASD Board of Directors in January 2012. The SCP can be found on the SASD website at https://www.sacsewer.com/standards-specifications. Sewer studies, including points of connection and phasing information will need to be completed to fully assess the impacts of any project that has the potential to increase existing or future flow demands.

For the areas where the City of Sacramento's local sewer collection system provides service, conveyance to the Sacramento Regional Wastewater Treatment Plant (SRWTP) for treatment and disposal will be provided via Sump 2/2A and the Regional San City Interceptor system. Cumulative impacts of the proposed project will need to be quantified by the project proponents to ensure wet and dry weather capacity limitations within Sump 2/2A and the City Interceptor system are not exceeded.

On March 13, 2013, Regional San approved the Wastewater Operating Agreement between the Sacramento Regional County Sanitation District and the City of Sacramento. The following flow limitations are outlined in this agreement:

Service Area	Flow Rate (MGD)
Combined Flows from Sump 2 and Sump 2A	60
Combined flows from Sumps 2, 2A, 21, 55, and 119	98
Total to City Interceptor of combined flows from Sumps 2, 2A, 21, 55, 119, and five trunk connections	108.5

Customers receiving service from Regional San and SASD are responsible for rates and fees outlined within the latest Regional San and SASD ordinances. Fees for connecting to the sewer system are set up to recover the capital investment of sewer and treatment facilities that serve new customers. The Regional San ordinance is located on their website at https://www.regionalsan.com/ordinance, and the SASD ordinance is located on the SASD website at https://www.sacsewer.com/sewer-ordinance.

Regional San and SASD are not land-use authorities. Projects identified within Regional San and SASD planning documents are based on growth projections identified by land-use authorities. Onsite and offsite impacts associated with constructing sanitary sewers facilities to provide service must be included in subsequent environmental impact reports.

The SRWTP provides secondary treatment using an activated sludge process. Incoming wastewater flows through mechanical bar screens through a primary sedimentation process. This allows most of the heavy organic solids to settle to the bottom of the tanks. These solids are later delivered to the digesters. Next, oxygen is added to the wastewater to grow naturally occurring microscopic organisms, which consume the organic particles in the wastewater. These organisms eventually settle on the bottom of the secondary clarifiers. Clean water pours off the top of these clarifiers and is chlorinated, removing any pathogens or other harmful organisms that may still exist. Chlorine disinfection occurs while the wastewater travels through a two-mile "outfall" pipeline to the Sacramento River, near the town of Freeport, California. Before entering the river, sulfur dioxide is added to neutralize the chlorine. The design of the SRWTP and collection system was balanced to have SRWTP facilities accommodate some of the wet weather flows while minimizing idle SRWTP facilities during dry weather. The SRWTP was designed to accommodate some wet weather flows while the storage basins and interceptors were designed to accommodate the remaining wet weather flows.

A NPDES Discharge Permit was issued to Regional San by the Central Valley Regional Water Quality Control Board (Water Board) in December 2010. In adopting the new Discharge Permit, the Water Board required Regional San to meet significantly more restrictive treatment levels over its current levels for ammonia, nitrate, and pathogens. The new treatment facilities for achieving the permit requirements must be completed by May 2021 for ammonia and nitrate and May 2023 for the pathogen requirements. In April 2016 the Water Board adopted a new NPDES Discharge Permit that continued the more restrictive treatment levels and deadlines for new treatment facilities for ammonia, nitrate, and pathogens.

Regional San currently owns and operates a 5-mgd Water Reclamation that has been producing and providing Title 22 tertiary recycled water since 2003 to select areas within the SRWTP property and the City of Elk Grove. The recycled water used in the City of Elk Grove is wholesaled by Regional San to the Sacramento County Water Agency (SCWA). SCWA retails the recycled water, primarily for landscape irrigation use, to recycled water customers in the City of Elk Grove. Although Regional San has evaluated at a high level the feasibility of using recycled water in the Mather area, Regional San currently does not have any planned facilities that could provide recycled water to the proposed project or its vicinity. Additionally, Regional San is not a water purveyor and any potential use of recycled water in the project area must be coordinated between the key stakeholders, e.g. land use jurisdictions, water purveyors, users, and the recycled water producers.

If you have any questions regarding these comments, please contact me at 916-876-4002.

Sincerely,

Anne Tran, P.E.
Regional San/SASD
Policy and Planning

Cc: Regional San Development Services, SASD Development Services, Michael Meyer, and Dave Ocenosak

Department of Transportation
Ron E. Vicari, Director

Divisions
Administration
Engineering & Planning
Maintenance & Operations

County of Sacramento

February 5, 2019

Mr. Scott Johnson
Senior Planner
City of Sacramento, Community Development Department
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811

SUBJECT: COMMENTS ON THE NOTICE OF PREPARATION (NOP) OF A MASTER ENVIRONMENTAL IMPACT REPORT (MEIR) AND SCOPING MEETING FOR THE 2040 GENERAL PLAN UPDATE AND CLIMATE ACTION PLAN.

Dear Mr. Johnson:

The Sacramento County Department of Transportation (SACDOT) has had a chance to review the NOP for this General Plan Update. Thank you for the opportunity to review. We have the following comments:

- We would request that you please forward a copy of the MEIR when complete for review.

- Please be consistent with the latest version of Sacramento County's General Plan when analyzing transportation facilities.

Should you have any questions, please feel free to contact me at (916) 874-7052.

Sincerely,

Matthew G. Darrow, PE, TE, PTOE
Senior Transportation Engineer
Department of Transportation.

MGD:mp

c: Dan Shoeman - DOT
Rick Carter – DOT

Regional Transit

Sacramento Regional Transit District
A Public Transit Agency
and Equal Opportunity Employer

Administrative Offices
1400 29th Street
Sacramento, CA 95816
916-321-2800

Mailing Address
P.O. Box 2110
Sacramento, CA 95812-2110

Human Resources
2810 O Street
Sacramento, CA 95816
916-556-0299

Customer Service & Sales Center
1225 R Street
Sacramento, CA 95811

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916-321-BUSS (2877)
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www.sacrt.com

Public Transit Since 1973

February 28, 2019

Mr. Scott Johnson
Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218

Dear Mr. Johnson,

Thank you for the opportunity to comment on the scope of analysis for the Master Environmental Impact Report (MEIR) for the 2040 General Plan Update and Climate Action Plan. Sacramento Regional Transit District (SacRT) is very supportive of the City's vision to address significant emerging trends and new issues within the project area, primarily ones that plan to reduce greenhouse gas emissions (GHG), as well identify Transit Oriented Development (TOD) policies.

SacRT is pleased to see the complete list of major issues identified for the scope of the MEIR, specifically the 'Transportation and Circulation' and 'Land Use & Planning' components. We believe that the City and SacRT share common goals, and can work together to improve the region with cleaner opportunities.

SacRT looks forward to working with the City on its efforts to update the 2040 General Plan and Climate Action Plan.

Sincerely,

Sarah Poe
Assistant Planner

James Boyle, Director, Planning, SacRT

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

February 28, 2019

SENT VIA E-MAIL ONLY

Scott Johnson, Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218

RE: Notice of Preparation of a Master Environmental Impact Report for the 2040 General Plan Update and Climate Action Plan

Dear Mr. Johnson:

Thank you for providing the Notice of Preparation of a Master Environmental Impact Report (MEIR) for the 2040 General Plan Update and Climate Action Plan to the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District) for review. The City of Sacramento ("City") is the lead agency for preparation of a MEIR to evaluate changes in the physical environment that could occur as a result of adoption of the proposed City of Sacramento 2040 General Plan Update and Climate Action Plan, which includes a focused update of the City's 2035 General Plan and development of a standalone Climate Action Plan. The Sac Metro Air District reviews and provides comments through the lead agency planning, environmental and entitlement processes with the goal of reducing adverse air quality impacts and ensuring compliance with the California Environmental Quality Act. Sac Metro Air District staff comments follow.

Consistency with Existing Plans

Evaluate the GPU's consistency with existing plans, especially those that reduce criteria air pollutants and greenhouse gases. Such plans include, but are not limited to, the Metropolitan Transportation Plan/Sustainable Communities Strategy, the California Air Resources Board's Climate Change Scoping Plan, the City's Bicycle and Pedestrian Master Plans, the City's Electric Vehicle Strategy, the final report and recommendations from the Mayors' Commission on Climate Change (in progress and likely to be completed by end of 2019), and the City's Urban Forest Master Plan (in progress and likely to be completed by end of 2019).

Air Quality Impacts

The NOP states that the impacts of the plan on air quality and greenhouse gas emissions will be analyzed. Please examine the types and levels of emissions generated by the project, the existing air quality conditions, and neighboring land uses. Analyze the impact of the GPU on emissions of particulate matter, ozone precursors, nitrogen oxides (NOx), and reactive organic gases (ROG). All phases of the project planning, construction and operation, as well as cumulative impacts on, should be studied. Please see our CEQA Guidance, which provides direction on analyzing topics such as emissions of particulate matter, ozone precursors, nitrogen oxides (NOx) and reactive organic gases (ROG). Included are thresholds of significance for particulate matter and other criteria pollutants.

Analyze the impact of proposed new land use developments and roadway construction on the urban heat island effect, as well as the alternative scenarios of deploying cool roofs and cool pavements on the urban heat island effect. Evaluate the impact of policies to update Public Works subdivision standards and street standards, for example to require the use of cool pavements, on reducing urban heat island effect. The urban heat island effect contributes to increased air pollution by accelerating ozone formation and increasing the use of air-conditioning for cooling. The widespread use of cool roofs, tree shading, cool pavements, and other strategies can help to lower building energy use, cool ambient air temperatures, and protect public health, including for pedestrians and cyclists. In addition, shaded parking spaces help reduce emissions of volatile organic compounds – ozone precursors – from conventional, internal combustion engine vehicles by as much as 20 percent.

Climate Change

Analyze the impact of the GPU on emissions of greenhouse gases (GHGs). The analysis should include GHG emissions from energy, transportation, waste, wastewater, and water for the residential, commercial, industrial, and government operations sectors. Analysis of the GPU's impact on GHG emissions from the waste sector should reflect changes associated with AB 1826 and SB 1383, which aim to increase local organics recycling, as well as anticipated recycling changes due to China's National Sword policy,[1] which restricted the import of contaminated materials for recycling. Evaluate the loss of carbon sequestered through new development and growth planned on converted wild or agricultural lands.

Establish greenhouse gas (GHG) emissions targets that are consistent with the California 2017 Climate Change Scoping Plan's target of 40 percent below 1990 levels by 2030, the Mayors' Commission on Climate Change's target of net zero emissions by 2045, and the Under2 Memorandum of Understanding (Under2 MOU), which the City signed on to in 2016, committing to reduce GHG emissions to 2 metric tons per capita or 80 to 95 percent below 1990 levels by 2050. These targets are not conflicting, as the Mayors' Commission on Climate Change aims for *net* zero emissions by 2045, while the Under2 MOU focuses on total emissions. Consistency with the Mayors' Commission target will simplify and streamline planning efforts, and demonstrate committed, focused climate leadership on the part of the City. Moreover, the Mayors' Commission will be producing strategies, data, and recommendations that can be incorporated into the Climate Action Plan.

Analyze the impact of the GPU on tree canopy citywide, consider expanding the City's existing tree policies, and evaluate tree canopy as a climate adaption measure. The air quality benefits of shade trees include removing particulate matter from the atmosphere and reducing the urban heat island effect, which in turn lowers summertime temperatures, cools buildings, and reduces ozone formation. Tree shade in parking lots also cool individual parked cars and reduce their emissions of volatile organic compounds, an ozone precursor. Other benefits of tree canopy include reduced energy use, reduced storm water runoff, increased wildlife habitat, carbon sequestration, and improved property values. Greater neighborhood tree canopy has been correlated to improvement of overall human health,

[1] CalRecycle: https://www.calrecycle.ca.gov/markets/nationalsword

primarily healthier weight, social cohesion, and mental health.[2] Studies have correlated neighborhood tree shade to active transportation.[3]

Analyze the effect of the GPU on climate resilience and adaptation, considering climate impacts that the City of Sacramento will likely face in 2040 and 2050. More wintertime precipitation is likely to fall as rain rather than snow and earlier spring snowmelt in the Sierra Nevada mountains and could increase the risk of flooding on the American River. More intense atmospheric river storm events in the winter could deliver high volumes of rainfall within a short time frame, challenging local stormwater systems and creeks, bringing the risk of localized flooding. General Plan policies could help to mitigate flood risks with the incorporation of green infrastructure and "sponge city" design features to channel, absorb, and capture stormwater during intense rainfall events. In addition, new growth could be sited out of areas of high flood risk. Also, more frequent and longer-lasting wildfires may trigger air alerts and cause extended periods of extremely poor air quality. Analyze the impact of fires on air quality.

The increased incidence of extreme heat and heat waves will be another challenge for the City of Sacramento, as the City is projected to experience, on average, 40 days over 100F and six heat waves annually by 2040 to 2060. The average length of a heat wave will also more than double, from 4 days to 11. General Plan policies could exacerbate heat by amplifying heat island effects, or could help to reduce the localized heat island effect and reduce resident heat exposure through the adoption of CalGreen Tier 1 or Tier 2 building codes, including cool roofs as a prescriptive measure, policies supportive of a healthy, climate-resilient, drought-tolerant tree canopy, promoting energy efficiency home upgrades, adopting cool and light-colored pavements, and accelerating the adoption of electric and fuel cell vehicles.

Other climate impacts to consider would include drought, due to smaller Sierra Nevada snowpacks and greater extremes of precipitation between wet and dry, severe wildfires that will generate local smoke and air quality challenges, and potential constraints on electricity generation and supply, due to potentially cascading factors such as reduced hydroelectric generation, summer peak demand, and transportation electrification.

Finally, climate adaptation and resilience should be considered with SB 1000 as a critical lens. Climate adaptation solutions should prioritize the needs and challenges of environmental justice and low-income communities, who will be the most vulnerable to climate impact such as extreme heat. Environmental justice communities may not be able to access or understand City-provided information, education, and resources, as well as warnings and alerts. Lack of financial capacity will limit communities' ability to evacuate as well as to recover. In addition, climate change impacts such as wildfires, sea level rise, and drought elsewhere in California or the United States may increase migration to the City of Sacramento and the greater metropolitan region.

Land Use and Planning

[2]Multiple health benefits of urban tree canopy: The mounting evidence for a green prescription, Health and Place , November 2016

[3] Green Prescription: The Link Between Urban Tree Canopy Cover & Health Behaviors and Outcomes, Greenprint Summit , January 2017

The City has invested in public infrastructure such as roads, sewer, and water lines which require regular maintenance and upkeep, whether the land adjacent or nearby it is utilized or not. These upkeep activities generate emissions of criteria pollutants and GHGs. Development on infill or vacant lands, intensification of existing uses, and redevelopment can maximize use of existing public infrastructure including roads, water, and sewer lines, and thereby reduce emissions of criteria pollutants and greenhouse gases. Analyze the plan's efficiency in utilization of public infrastructure by evaluating whether the unused capacity of existing infrastructure, such as existing neighborhoods, structures, and public infrastructure is fully utilized before investing in new infrastructure for growth outside of existing developed areas.

Transportation

Analyze vehicle miles traveled (VMT) and associated air quality impacts, including induced VMT, and any impacts that may result outside of City boundaries. Analysis should include VMT quantification and all associated model runs, and evaluate VMT against a threshold of significance. For guidance, we recommend referring to the California Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA (Dec. 2018).

Analyze how the GPU either supports or impacts transit-oriented development (TOD), and the associated benefits or impacts to air quality, multimodal transportation, and health from mixed-use TOD developments, commercial corridors, increased property values and sales taxes, and increased vitality of the urban core.

Analyze how the GPU supports or impacts locating affordable housing near transit stations. Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT. Analyze the impact of the GPU on housing affordability overall, considering the costs of both transportation and housing. Higher housing costs in California lead many people to move to more affordable options further away from job centers, and commute long distances to and from work.[4]

Analyze the impact of the GPU on transit use, walking and biking, and their associated health outcomes. This should include an analysis of any VMT increases identified. Locating more housing near transit, as well as existing development and job centers, can help to increase active transportation as people choose to walk, bike, or use transit for commuting, grocery trips, errands, entertainment, and other trips. This can result in improved health outcomes through decreasing obesity, diabetes, and other chronic illnesses, as well as improved air quality. As part of the analysis, consider increased heat as a barrier to active transportation and mitigation measures that the City can incorporate to encourage walking and biking.

Analyze the impacts or benefits of GPU parking policies and transportation pricing strategies such as VMT pricing and roadway tolling on air quality. Parking policies such as unbundling parking from rents, parking cash-out, eliminating minimum parking requirements, and strategic street meter programs can significantly reduce motor vehicle emissions, as can transportation pricing.

Analyze how GPU policies designed to support or impact the development of transportation network companies (TNC) will affect VMT throughout the City. TNCs have been

[4] While the cost of housing may be higher in existing urbanized areas accessible to transit, transportation costs are far lower.

demonstrated to increase congestion elsewhere in California, e.g. San Francisco, where they are responsible for as much as 50 percent of the growth in congestion between 2010 and 2016. Analyze how GPU policies may support alternative mobility modes, such as Bikeshare, that can replace trips with more sustainable modes.

Analyze a plan option that would minimize the need for motor vehicle use or ownership within the City of Sacramento. Research indicates that the people with the lowest VMT are those that don't own cars.

Whether adopting a threshold of significance, or evaluating transportation impacts on a case-by-case basis, the City should ensure that the analysis addresses:

- Direct, indirect and cumulative effects of the transportation project (CEQA Guidelines, § 15064, subds. (d), (h))
- Near-term and long-term effects of the transportation project (CEQA Guidelines, §§ 15063, subd. (a)(1), 15126.2, subd. (a))
- The transportation project's consistency with state greenhouse gas reduction goals (Pub. Resources Code, § 21099)34
- The impact of the transportation project on the development of multimodal transportation networks (Pub. Resources Code, § 21099)
- The impact of the transportation project on the development of a diversity of land uses (Pub. Resources Code, § 21099)

Overall
Ensure the environmental document is comprehensive enough to address potential impacts so that project level checklists can be applied to streamline development processes.

Thank you for your consideration of these comments. If you have any questions, please contact me at 916-874-4816 or tduarte@airquality.org.

Sincerely,

Teri Duarte

Teri Duarte, MPH
Planner/Analyst

Cc: Paul Philley, AICP, SMAQMD

SMUD®

Sent Via E-Mail

February 28, 2019

Scott Johnson
City of Sacramento
300 Richards Blvd., 3rd Floor
Sacramento, CA 95811
SRJohnson@cityofsacramento.org

Subject: 2040 General Plan Update and Climate Action Plan / Notice of Preparation

To Scott Johnson,

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Notice of Preparation (NOP) for the 2040 General Plan Update and Climate Action Plan. SMUD is the primary energy provider for Sacramento County and the proposed Project area. SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region. As a Responsible Agency, SMUD aims to ensure that the proposed Project limits the potential for significant environmental effects on SMUD facilities, employees, and customers.

It is our desire that the Project EIR will acknowledge any Project impacts related to the following:

- Overhead and or underground transmission and distribution line easements.
- Utility line routing
- Electrical load needs/requirements
- Energy Efficiency
- Climate Change
- Cumulative impacts related to the need for increased electrical delivery

Per the NOP, the project will include updating 10 community plans and revisions to the Land Use and Urban Design Element. SMUD will need the updated information to evaluate the impact to existing and/or future electrical facilities to support these areas with the exception of Central City which has already been reviewed based on the latest information made available to SMUD.

More specifically, SMUD would like to have the following details related to the electrical infrastructure for the Central City Plan Area incorporated into the project description:

Estimated Proposed Facilities for the Central City Plan Area Only[1]:

- SMUD will require a new 230 and/or 115/21 kV substation site in the approximate area shown on the attached exhibit. The area of need covers, approximately, from Interstate 5 to the west, Bercut Dr and Vine St to the north, Dos Rios St to the east and Railyards Blvd to the south. This substation is needed to support expected growth and align with the City of Sacramento's General Plan for the area through 2040.
- The needed size of this substation site is approximately five (5) to ten (10) acres.
- SMUD will require new 115 and/or 230 kV transmission routes to the finalized substation site. A likely route is shown on the attached exhibit, however, the exact extent, quantity and location of any proposed transmission routes will not be finalized until the substation site is determined.
- SMUD will likely require extensive underground 21 kV distribution circuit extensions and other distribution infrastructure in the area shown on the attached exhibit to support growth and align with the City of Sacramento's General Plan for the area through 2040. The majority of this construction will likely occur in the road right-of-way.
- SMUD may require additional infrastructure and facilities not explicitly stated here as needed depending on specific development demands and/or requirements.

General Note on Areas Not Explicitly Described Here:

- SMUD may require additional infrastructure and facilities, including and up to new substation sites and transmission line routes, in any area covered in the City of Sacramento's 2040 General Plan. Such facilities will be dependent on area capacity needs and specific development demands and/or requirements.

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable delivery of the proposed Project. Please ensure that the information included in this response is conveyed to the Project planners and the appropriate Project proponents.

Environmental leadership is a core value of SMUD and we look forward to collaborating with you on this Project. Again, we appreciate the opportunity to provide input on this NOP.

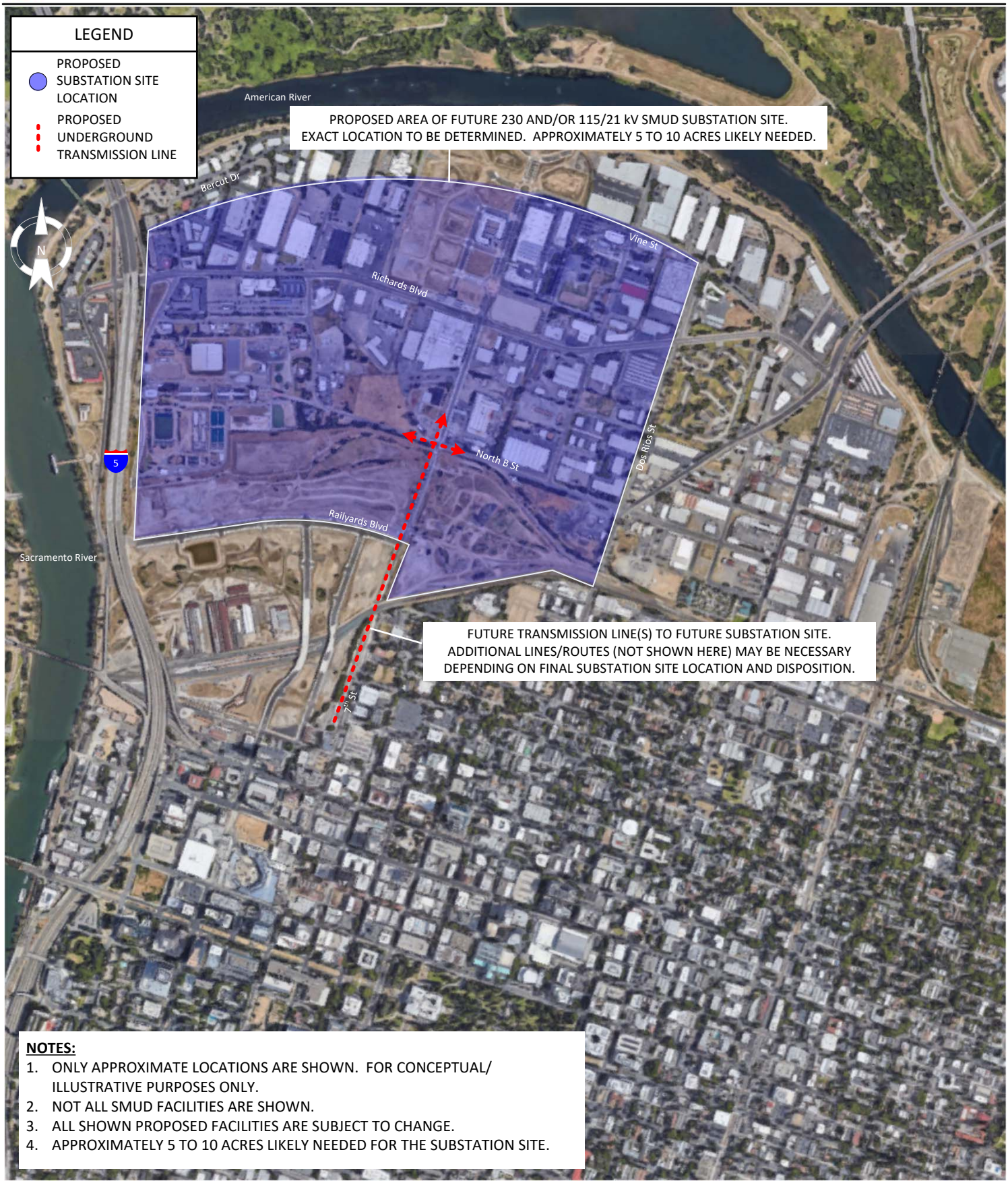
[1] The indicated estimated facilities are SUBJECT TO CHANGE.

If you have any questions regarding this letter, please contact SMUD's Environmental Management Specialist, Rob Ferrera, at rob.ferrera@smud.org or 916.732.6676.

Sincerely,

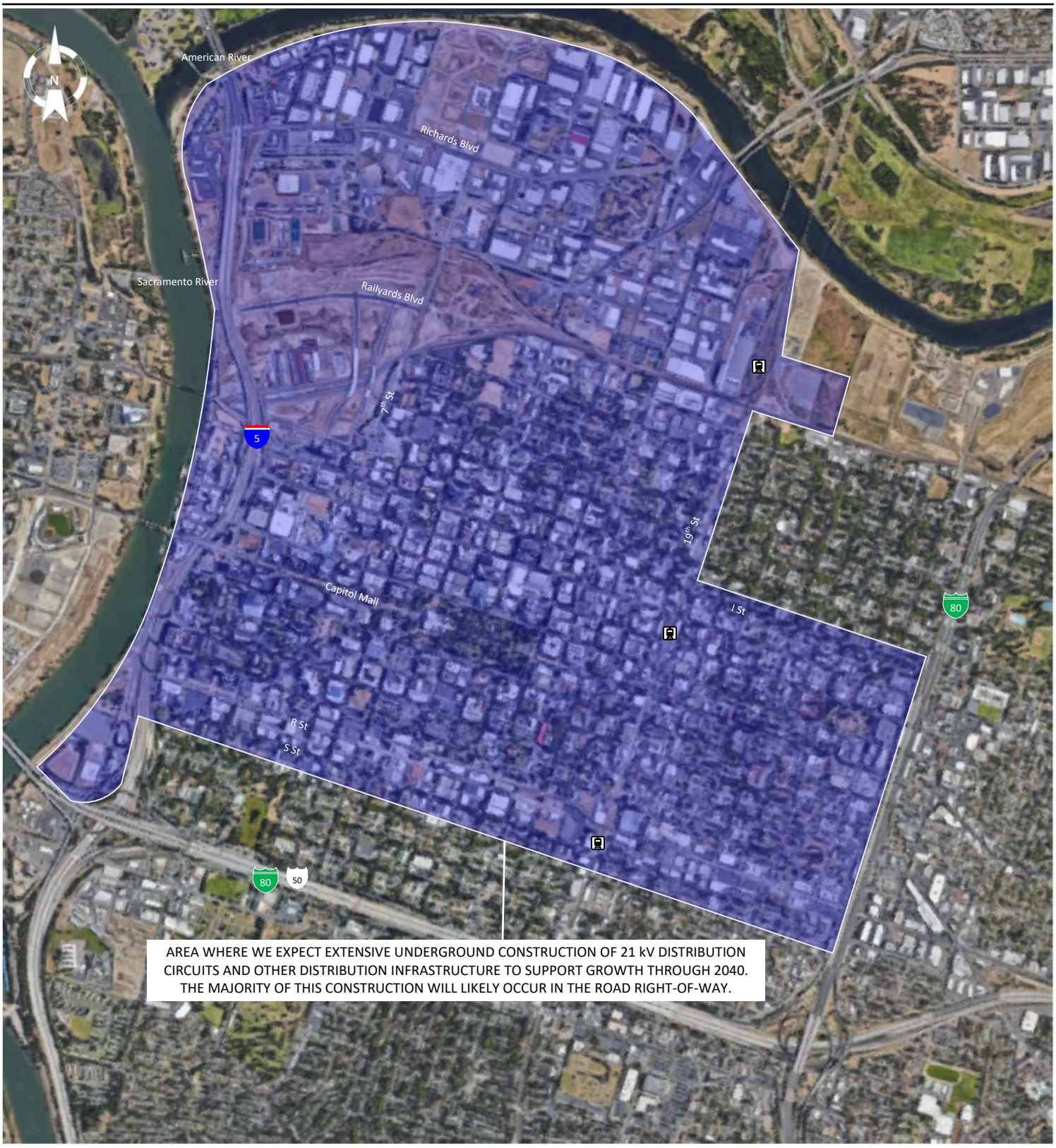
Nicole Goi
Regional & Local Government Affairs
Sacramento Municipal Utility District
6301 S Street, Mail Stop A313
Sacramento, CA 95817
Nicole.goi@smud.org

Cc: Rob Ferrera



NOTES:

1. ONLY APPROXIMATE LOCATIONS ARE SHOWN. FOR CONCEPTUAL/ ILLUSTRATIVE PURPOSES ONLY.
2. NOT ALL SMUD FACILITIES ARE SHOWN.
3. ALL SHOWN PROPOSED FACILITIES ARE SUBJECT TO CHANGE.
4. APPROXIMATELY 5 TO 10 ACRES LIKELY NEEDED FOR THE SUBSTATION SITE.



NOTES:

1. ONLY APPROXIMATE LOCATIONS ARE SHOWN. FOR CONCEPTUAL/ ILLUSTRATIVE PURPOSES ONLY.
2. NOT ALL SMUD FACILITIES ARE SHOWN.
3. ALL SHOWN PROPOSED FACILITIES ARE SUBJECT TO CHANGE.

From:	jjarvis@landlawbybarnes.com
To:	Scott Johnson
Cc:	bsbarnes@landlawbybarnes.com; noreen@landlawbybarnes.com
Subject:	Comments on MEIR NOP for 2040 General Plan Update
Date:	Thursday, February 28, 2019 3:43:30 PM

Dear Mr. Johnson,

Sacramento should modify its land use documents to clarify that the Handle portion of the Pan Handle area is in the process of being annexed by City of Sacramento- LAFCO – City Annexation application 016-13. However the Pan portion of the Pan Handle area is not subject to any annexation, and is intended to remain in Sacramento County jurisdiction.

Sincerely,

Brigit S. Barnes, Esq.

Brigit S. Barnes & Associates, Inc.
3262 Penryn Road, Suite 200
Loomis, CA 95650
Telephone: 916-606-9555
Email: bsbarnes@landlawbybarnes.com

From:	Brian Kiley
To:	Scott Johnson
Subject:	2040 general plan update comments
Date:	Monday, February 25, 2019 12:11:02 PM

Mr. Johnson,

Regarding the 2040 General Plan update, I would like to make several comments about land use and transportation.
My first comment is that the plan should eliminate single family zoning. Many cities have already done so in order to promote a more dense and walkable city, and Sacramento should do so as well. Single family zoning is overly restrictive and does not allow for adequate housing growth to address the severe housing shortage. All single family zones should be upzoned to allow 4-unit buildings with a three story height limit, which would allow for more traditional neighborhoods to develop. Special attention should continue to be paid to transit rich areas that should allow even more density and height. Sacramento must change its land use patterns to address climate change, and since driving is the largest emitter of greenhouse gases, we should focus on replacing car dependent areas with more dense, traditional, walkable neighborhoods served by high frequency transit. This includes Natomas, which should not be allowed to continue its sprawling development, but should be mandated as a more dense walkable neighborhood.
I would also like to comment that Sacramento should work with the county and LAFCO to annex more of the neighboring areas, such as arden arcade. I know this issue comes up occasionally in different forms, including incorporation as a separate city, but it should be recognized in our goverment organization that arden arcade is an urban area that is completely intertwined with the city of Sacramento, and rightfully should be within city boundaries. One example of a benefit to the region is that Howe Ave could be the next great walkable and bikeable street with a bus rapid transit line, but to do that we need Sacramento's forward thinking council to have an impact on the street's design and on the layout and zoning of adjacent neighborhoods.
One final point I would like to make is that RT should plan a rail extension into arden arcade along arden blvd. The Arden area is a major retail and population center that would give RT a big boost to ridership. Most of the track already exists—there would just need to be an extension over the freeway down arden blvd., possibly going as far as Watt Ave. Many other cities have shown how to have a dedicated transit lane on grade in the middle of the street, as I would suggest on Arden. There is plenty of capacity on the existing tracks for the blue line to share with a new line at 15 minute frequency. Residents and businesses on the existing route between the royal oaks station and downtown would benefit from more trains running at double the current frequency, which is closer to being in line with the more successful transit systems. People would be able to walk to a station and know they only have to wait a few minutes for a train, rather than planning around the schedule. This additional line would take Sacramento transit to the next level and help our city end its dependency on cars.
Please consider my comments. My goal is to make Sacramento more livable and environmentally friendly.

Thank you,
-Brian Kiley
2801 Freeport Blvd
Sacramento CA 95818

From:	Jackie Whitelam
To:	Scott Johnson
Subject:	2040 General Plan MEIR Scoping comment
Date:	Tuesday, February 26, 2019 1:13:46 PM

If it is to meaningfully address the issue of social equity, the MEIR must evaluate the inherent conflict between the sustainable development goal of compact growth and the social equity goal of affordable housing. Having policies that incentivize compact growth without there being policies that make the production of affordable housing feasible exacerbates the achievement of social equity.

Compact growth reduces VMTs, but it raises land values to the point where market-rate housing is out of reach of the workforce population. With the exception of the Capitol Area Development Authority (CADA) which in its first 20 years wrote down the land costs on long term ground leases, the use of government owned or controlled land for workforce housing has not been a City priority. The City's emphasis has rather been on streamlining the entitlement process and securing financial assistance from the state or federal government.

To date, the one City program that facilitates the production of housing on which rising land costs are less of an impediment is the Accessory Dwelling Units Ordinance which encourages property owners who already own their land to build housing on their property. In addition to evaluating the implications of the City long term leasing government owned or controlled properties (including surplus property on school district land, right-of-ways and City parking structures) for the production of affordable workforce housing, the MEIR should evaluate the implications of the City providing financial assistance to ADU builders providing they agree to keep such units affordable to low and moderate (80 to 120 percent of median) income households.

From: Kate Lenox
To: Scott Johnson
Subject: General Plan 2040 MEIR Scope Comment
Date: Thursday, February 14, 2019 3:50:28 PM
Attachments: Comment General Plan Update Feb 2019 comments-bullet points.docx

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2040 General Plan MEIR- Addressing Climate Change

Climate Adaptation and Resiliency-- Sustainable designs and green infrastructure that respond to climatic demands and conserves scarce resources

The effect of current and proposed development in the combined sewer/storm drain system will increase runoff and impact hydrology and water quality.

Climate change experts are predicting that rainy seasons will no longer be reliable. Drought will be mixed with storms of unusual severity. These storms could be 100 year or 200 or more year storms in any given rainy season. Every neighborhood in the combined sewer/storm drain system will be vulnerable to street flooding. The Climate Action Plan should reflect the need to reduce runoff in these neighborhoods.

Larger homes and more pavement increase

runoff, and in severe storms the 100+ year old system will be overwhelmed.

Due to increasing real estate values, existing neighborhoods are seeing teardowns of small homes. The new homes being built are larger than the ones they replace. Homeowners are also building larger remodels. R1 design guidelines now allow build out to 2500 square feet or up to a maximum 50% lot coverage. While the water vault being built in McKinley Park may lessen the effects of storm water runoff in the blocks surrounding the park in a 10 year storm event, it will have little or no impact on the other existing neighborhoods of East Sacramento or other areas of the city on the combined system. The new neighborhoods being developed in East Sacramento will also mean more houses and pavement. The city should act to find ways to decrease runoff from these new homes and driveways.

Lessen the effects of runoff in storms of the future by reducing the maximum allowable lot coverage/square footage in the area of the combined sewer/storm drain system.

Reduce from the current maximum of 50%/2500 to the former requirement of no more than 40% lot coverage/2400 square feet without a variance or mitigation. Homeowners who want to increase the lot coverage in an existing neighborhood would have mitigate the increased runoff. One method would be to build an individual water vault on their property to hold the increased runoff from a larger roof or more hardscape. These requirements exist in other cities (Newton, MA for instance). There is still opportunity to require these systems or offer them to new home buyers. An initiative on the June 2018 ballot exempts these systems from a property tax increase.

Reducing the allowable lot coverage back to the previous 40%/2400 max will help prevent the creation of heat islands.

Another effect of climate change will be increasing temperatures, including extreme heat waves. The result of larger homes and increased hardscape is the reduction of neighborhood greenspace. This greenspace

mitigates the heat island effect. If an owner wanted a larger home, he could be required to install a cool roof system to mitigate the heat island effect.

Reducing the allowable lot coverage/square footage would help preserve wildlife habitat. Home landscaping and residential greenscapes provide wildlife habitat. Our local wildlife is threatened by climate change just as we are. Home landscapes provide water, food and shelter for animals.

Kate Lenox
4823 C St., Sacramento, 95819

klenox@earthlink.net

2040 General Plan MEIR- Addressing Climate Change

Climate Adaptation and Resiliency--Sustainable designs and green infrastructure that respond to climatic demands and conserves scarce resources

- *The effect of current and proposed development in the combined sewer/storm drain system will increase runoff and impact hydrology and water quality.*

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Home landscaping and residential greenscapes provide wildlife habitat. Our local wildlife is threatened by climate change just as we are. Home landscapes provide water, food and shelter for animals.

Kate Lenox klenox@earthlink.net
4823 C St., Sacramento, 95819

East Sacramento Community Plan Update

■■ *A mix of housing types and housing affordability*

Since the last community plan was written, new development has begun in East Sacramento. Infill projects are bringing 500+ new homes to the McKinley/Elvas (north of H St. between 39th St. and Elvas Ave) area of East Sacramento. If the goal of the General Plan is to preserve and enhance East Sacramento so that neighborhoods "retain their current form and character", the effects of new developments and the pressure of increasing real estate values have on these existing neighborhoods need to be addressed.

While there seems to currently be a slowdown in the red hot real estate market, home values remain very high in East Sacramento. The desirability of the established neighborhood's location and mature treescapes continue to rise. Market forces are creating change in the neighborhood.

The one of the effects of rising real estate values is an increase in the number of tear downs of existing small homes. Because of the changes to city code which allowed an increase in lot coverage, square footage and height, the homes built in their place are usually much larger. Not only do these new homes often tower over the surrounding homes, they increase the upward pressure on real estate prices and affordability. They change the character of the neighborhood, and lead to a loss of rental units and smaller "starter" homes in the area.

There have been instances of a homeowner buying the house next door and tearing it down in order to build a much larger home. There have also been instances of lots with two housing units on them being purchased, then a new much larger single family home being built on the lot.

If a goal of the general plan is to have a mix of housing types and affordability in our neighborhood, we are losing this in East Sac. The update of the General Plan and East Sacramento Community Plan should address this. Some possible solutions are:

- A return to the pre-2013 design guidelines that allowed only a 40% lot coverage or maximum 2400 square feet would help reduce the incentive to purchase existing homes for teardowns.
- A prohibition or moratorium on combining lots to prevent the reduction in residential units.
- A prohibition or moratorium on converting lots with two dwelling to a single family residence
- A consideration of a zoning overlay of East Sacramento with design zoning guidelines to reduce the number of teardowns and McMansions being built.

Kate Lenox
4823 C St.
Sacramento, 95819
klenox@earthlink.net

City of SACRAMENTO

sacramento | 2040

City of Sacramento General Plan Update, Climate Action Plan and Master EIR

2040 GENERAL PLAN UPDATE AND CLIMATE ACTION PLAN MASTER ENVIRONMENTAL IMPACT REPORT (MEIR) NOTICE OF PREPARATION (NOP) SCOPING

COMMENT FORM

Please provide the following information if you wish to receive Notice of Availability of the Draft MEIR and to document the author of comments received. Thank you.

Name: LAURIE Heller

Email: lauriewlinheller@gmail

Address (if no email): _____

Organization: 350 Sacramento

Please provide us with your written comments on the scope of analysis in the draft MEIR by **February 28, 2019**. Comments may be sent to:

Scott Johnson
City of Sacramento
Community Development Department
300 Richards Blvd, Third Floor
Sacramento, CA 95811

Email: srjohnson@cityofsacramento.org

You may attach additional pages to this form and/or you may submit your written comments separately. Written comments on the scope of the Draft MEIR will help guide the analysis.

"Update CURRENT conditions" must include also update CURRENT science related to the Regional impacts of climate change, using projections from State, Fed etc recent Reports.

From: Russ Bennett
To: Scott Johnson
Subject: MEIR Scope Comment
Date: Tuesday, January 29, 2019 6:14:47 AM

Dear Mr. Johnson,

Please include in the upcoming Sacramento MEIR scope a discussion of emerging gas plasma waste recovery technology. This technology will help to reduce greenhouse gas emissions by replacing existing landfill technology with plasma gas recovery technology currently undergoing land trials at the U.S Army's Fort Liggett Hunter facility in California. The technology converts the un-recyclable portion of municipal waste into CO and H2 feedstocks. Depending on the post gasification technology selected, these feedstocks can be used to produce H2, methane, biodiesel, or feedstocks for plastics. Other potential waste stream feeds are waste oil, oily debris, waste agricultural products, range/wildland material, petroleum coke, and secondary sludge from municipal waste water treatment plants. Depending on the cumulative and ongoing costs associated with improperly designed legacy landfills in the area, it my be more cost effective to dig up the waste and recover its value by running it through a plasma gasifier.

Thank You,

Russ Bennett
210 Soaring Hawk Lane
Sacramento, CA

From: Russ Bennett
To: Scott Johnson
Subject: Re: MEIR Scope Comment
Date: Thursday, January 31, 2019 5:36:16 AM

Dear Mr. Johnson,

Good luck on the MEIR, I hope to be able to actively participate to advocate for a strong resource recovery and circular economy element to the general plan. I am following the efforts of advanced nuclear reactor developers who's focus is on on the recovery of spent nuclear fuel. One design, the molten chloride salt fast spectrum reactor show great promise to generate ~200 GW-yrs of electricity from the spent nuclear fuel at Rancho Seco; however, I don't believe they are far enough along to even consider for the general plan at this time.

Thank You,

Russ Bennett
210 Soaring Hawk Lane
Sacramento, CA

From: Scott Johnson <SRJohnson@cityofsacramento.org>
Sent: Tuesday, January 29, 2019 2:59 PM
To: Russ Bennett
Subject: RE: MEIR Scope Comment

Dear Mr. Bennett,

Thank you for your response to the Notice of Preparation (NOP) of a Master Environmental Impact Report (MEIR) for the City's 2040 General Plan Update and Climate Action Plan. Responses to the NOP and comments on the scope of the MEIR analysis will be accepted through February 28, 2019.

Scott Johnson
City of Sacramento
Community Development Department
Environmental Planning Services
300 Richards Blvd., 3rd Floor
Sacramento, CA 95811
(916) 808-5842
srjohnson@cityofsacramento.org

From: Russ Bennett <RBenn38486@live.com>
Sent: Tuesday, January 29, 2019 6:15 AM
To: Scott Johnson <SRJohnson@cityofsacramento.org>
Subject: MEIR Scope Comment

Dear Mr. Johnson,

Please include in the upcoming Sacramento MEIR scope a discussion of emerging gas plasma waste recovery technology. This technology will help to reduce greenhouse gas emissions by replacing existing landfill technology with plasma gas recovery technology currently undergoing land trials at the U.S Army's Fort Liggett Hunter facility in California. The technology converts the un-recyclable portion of municipal waste into CO and H2 feedstocks. Depending on the post gasification technology selected, these feedstocks can be used to produce H2, methane, biodiesel, or feedstocks for plastics. Other potential waste stream feeds are waste oil, oily debris, waste agricultural products, range/wildland material, petroleum coke, and secondary sludge from municipal waste water treatment plants. Depending on the cumulative and ongoing costs associated with improperly designed legacy landfills in the area, it my be more cost effective to dig up the waste and recover its value by running it through a plasma gasifier.

Thank You,

Russ Bennett
210 Soaring Hawk Lane
Sacramento, CA

From: Thomas Cordano
To: Scott Johnson
Subject: regulations
Date: Thursday, February 7, 2019 10:56:57 PM

Please allow elderly persons to convert a garage or put up a small cottage on their property so that a caretaker can move in. Or the elderly person move to the smaller residence and rent to larger one.

Tom Cordano
967

February 28, 2019

Via Electronic Mail

Scott Johnson, Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218
Email: SRJohnson@cityofsacramento.org

Re: Earthjustice and Sierra Club's Comments on the Inclusion of Building Electrification Policies in City of Sacramento 2040 General Plan Update and Climate Action Plan.

Earthjustice and Sierra Club submit the following comments on the Notice of Preparation of a Master Environmental Impact Report for the 2040 General Plan Update and Climate Action Plan ("CAP") for the City of Sacramento (the "City"). While there are many elements to a successful General Plan and CAP, including use of transit-oriented, mixed use development to minimize car trips, increased use of renewable energy, and policies to facilitate adoption of electric vehicles, these comments focus on the importance of building electrification.[1] Direct emissions from fossil fuel combustion in buildings, such as from gas-powered space and water heating, accounts for approximately ten percent of California's total greenhouse gas ("GHG") emissions.[2] Switching to efficient electric options results in substantial GHG reductions today, and increased reductions over time as California relies on increasing levels of renewable energy. Because new construction projects, existing building retrofits, and appliance replacements lock-in energy system appliances for decades, decisions that result in new and continued fossil fuel use today will make it more difficult to meet future GHG reduction requirements. Accordingly, now is the time for the City to incorporate meaningful building electrification measures into the CAP and set a path to eliminate GHGs from the building sector.

Through its jurisdiction over land use, building permits, and interactions with contractors and residents, local governments have a key role to play in facilitating building electrification. Pursuant to the requirements of a CAP under the California Environmental Quality Act ("CEQA"), these comments recommend a methodology for determining the significance of community-wide GHG impacts under the CAP, set forth goals and policies that should be adopted to support building electrification, and highlight the safety, public health, and economic

[1] Sierra Club will be commenting on other aspects of the General Plan and CAP in a separate letter.
[2] California Energy Commission, Final 2018 Integrated Energy Policy Report Update, Volume II, at 18 (Jan. 28, 2019) ("Final 2018 IEPR Update"), https://www.energy.ca.gov/2018_energypolicy/documents/.

benefits resulting from widespread building electrification. It is our hope these comments will help realize our shared vision of meaningful reductions in GHG pollution and more healthy and sustainable communities.

I. Determining the Significance of Community-Wide Emissions.

CEQA Guideline § 15183.5(b)(1)(B) provides that a CAP should "[e]stablish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable." In determining the significance of project impacts, a lead agency "must ensure that CEQA analysis stays in step with evolving scientific knowledge and state regulatory schemes." *Cleveland National Forest Foundation v. San Diego Assn. of Gov'ts* (2017) 3 Cal.5th 497, 519.

One approach for determining significance of community GHG impacts is the use of a per-capita metric that looks at total community-wide emissions on a per capita basis when factoring in both the number of residents and employees (collectively "service population" or SP). In examining this approach, the Bay Area Air Quality Management District ("BAAQMD") used statewide numbers to set a 2020 per capita emissions threshold when considering all sources of state emissions of 6.6 Metric tons ("MT") CO_2e/SP and 4.6 MT CO_2e/SP for the land use sector.[3] This threshold was based on AB 32's target or reducing GHG emissions to 1990 levels by 2020. Importantly, "using a statewide criterion requires substantial evidence and reasoned explanation to close the analytical gap left by the assumption that the 'level of effort required in one [statewide] context . . . will suffice in the other.'" *Golden Door Properties LLC v. County of San Diego* (2018) 27 Cal.App.5th 892, 904 (quoting *Center for Biological Diversity*, 62 Cal.4th at 227). To the extent the community emissions under the CAP are reflective of statewide emission sources and include a mix of industrial, commercial and residential development, and potential agricultural sources, use of the statewide 2020 target of 6.6 MT CO_2e/SP would likely be appropriate. For communities that are largely comprised of commercial and residential development, the 4.6 MT CO_2e/SP should be used.

As a long range plan, the CAP should determine significance based on Senate Bill 32's requirement to reduce GHGs to 40 percent below 1990 levels by 2030 and California's goal under Executive Order B-55-18 of achieving carbon neutrality by no later than 2045. Scaling the 2020 4.6 MT CO_2e/SP to meet the 2030 requirement of reducing GHGs to 40 percent below 1990 levels yields a threshold of 3.2 MT CO_2e/SP.[4] By 2045, the threshold should be net-zero.

In addition to GHG emissions, a key purpose of the evaluation of energy impacts under CEQA is "decreasing reliance on fossil fuels, such as coal, natural gas and oil."[5] Addressing energy impacts of proposed projects requires more than mere compliance with Title 24 Building

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[3] *See* BAAQMD, *CEQA Guidelines Update, Proposed Thresholds of Significance* at 4-5 (Dec 7, 2009), http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/proposed-thresholds-of-significance-dec-7-09.pdf?la=en (explaining methodology for project-level GHG threshold).

[4] Using 190.7 $MMTCO_2e$ for land use sector under Air Resources Board 2017 Climate Change Scoping Plan Update and 2030 service population of 60.39 million under California Board of Finance and Caltrans projections.

[5] CEQA Guidelines, Appendix F, Sec. I.

Energy Efficiency Standards.[6] Including gas hook-ups in new projects, and thereby perpetuating reliance on fossil fuels, is contrary to California's energy objectives and should be considered a significant impact under CEQA. As the California Energy Commission ("CEC") stated in its recent Integrated Energy Policy Report ("IEPR"):

> New construction projects, retrofitting existing buildings, and replacing appliances and other energy-consuming equipment essentially lock in energy system infrastructure for many years. As a result, each new opportunity for truly impactful investment in energy efficiency and fuel choice is precious. If the decisions made for new buildings result in new and continued fossil fuel use, it will be that much more difficult for California to meet its GHG emission reduction goals. Parties planning new construction have the opportunity instead to lock in a zero- or low-carbon emission outcome that will persist for decades[7]

Including gas hook-ups in new projects, and thereby perpetuating reliance on fossil fuels, is contrary to California's energy objectives and decarbonization trajectory and should be considered a significant energy impact under CEQA. Because efficient, all-electric buildings do not require a gas hook-up and therefore do not lock-in additional fossil fuel infrastructure, they avoid this significant energy impact.

II. A Range of Feasible Mitigation Measures Should be Incorporated into the Climate Action Plan to Facilitate Building Electrification and Mitigation of Community Greenhouse Gas and Energy Impacts.

CEQA Guideline § 15183.5(b)(1)(D) states that a CAP should "[s]pecify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level." Notably, "[q]uantifying GHG reduction measures is not synonymous with implementing them."[8] Accordingly, while a mitigation that quantifies benefits from certain measures such as increased renewable procurement is a start, these measures must be backed with timelines for implementation, identified funding streams where applicable, and specific performance standards to provide the requisite assurance that claimed reductions will be realized. Where proposed mitigation is unfunded, does not have a defined timeline for adoption, or is simply a suggestion lacking any requirement of compliance, it cannot be relied upon to support achievement of CAP's GHG emission reduction targets.[9] Particularly where there is no evidence "to support its belief that people will participate" in various voluntary programs, a CAP will not survive legal scrutiny.[10] Accordingly, building electrification and other greenhouse gas mitigation measures

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[6] *See California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 211.
[7] CEC, *2018 Integrated Energy Policy Report Update, Vol. II* at 18 (Jan. 2019), https://efiling.energy.ca.gov/getdocument.aspx?tn=226392
[8] *Sierra Club v. County of San Diego,* 231 Cal.App.4th 1152, 1170 (2014).
[9] *Id.* at 1168-69.
[10] *Id.* at 1170.

should be "coupled with specific and mandatory performance standards to ensure that the measures, as implemented, will be effective."[11]

With choices over appliances and permitting happening at the local level, there is a range of actions for local governments to take to ensure their communities transition away from fossil fuel combustion in their buildings. We recommend the CAP include a specific goal of eliminating gas combustion in buildings by 2045 and adopt a range of feasible measures to put the City on a path to achieve this objective.

1. Set a Goal of Reducing GHG Emissions from Building to 40 Percent Below 1990 Levels by 2030 and Eliminating Building Emissions by 2045.

The CAP should set the following overarching goal:

Goal: *Reduce GHG emissions from buildings by 40 percent below 1990 levels by 2030 and eliminate building emissions by 2045 through widespread building electrification.*

Setting a target for building electrification provides much needed clarity for builders, appliance manufacturers, HVAC installers, contractors, and others to prepare for and support the transition from gas to clean electricity. Just as regulatory and local agencies have adopted procurement targets for zero-emission vehicles, renewable energy, and energy storage, establishing similar goals for zero-emission appliances like electric heat pumps and induction stoves can help rally key market actors to offer the technologies, services, financing, and innovative programs needed to successfully decarbonize the buildings sector.

Local governments are already beginning to establish electrification targets in line with their climate goals. For example, in February 2018, the Los Angeles City Council directed their municipal utility Los Angeles Department of Water and Power and the Department of Building and Safety to set building electrification targets and strategies.[12] A target of at least 40 percent below 1990 GHG emission levels by 2030 aligns with the statewide emissions reduction target under Senate Bill 32. Eliminating building emissions by 2045 aligns with California's 2045 statewide carbon neutrality goal set forth in Executive Order B-55-018 and 100 percent carbon-free electricity under Senate Bill 100.

To achieve these targets, the CAP should also set targets for market share of underlying electric technologies such as:

[11] *Communities for a. Better Env't v. City of Richmond*, 184 Cal.App.4th 70, 94 (2010).
[12] Motion to Amend Resolution G-3536 to "[r]equest that the Department of Water and Power establish aggressive 2028 and 2038 building electrification targets within their 2018 Integrated Resource Plan that align with the City's existing greenhouse gas reduction targets, as described in Mayor's Sustainability pLAn [sic]." (Feb. 6, 2018), http://clkrep.lacity.org/onlinedocs/2018/18-0002-S7_mot_2-6-18.pdf.

- Increase the share of high-efficiency heat pumps for space heating from 5% sales in 2018, to 50% in 2025, and 100% in 2030
- Increase the share of high-efficiency heat pumps for water heating from 1% sales in 2018, to 50% in 2025, and 100% in 2030
- Increase the share of high-performance electric induction cooking from 1% sales in 2018, to 50% in 2025, and 100% in 2030

2. Prohibit Gas Infrastructure in All New Buildings

In reaching the goal of a zero-emissions building sector, the CAP should adopt the following policies:

Policy: *All newly constructed buildings will not install gas infrastructure, meaning there is no gas meter connection and that electricity may be the only permanent source of energy for water-heating, mechanical and heating, ventilation and air conditioning (HVAC) (i.e., space-heating and space cooling), cooking, and clothes-drying.*

A critical first step in reaching the goal of eliminating emissions from buildings is ensuring avoiding new gas connections and ensuring new are all-electric. New construction is the most cost-effective and easiest entry point for building electrification. New buildings will also last the longest, making them the most important to electrify to minimize long-term carbon lock-in.

All-electric homes are readily achievable. The most recent household energy survey by the U.S. Energy Information Administration found that one in every four homes in the United States is *already* all-electric, and that proportion is steadily rising.[13] Sacramento Municipal Utility District ("SMUD") has partnered with homebuilders to construct entire neighborhoods that are all-electric, with 400 all-electric homes planned in the next two years alone.[14] Indeed, some California developers now exclusively build all-electric homes and have already deployed a range of affordable, luxury, single- and multi-family housing units all across the State.[15] For example, CityVentures is building multi-family all-electric homes throughout California.[16] With regard to other building classes, a report by Redwood Energy, *Zero Carbon Commercial Construction: An Electrification Guide for Large Commercial Buildings and Campuses*, highlights how standard all electric designs allow large commercial developments to save money and create more

[13] U.S. Energy Information Administration, *What's New in How We Use Energy at Home: Results from EIA's 2015 Residential Energy Consumption Survey (RECS)*, at 6 (May 2018), https://www.eia.gov/consumption/residential/reports/2015/overview/pdf/whatsnew_home_energy_use.pdf.
[14] Justin Gerdes, *All-Electric Homes Are Becoming the Default for New Residential Construction in Sacramento*, Greentech Media (Nov. 13, 2018), https://www.greentechmedia.com/articles/read/all-electric-homes-are-becoming-the-default-for-new-residential-constructio#gs.VYzCCMQ.
[15] *See* Redwood Energy, *Development Projects (A Small Sample)*, https://www.redwoodenergy.tech/development-projects/.
[16] *See*, City Ventures Residences, https://www.cityventures.com (last visited Dec. 20, 2018).

comfortable spaces.[17] The University of California announced in August of 2018 that "[n]o new UC buildings or major renovations after June 2019, except in special circumstances, will use on-site fossil fuel combustion, such as natural gas, for space and water heating."[18] This policy is based in part on the results from a number of successful pilots in all-electric buildings throughout the UC system, many of which are non-residential, including a downtown office building at UC Merced and a Genomics Laboratory at Lawrence Berkeley National Laboratory.[19] All-electric restaurants are also growing in popularity with both chefs and manufacturers, who express enthusiasm about the increased efficiency, precision, safety, and flexibility of induction cook stoves.[20]

To fully implement this policy, the CAP should commit to City adoption of necessary changes to its building code by a date certain. Health and Safety Code § 17958.7, permits local governments to make changes to state building codes that "are reasonably necessary because of local climatic, geological or topographical conditions." While the local climatic conditions need not be unique to the jurisdiction, Sacramento faces no shortage of acute climate impacts that make an updated building standard both reasonable and prudent. For example, California's Fourth Climate Change Assessment for the Sacramento Valley highlights the bleak climatic and geographic challenges the region will face. Extreme heat will become commonplace, as temperatures are expected to be 10°F higher by century's end.[21] Annual snowpack in the Northern Sierra, a major water source for the region, may virtually disappear by the end of the century, alongside longer, more severe, and more frequent droughts.[22] The region's topographical conditions also contribute to its federal nonattainment for ozone, which the significant NOx emissions (an ozone precursor) from gas appliances exacerbates. The City has abundant evidence to make the finding that prohibiting new natural gas infrastructure and the resulting greenhouse gas pollution is a reasonable response to the local climatic and topographical conditions in the region.

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[17] *See, e.g.*, Redwood Energy, *Zero Carbon Commercial Construction: An Electrification Guide for Large Commercial Buildings and Campuses* (2018), https://drive.google.com/file/d/1J-DHuP5SfY1FUQr2o1ov2cqsgt_arWle/view.

18 University of California, *UC sets higher standards, greater goals for sustainability* (Sept. 4, 2018), https://www.universityofcalifornia.edu/press-room/uc-sets-higher-standards-greater-goals-sustainability.

[19] *Id.* at 48.

[20] Andrea Victory, *Why Induction Cooking is the Hottest Trend to Hit Restaurant Kitchens,* Food Service and Hospitality (May 31, 2017) https://www.foodserviceandhospitality.com/why-induction-cooking-is-the-hottest-trend-to-hit-restaurant-kitchens/

[21] Houlton *et al*, *California's Fourth Climate Change Assessment: Sacramento Valley Region Report*, University of California, Davis, at 18 (Aug, 2018) http://www.climateassessment.ca.gov/regions/docs/20180827-SacramentoValley.pdf

[22] Houlton *et al*, *California's Fourth Climate Change Assessment: Sacramento Valley Region Report*, University of California, Davis, at 6 (Aug, 2018) http://www.climateassessment.ca.gov/regions/docs/20180827-SacramentoValley.pdf

3. Prohibit Gas Infrastructure as Part of Major Renovations.

Similarly, major renovations provide an opportunity to switch to efficient electric options and avoid locking in a new source of fossil fuel combustion. Building standards are not just for new construction but apply to "any rule, regulation, order, or other requirement … that specifically regulates, requires, or forbids the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building ….including fixtures therein."[23] Accordingly, under its same authority to modify state building codes, the City can prohibit natural gas infrastructure as part of a building alternations and improvements as a means to begin to phase out gas from existing building stock.

4. Adopt a Plan to Electrify Municipal Buildings.

An important opportunity for the City to lead by example and demonstrate the effectiveness and benefits of electrification and clean energy buildings, while simultaneously reducing GHG emissions, is to electrify all gas uses in municipally-owned buildings. According, the CAP should include the following policy:

Policy: *The City shall develop and implement a plan to electrify and disconnect City-owned facilities from gas service.*

The plan to electrify municipal buildings should include an implementation timeline, require the City to conduct an inventory of municipal and other government buildings, identify facilities that are ready for routine system replacements as targets for electrification efforts, and document implementation issues, costs, and technical considerations for future planning and expansion efforts.

The City can also work with the school district to achieve a similar outcome and adopt the following policy in the CAP:

Policy: *The City shall assist local school districts in leveraging government funds (such as Proposition 39) to finance electrification projects at school facilities.*

5. Streamline permitting to make electrifying existing residential and commercial buildings easier for building owners.

The permitting process to replace gas appliances with electric can be overly costly, confusing, and time-consuming for the building owner. This burden paired with building owners' limited knowledge of which contractors and installers are familiar with fuel-

[23] Health & Safety Code § 18909.

switching, can mean electrification projects do not move forward and the building owner invests in another gas appliance that could last ten to twenty years. The City should review its existing permitting process for replacing gas water heaters, gas furnaces, gas dryers, and gas stoves with electric appliances as well as for capping the gas meter with ways to lower the cost and expedite the permitting process.

6. Develop incentives to lower installation costs of electric appliances.

Rebates and other financial incentives are needed to offset the cost of purchasing and installing advanced electric appliances like heat pumps and induction stoves. Targeted incentives can help to stimulate demand and increase sales, with the end goal of developing a self-sustaining electrification market that is broadly accessible to all Californians.

Policy: *The City shall collaborate with regional organizations and the local electric service provider to promote financing programs for building electrification.*

Fortunately, SMUD offers up to $13,750 for electrification upgrades and appliances. Their Home Performance Program includes a list of participating contractors, rebates for efficiency and electrification upgrades, as well as financing.[24] Another potential source of funding the City could explore is through a CEQA GHG mitigation fee from projects that are unable to fully mitigate their GHG emissions from all feasible on-site measures alone. This can allow projects under CEQA review to mitigate their GHG emissions to a less-than-significant level and facilitate local emissions reductions.

7. Create public education, marketing, and outreach programs to promote fuel switching from gas to electric options

Similar to other clean energy initiatives, building owner and tenant education will be key to successfully removing barriers and improving access. Given that building electrification is in the early stages of market penetration, a greater focus on education and outreach is needed to establish awareness, familiarity, and interest. Education and outreach should be geared to specific market segments and appropriately convey the benefits of electrification, an overview of the technology, as well as resources on where to begin, such as a list of certified contractors and available rebates. Polices to foster public engagement include:

Policy: *The City shall conduct targeted outreach to homeowners and contractors to encourage installation of electric appliances upon routine replacement of natural gas appliances and water heaters.*

[24] *See* SMUD, Home Performance Program, https://www.smud.org/en/Rebates-and-Savings-Tips/Improve-Home-Efficiency.

For example, Sonoma Clean Power (the CCA in Sonoma County) has done extensive community outreach after the Sonoma County fires to support all-electric rebuilding.[25] Their induction cooktops lending program, induction cooking shows online, and other demonstration efforts have led to over 90% of participants expressing interest in all-electric rebuilds.

Policy: *The City shall provide resources on its website to connect residents, businesses, and industrial entities with electrification resources and incentives, and to provide information on the non-energy benefits of electrification such as hazard mitigation, indoor air quality, and health and safety.*

For example, several cities, including Berkeley, Oakland, and Palo Alto have online educational resources on how to electrify gas appliances.[26] Website information should also include detailed information on your website on the steps to disconnect a home from natural gas and how to be "electric ready," which could include an overview about storage, preparing for electric vehicle ("EV") connections, etc.

Policy: *The City shall hold community workshops, electrification expos, and other educational forums to provide information on the benefits of heat pump and induction stove technologies, cost and installation considerations, and financial incentives.*

8. Support workforce outreach and training

Robust workforce development and training programs will be important to ensure that there are skilled local technicians who can install and service electric technologies like heat pumps and induction stoves over the appliance lifetime. CAP measures can include:

- Support training, apprentice and employer-partnership programs that create pathways to middle-class careers for people facing barriers to quality employment opportunities. Publicly-subsidized electrification projects should require partnerships between training providers and employers.
- Leverage California's existing workforce training and education system. For example, adding training modules within California's apprenticeship or community college system is more effective than stand-alone contractor classes.
- Ensure that workforce training leads to industry-recognized credentials.

[25] *See* Sonoma Clean Power, https://sonomacleanpower.org/programs/advanced-energy-rebuild.
[26] For city website examples, see City of Berkeley, *Residential Heat Pump Water Heaters: Replacing a Gas Water Heater*, https://www.cityofberkeley.info/HPWH/; *7 Steps to a Clean Energy Oakland Home*, http://www2.oaklandnet.com/oakca1/groups/ceda/documents/marketingmaterial/oak066266.pdf; and City of Palo Alto, *Heat Pump Water Heaters Pilot Program*, https://www.cityofpaloalto.org/gov/depts/utl/residents/resrebate/smartenergy/heat_pump_water_heaters/heat_pump_water_heater_pilot_program.asp.

9. Break down clean energy silos – offer special incentives, financing, and other programs that support pairing electrification with new EV charging, rooftop PV, and/or energy efficiency upgrades

Consumer interest in rooftop solar and electric vehicles is becoming mainstream across California. Finding innovative ways to pair electrification with new solar installs, EV-charging, and/or energy efficiency upgrades will open a larger consumer base for electrification, lower energy bills and shorten payback periods, support appropriately-sized and managed systems, and potentially make the residential and commercial clean energy projects more profitable for the contractor or installer. Measures can include:

- Offer larger incentives for clean technology-combination installs
- Provide information to existing and prospective rooftop solar customers about how to make the most of their installations through electrifying their appliances
- Create and/or expand bulk buy programs to include heat pumps and induction stoves
- Establish accessible financing mechanisms to support larger-scale clean energy upgrades

III. There Are Multiple Co-Benefits to Achieving Zero Emission Buildings through Electrification.

Beyond achieving the energy and GHG emissions reductions essential for preventing climate breakdown, building electrification will produce a range of important co-benefits for the economic well-being, safety, and health of the community. Building electrification offers the potential to lower energy bills, reduce the cost of new construction, improve air quality, public safety, and climate resiliency, as well as create new jobs. Far from being a barrier to new housing, all-electric new construction can enable greater opportunities for affordable housing construction by reducing costs and streamlining mitigation requirements. For disadvantaged populations that pay a disproportionate amount of their income to energy costs, and who are more likely to suffer from asthma due to poor indoor air quality, zero emission homes are an important opportunity to deliver social equity.[27]

A. Lowering Energy Bills and Cost of New Construction

All-electric buildings can lower utility bills for tenants, reduce the cost of construction of new housing in the City, and shield customers from the volatile and increasing costs of gas. A recent report, *Decarbonization of Heating Energy Use in California Buildings*, by Synapse Energy Economics found that electrification could lower utility bills by up to $800 annually and lower the cost of new construction in Los Angeles by roughly $1,500 to $6,000.[28] Other analysis

[27] Kelly Vaugh, *Social Equity, Affordable Housing, and the Net-Zero Energy Opportunity*, Rocky Mountain Institute (May 9, 2018), https://rmi.org/social-equity-affordable-housing-and-the-net-zero-energy-opportunity/.
[28] Synapse Energy Economics, *Decarbonization of Heating Energy Use in California Buildings* at 2, 39 (Oct. 2018), http://www.synapse-energy.com/sites/default/files/Decarbonization-Heating-CA-Buildings-17-092-1.pdf.

has found that new homes and apartment buildings can cost between $1,000 and $18,000 less to build if they are not connected to gas distribution pipelines.[29] Another study by Rocky Mountain Institute similarly found new all-electric homes provided cost savings.[30] The results are clear: "[f]or newly constructed buildings, heat pumps are universally more cost-effective, even without optimizing for demand flexibility, primarily because the heat pump provides both heating and air conditioning, avoiding the need to purchase both a furnace and an air conditioner."[31]

B. A Safer Community

Recent events from Aliso Canyon, San Bruno, and the state of Massachusetts add to the devastating record of hazardous natural gas infrastructure. Between 2015 and 2017, natural gas pipeline explosions and incidents in the country claimed on average 15 fatalities, 57 injuries, and $316,647,907 in property damage *annually*.[32] As climate impacts intensify, the escalating risks of aging natural gas infrastructure will outpace the industry's rate of pipeline replacement. Sea level rise, which promises to be one of the many significant climate impacts affecting the region, especially amplifies the risks of natural gas.[33]

Methane leakage, a pervasive problem with natural gas infrastructure, can be particularly hazardous for families living in earthquake and fire-prone areas since leaking gas exacerbates fires after earthquakes. The California Seismic Safety Commission estimates that 20 to 50 percent of total post-earthquake fires are fires related to gas leaks.[34] Beginning to electrify entire communities is a key precautionary strategy to mitigate the growing risks of California's massive gas system.

C. Improved Air Quality

Gas appliances in residential buildings alone make up over a quarter of California's nitrogen oxide (NO_x) emissions from natural gas.[35] NO_x is a precursor to ozone and a key pollutant to curb in order to comply with state and federal ambient air quality standards. Electrifying buildings will help reduce NO_x and ground level ozone, improving *outdoor* air quality and benefiting public health. Electrification of fossil fuel appliances will also immediately improve *indoor* air quality and health. On average, Californians spend 68 percent

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[29] Stone Energy Associates, *Accounting for Cost of Gas Infrastructure*, CEC Docket 17-BTSD-01 (May 4, 2017), https://efiling.energy.ca.gov/GetDocument.aspx?tn=217420&DocumentContentId=26959.
[30] Rocky Mountain Institute, *The Economics of Electrifying Buildings* (June 2018), https://rmi.org/insight/the-economics-of-electrifying-buildings/.
[31] *Id.* at 29-30.
[32] Pipeline and Hazardous Materials Safety Administration, *Pipeline Incident 20 Year Trends* (Nov. 2018), https://www.phmsa.dot.gov/data-and-statistics/pipeline/pipeline-incident-20-year-trends.
[33] Radke *et al.*, *Assessment of California's Natural Gas Pipeline Vulnerability to Climate Change*, University of California, Berkeley (2016), https://www.energy.ca.gov/2017publications/CEC-500-2017-008/CEC-500-2017-008.pdf.
[34] California Seismic Safety Commission, *Improving Natural Gas Safety in Earthquakes* at 1 (adopted July 11, 2002), http://ssc.ca.gov/forms_pubs/cssc_2002-03_natural_gas_safety.pdf.
[35] *See* https://www.arb.ca.gov/ei/emissiondata.htm (downloading spreadsheet of detailed data on areawide sources, filtering for natural gas and dividing total NO_x emissions by contribution from residential fuel combustion).

of their time indoors, making indoor air quality a key determinant of human health.[36] The combustion of gas in household appliances produces harmful indoor air pollution, specifically nitrogen dioxide, carbon monoxide, nitric oxide, formaldehyde, acetaldehyde, and ultrafine particles.[37] The California Air Resources Board warns that "cooking emissions, especially from gas stoves, have been associated with increased respiratory disease."[38] Young children and people with asthma are especially vulnerable to indoor air pollution.

D. Pathways to Good, Green Jobs

Electrification of buildings will also development of the local workforce for jobs that will be critical in California's broader energy transition. Partnering with local organizations and community colleges, local governments can foster training and pipeline programs for new jobs in construction, HVAC installation, electrical work, energy efficiency and load management services, as well as manufacturing.

These jobs will rapidly grow in demand as local governments across the state look to rapidly address the emissions from their building sector. In Sacramento Municipal Utility District territory, where all-electric buildings are quickly becoming the default for new developments, demand for specialized plumbers and HVAC technicians is expected to grow enormously. The region expects to install more than 300,000 heat pump space heaters in the next 15 to 20 years.[39]

The next one to five years will be a critical window of opportunity to jump-start this transition away from gas to clean energy buildings. We urge your leadership on electrifying and decarbonizing residential, commercial, and municipal buildings. Sierra Club and Earthjustice look forward to continuing to work with you to ensure a robust and CEQA-complaint CAP.

Please contact Matt Vespa at mvespa@earthjustice.org and Sasan Saadat at ssaadat@earthjustce.org at Earthjustice and Rachel Golden at rachel.golden@sierraclub.org with any questions or concerns and please include each of us in future notifications on CAP development.

Sincerely,

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[36] Klepeis *et al.*, *The National Human Activity Pattern Survey (NHAPS): A Resource for Assessing Exposure to Environmental Pollutants*, J. EXPO. ANAL. ENVIRON. EPIDEMIOL., Vol. 11(3), 231-52 (2001).
[37] *See, e.g.*, Logue *et al.*, *Pollutant Exposures from Natural Gas Cooking Burners: A Simulation-Based Assessment for Southern California*, ENVIRON. HEALTH PERSP., Vol. 122(1), 43-50 (2014); Victoria Klug & Brett Singer, *Cooking Appliance Use in California Homes—Data Collected from a Web-based Survey*, LAWRENCE BERKELEY NATIONAL LABORATORY (Aug. 2011); John Manuel, *A Healthy Home Environment?* ENVIRON. HEALTH PERSP., Vol. 107(7), 352-57 (1999); Mullen *et al.*, *Impact of Natural Gas Appliances on Pollutant Levels in California Homes*, LAWRENCE BERKELEY NATIONAL LABORATORY (2012).
[38] California Air Resources Board, *Combustion Pollutants* (last reviewed Jan. 19, 2017), https://www.arb.ca.gov/research/indoor/combustion.htm.
[39] Justin Gerdes, *Experts Discuss the Biggest Barriers Holding Back Building Electrification*, Greentech Media (Sept. 19. 2018), https://www.greentechmedia.com/articles/read/here-are-some-of-the-biggest-barriers-holding-back-building-electrification#gs.fBEBKJy2.

Matt Vespa
Staff Attorney
Earthjustice
50 California St., Ste 500
San Francisco, CA 94111
mvespa@earthjustice.org
(415) 217-2123

Sasan Saadat
Research and Policy Analyst
Earthjustice
50 California St., Ste 500
San Francisco, CA 94111
ssaadat@earthjustice.org
(415) 217-2104

Rachel Golden
Senior Campaign Representative
Sierra Club
2101 Webster St., Suite 1300
Oakland, CA 94612
rachel.golden@sierraclub.org
(415) 977-5647

February 26, 2019

Scott Johnson
Senior Planner
City of Sacramento
Sent via email to SRJohnson@cityofsacramento.org

RE: NOTICE OF PREPARATION OF A MASTER ENVIRONMENTAL IMPACT REPORT AND SCOPING MEETING FOR THE 2040 GENERAL PLAN UPDATE AND CLIMATE ACTION PLAN

Dear Scott,

Thank you for allowing House Sacramento the opportunity to comment on the scope of the analysis in the City's Master EIR for the 2040 General Plan update. We are writing to confirm and support the City's proposed scope of the MEIR update for the 2040 General Plan Update and Climate Action Plan.

House Sacramento is an organization formed to advocate for building inclusively affordable communities in the Sacramento area. We formed to represent renters, young people, and other communities disproportionately harmed by NIMBYism and California's long standing culture of opposition to developing adequate housing supply.

First of all, we are glad to see that the scope of the 2040 General Plan Update includes "identifying Transit Oriented Development (TOD) policies, [adjusting] building heights, densities, and floor area ratio (FAR) to accommodate SACOG 2040 growth projections, and the market demand for different housing and employment types." This recognizes the reality in the City of Sacramento--we will need to increase density and building heights not only to accommodate growth, but also to provide enough affordable housing for people who are feeling the crunch of the California housing crisis, and ensure those homes are built in high-opportunity, transit-oriented areas so that all types of Sacramentans can benefit from the renaissance that this city is feeling. Ultimately, we support changes to the land use element to eliminate R-1 and similar zoning throughout the city and plan for even higher density residential zoning in areas close to jobs and transit. We urge the city to revisit outdated low-density land use designations in this general plan update.

We are also pleased to note that the Plan update will include addressing the state mandate for considering the reduction of Vehicle Miles Traveled [SB 743] in CEQA analysis instead of the

antiquated method of attempting to maximize Level of Service. Those regulations won't be finalized until 2020, so we commend the City for including that update in the plan's MEIR scope. Ensuring that new development reduces VMT will be key to meeting the City and state's carbon reduction goals. Another important state mandate we are glad to see included in the Plan update is addressing SB 1000 in order to pursue environmental justice and to identify ways to reduce the health risks in disadvantaged communities. Lastly, "incorporat[ing] a plan to address annexation of disadvantaged communities (SB 244)" is an important part of the General Plan update goals, and House Sacramento supports annexation certain neighborhoods adjacent to the City.

Finally, on the City's website, one of the items in the scope of work for the Plan update is "Grid 3.0 - Citywide." House Sacramento was impressed by the City's Grid 3.0 plan for the downtown and midtown areas, so we are glad to see that the same complete streets approach will be considered for the whole city. We encourage the city to coordinate with transit agencies to ensure that bus service is enhanced by complete streets changes, as high-frequency bus service will be important for promoting and implementing TOD projects. Reducing automobile dependence is the key to a sustainable, safe, equitable future for our community.

Pro-housing groups like House Sacramento are glad to have an opportunity to speak up for residents of the City of Sacramento, whether they be rent-burdened, searching for a new home, or homeless, who are often unrepresented in housing decisions. As the 2040 General Plan Update and Climate Action Plan moves forward, we look forward to being involved in the development of those plans.

Regards,

Ansel Lundberg
Chair, House Sacramento
www.housesac.org

From:	Chris Brown
To:	Scott Johnson
Subject:	comments on scoping 2040 MEIR GENERAL PLAN UPDATE AND CLIMATE ACTION PLAN
Date:	Thursday, February 28, 2019 3:50:06 PM
Attachments:	SCC comments on 2040 CAP.pdf

Hi Scott,

Please find attached some comments focused on the scope of the CAP for the 2040 Plan Update. In general, our comments can be understood to support activities necessary to meet the goal of rapid removal of fossil fuels from our energy, transportation, buildings, manufacturing and food systems. In view of recent and rapidly accelerating impacts of climate change, we support activities that reach zero fossil fuel emissions as fast as possible. Our comments can be understood to support both the options in the attached document and also support more aggressive options.

Chris Brown

RE: City of Sacramento MEIR for 2040 General Plan and CAP
Date: February 28, 2019
From: Chris Brown, on behalf of Sacramento Climate Coalition

Topics to be considered include Energy, Transportation, Industry, Food, Water, and City Services. The goal should be a rapid decarbonization of our local economic and social activities with a consideration toward the targeting of programs to alleviate current impacts on disadvantaged communities and training for the preservation of high wage union jobs in a new green economy.

Please see below a list of elements we believe need to be examined for implementation at the fastest speed possible, in other words, by 2030, so that the last ten years of the plan horizon can be spent on fine-tuning and achieving the complete elimination of fossil fuels from the local economy. Here are the elements we think need to be included, but not limited to:

- Include project alternatives with increased density in housing options, high and low-rise multi-unit, for infill development to meet new population projections.
- Changes to transportation resources to improve opportunities to use alternatives to the standard -car/truck/suv transportation choices – including more bike/small scale transit options lanes; more EV charging stations;
- Utilization of 70% of all qualified rooftops within the City of Sacramento to receive rooftop solar panel installations, for a cumulative distributed solar power generation of 1,750 MW of new installed rooftop DC capacity.
- The development of large-space, grid-scale solar systems are also required to meet both current electricity demand and additional load requirements as a result of fuel-switching from fossil fuel consumption in residences and gasoline in the transportation sector. The cumulative installed capacity needs for grid-connected solar in the plan is 1,523 MW of new installed grid-scale solar generation capacity. New wind resource development is also needed to provide energy during off-solar peak periods. The City of Sacramento site 668 MW of installed AC wind generation capacity, using new 110-meter hub turbines in areas identified by NREL to have a gross wind capacity factor of 34% or higher.
- Rapid and deep reductions in The City's electrical energy use are provided through an aggressive deep-energy efficiency retrofit program that installs city-produced mini-split (ductless) and rooftop heat pump systems, retrofits of all natural gas, fuel oil and conventional electric residential water heating systems with heat pump water heaters, and installs blown-in cellulose rooftop insulation.
- City-wide natural gas and/or fuel oil consumption must also be switched to electrical power supplied appliances to achieve a zero net greenhouse gas emissions system and to improve in home air quality. To achieve this goal, The City contracts government-owned, contractor operated (GOCO) manufacturing facilities for the production of heat

pump water heaters that eventually replace every standard electric and natural gas water heating appliance. The installation of electric stoves and water heat systems are to be incorporated into the residential deep energy efficiency retrofit program.

- Increased use of local gardens, community gardens, urban agriculture, permaculture inside the urban area and peri-urban area to provide food locally and sequester carbon in soils. To include comprehensive municipal composting of food and yard wastes that are combined with regionally-sourced biochar feedstocks and utilized within a distributed agriculture program modeled after the popular "Victory Gardens" project of World War II. This system works to develop 45,700 new front- and backyard gardens in the City. To achieve a targeted 80% reduction in all imported vegetable produce. To achieve significant reductions in greenhouse gas emissions resulting from water transport and storage in Sacramento, and to facilitate the local production of food, the "Green Gardens" project also develops greywater and rooftop catchment and storage systems in participating households. Additional rooftop solar-powered water vapor condensers, rapidly entering the market, are installed to attain the targeted reduction in city water system consumption by 56%.
- Workforce development activities to assist in the direct implementation of these sweeping transformations are expected to create 67,800 new jobs in addition to the significant growth projected in the manufacturing and services sectors.
- Delivery of additional subsidies in economically disadvantage communities; training and services to communities who have been most impacted by air pollution and economic inequities, as defined by CalEnviroScreen.
- Proactive solicitation of input and deliberative decision-making from and with communities most impacted by asthma and other environmental related health impacts within the planning area.

Thursday Feb. 28, 2019

Via Electronic Mail

Scott Johnson, Senior Planner
City of Sacramento Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811-0218
Email: SRJohnson@cityofsacramento.org

Re: Sierra Club California's Comments on the City of Sacramento 2040 General Plan Update and Climate Action Plan

Dear Mr. Johnson--

I am contacting you on behalf of the Sierra Club California to express our strong support for the City of Sacramento's effort to develop a Communitywide Greenhouse Gas Reduction and Climate Change Adaptation (Climate Action Plan).

I understand that this is the beginning of the process, and that much work must be done to identify, approve, and implement the many specific measures needed to achieve the necessary greenhouse gas reductions. Sierra Club California is ready to support the City in developing a strong plan to achieve the most ambitious reductions possible. To that end, we offer these comments regarding potential measures that we strongly recommend the City include in the Climate Action Plan.

AB 262- Buy Clean California Act (2017)

Purchasing power is one of the most effective tools consumers can use to influence pollution reduction. State and local governments are consumers who can reduce pollution by putting their money where their policy is. Assembly Bill 262, the Buy Clean California Act, signed into law in 2017, is the country's first law that addresses greenhouse gas emissions within the State's supply chain. It does this by directing the State to purchase certain construction materials (such as structural steel, carbon steel rebar, mineral wool board insulation, and flat glass) from manufacturers that have invested in reducing their greenhouse gas pollution during the production process. The pollution is disclosed through an

Environmental Product Declaration (EPD), which is similar to a "nutritional label" but provides information on the amount of greenhouse gas emissions that were produced during the manufacturing process. Contractors bidding on State projects must submit an EPD for the specified materials to be used in the project.

California is the 5th largest economy in the world, and because of this we have great market influence. The State of California has more than $100 billion in long-term obligations for infrastructure projects, spending roughly $10 billion per year on infrastructure projects--from roads to bridges to buildings. This does not include the money that is spent by local and regional governments on infrastructure purchasing.

While the law currently only requires State agencies to buy clean, city and county governments have the opportunity to implement similar policies at the local level. Many municipal governments across California have adopted sustainable purchasing policies into their City and/or County procurement processes. Sierra Club CA recommends that Buy Clean policies be adopted into the City's CAP; and if an environmentally preferable purchasing program currently exists within the City, that Buy Clean be added to the pre-existing policy.

Adopting Buy Clean as a qualitative measure into the City's CAP would ensure that public dollars are spent in a way that is consistent with our climate goals. Once data on projected greenhouse gas emissions reductions becomes available, then Buy Clean can be adopted as a quantitative measure under the CAP. Sierra Club CA has been working with Sacramento County on developing their CAP and including Buy Clean policies into their next bid specification update. If there are any opportunities for collaboration between the City and County of Sacramento on Buy Clean and/or the CAP as a whole, we would recommend taking them.

Thank you for considering including this important policy into the Sacramento City Climate Action Plan. Please Contact Molly Culton (Sierra Club CA Buy Clean Campaign) if you have any questions.

Molly Culton
Buy Clean | Sierra Club California
909 12th Street, Ste 202, Sacramento, CA 95814
Email: molly.culton@sierraclub.org
Phone: (916) 557-1100 x1100

Appendix B
Air Quality Modeling Output

City of Sacramento 2040 General Plan Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	City of Sacramento 2040 General Plan
Operational Year	2040
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.4
Location	38.576817938190544, -121.49008714496522
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	504
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.12

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	12,960	1000sqft	298	12,959,500	129,550	0.00	—	—

Hospital	6,159	1000sqft	141	6,158,950	615,895	0.00	—	—
User Defined Commercial	4,034,000	User Defined Unit	92.6	4,034,000	403,400	0.00	—	—
Elementary School	4,031	1000sqft	92.5	4,031,300	403,130	403,130	—	—
General Heavy Industry	8,350	1000sqft	192	8,350,000	835,000	0.00	—	—
High Turnover (Sit Down Restaurant)	2,446	1000sqft	56.1	2,445,600	244,560	0.00	—	—
Apartments Mid Rise	46.0	Dwelling Unit	1,235	46,929,000	4,692,900	0.00	129	—
Condo/Townhouse	9.00	Dwelling Unit	571	9,143,000	914,300	0.00	25.0	—
Single Family Housing	12.0	Dwelling Unit	4,201	23,292,000	2,329,200	0.00	34.0	—
Regional Shopping Center	2,672	1000sqft	61.3	2,671,650	267,165	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	125,500	116,922	89,448	1,375,157	3,704	1,531	153,169	154,700	1,439	27,082	28,521	82,467	378,195,573	378,278,041	17,241	12,841	218,930	382,754,670

Mit.	125,500	116,922	89,448	1,375,15	3,704	1,531	153,169	154,700	1,439	27,082	28,521	82,467	378,195,	378,277,	17,241	12,841	218,930	382,754,
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%	< 0.5%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	—	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	117,210	108,614	106,516	1,086,725	3,363	1,530	153,169	154,699	1,436	27,082	28,519	82,467	343,795,927	343,878,395	18,004	14,069	12,140	348,533,252
Mit.	117,210	108,614	106,516	1,086,725	3,363	1,530	153,169	154,699	1,436	27,082	28,519	82,467	343,795,530	343,877,998	18,004	14,069	12,140	348,532,854
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%	< 0.5%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	—	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	89,057	83,307	74,817	838,646	2,592	1,164	115,572	116,737	1,094	20,435	21,529	82,467	265,020,508	265,102,975	14,963	10,187	75,802	268,588,538
Mit.	89,057	83,307	74,817	838,646	2,592	1,164	115,572	116,736	1,094	20,435	21,529	82,467	265,020,111	265,102,578	14,963	10,187	75,802	268,588,140
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%	< 0.5%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16,253	15,204	13,654	153,053	473	212	21,092	21,304	200	3,729	3,929	13,653	43,877,169	43,890,823	2,477	1,687	12,550	44,467,898
Mit.	16,253	15,204	13,654	153,053	473	212	21,092	21,304	200	3,729	3,929	13,653	43,877,104	43,890,757	2,477	1,687	12,550	44,467,832
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%	< 0.5%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	125,136	113,757	88,991	1,373,013	3,701	1,495	153,169	154,664	1,402	27,082	28,484	—	377,480,638	377,480,638	10,320	12,804	212,296	381,766,611
Area	315	3,141	14.9	1,772	0.11	2.38	—	2.38	3.14	—	3.14	0.00	7,280	7,280	0.31	0.06	—	7,307
Energy	48.7	24.3	443	372	2.66	33.6	—	33.6	33.6	—	33.6	—	703,876	703,876	77.4	5.03	—	707,309
Water	—	—	—	—	—	—	—	—	—	—	—	14,496	3,779	18,275	50.5	31.8	—	29,000
Waste	—	—	—	—	—	—	—	—	—	—	—	67,971	0.00	67,971	6,793	0.00	—	237,808
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,635	6,635
Total	125,500	116,922	89,448	1,375,157	3,704	1,531	153,169	154,700	1,439	27,082	28,521	82,467	378,195,573	378,278,041	17,241	12,841	218,930	382,754,670
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	117,161	105,740	106,073	1,086,353	3,361	1,496	153,169	154,665	1,403	27,082	28,485	—	343,088,272	343,088,272	11,083	14,032	5,505	347,552,501
Area	0.00	2,850	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	48.7	24.3	443	372	2.66	33.6	—	33.6	33.6	—	33.6	—	703,876	703,876	77.4	5.03	—	707,309
Water	—	—	—	—	—	—	—	—	—	—	—	14,496	3,779	18,275	50.5	31.8	—	29,000
Waste	—	—	—	—	—	—	—	—	—	—	—	67,971	0.00	67,971	6,793	0.00	—	237,808
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,635	6,635
Total	117,210	108,614	106,516	1,086,725	3,363	1,530	153,169	154,699	1,436	27,082	28,519	82,467	343,795,927	343,878,395	18,004	14,069	12,140	348,533,252
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	88,792	80,234	74,364	837,061	2,590	1,129	115,572	116,701	1,058	20,435	21,493	—	264,307,866	264,307,866	8,042	10,150	69,167	267,602,782
Area	216	3,049	10.2	1,214	0.07	1.63	—	1.63	2.15	—	2.15	0.00	4,987	4,987	0.21	0.04	—	5,005
Energy	48.7	24.3	443	372	2.66	33.6	—	33.6	33.6	—	33.6	—	703,876	703,876	77.4	5.03	—	707,309
Water	—	—	—	—	—	—	—	—	—	—	—	14,496	3,779	18,275	50.5	31.8	—	29,000

Waste	—	—	—	—	—	—	—	—	—	—	—	67,971	0.00	67,971	6,793	0.00	—	237,808
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,635	6,635
Total	89,057	83,307	74,817	838,646	2,592	1,164	115,572	116,737	1,094	20,435	21,529	82,467	265,020,508	265,102,975	14,963	10,187	75,802	268,588,538
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16,205	14,643	13,571	152,764	473	206	21,092	21,298	193	3,729	3,922	—	43,759,184	43,759,184	1,331	1,680	11,451	44,304,694
Area	39.4	556	1.86	221	0.01	0.30	—	0.30	0.39	—	0.39	0.00	826	826	0.03	0.01	—	829
Energy	8.89	4.44	80.8	67.8	0.48	6.14	—	6.14	6.14	—	6.14	—	116,535	116,535	12.8	0.83	—	117,103
Water	—	—	—	—	—	—	—	—	—	—	—	2,400	626	3,026	8.36	5.26	—	4,801
Waste	—	—	—	—	—	—	—	—	—	—	—	11,253	0.00	11,253	1,125	0.00	—	39,372
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,098	1,098
Total	16,253	15,204	13,654	153,053	473	212	21,092	21,304	200	3,729	3,929	13,653	43,877,169	43,890,823	2,477	1,687	12,550	44,467,898

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	125,136	113,757	88,991	1,373,013	3,701	1,495	153,169	154,664	1,402	27,082	28,484	—	377,480,638	377,480,638	10,320	12,804	212,296	381,766,611
Area	315	3,141	14.9	1,772	0.11	2.38	—	2.38	3.14	—	3.14	0.00	7,280	7,280	0.31	0.06	—	7,307
Energy	48.7	24.3	442	372	2.65	33.6	—	33.6	33.6	—	33.6	—	703,479	703,479	77.3	5.03	—	706,911
Water	—	—	—	—	—	—	—	—	—	—	—	14,496	3,779	18,275	50.5	31.8	—	29,000
Waste	—	—	—	—	—	—	—	—	—	—	—	67,971	0.00	67,971	6,793	0.00	—	237,808
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,635	6,635
Total	125,500	116,922	89,448	1,375,157	3,704	1,531	153,169	154,700	1,439	27,082	28,521	82,467	378,195,176	378,277,644	17,241	12,841	218,930	382,754,271

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	117,161	105,740	106,073	1,086,353	3,361	1,496	153,169	154,665	1,403	27,082	28,485	—	343,088,272	343,088,272	11,083	14,032	5,505	347,552,501
Area	0.00	2,850	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	48.7	24.3	442	372	2.65	33.6	—	33.6	33.6	—	33.6	—	703,479	703,479	77.3	5.03	—	706,911
Water	—	—	—	—	—	—	—	—	—	—	—	14,496	3,779	18,275	50.5	31.8	—	29,000
Waste	—	—	—	—	—	—	—	—	—	—	—	67,971	0.00	67,971	6,793	0.00	—	237,808
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,635	6,635
Total	117,210	108,614	106,516	1,086,725	3,363	1,530	153,169	154,699	1,436	27,082	28,519	82,467	343,795,530	343,877,998	18,004	14,069	12,140	348,532,854
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	88,792	80,234	74,364	837,061	2,590	1,129	115,572	116,701	1,058	20,435	21,493	—	264,307,866	264,307,866	8,042	10,150	69,167	267,602,782
Area	216	3,049	10.2	1,214	0.07	1.63	—	1.63	2.15	—	2.15	0.00	4,987	4,987	0.21	0.04	—	5,005
Energy	48.7	24.3	442	372	2.65	33.6	—	33.6	33.6	—	33.6	—	703,479	703,479	77.3	5.03	—	706,911
Water	—	—	—	—	—	—	—	—	—	—	—	14,496	3,779	18,275	50.5	31.8	—	29,000
Waste	—	—	—	—	—	—	—	—	—	—	—	67,971	0.00	67,971	6,793	0.00	—	237,808
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,635	6,635
Total	89,057	83,307	74,817	838,646	2,592	1,164	115,572	116,736	1,094	20,435	21,529	82,467	265,020,111	265,102,578	14,963	10,187	75,802	268,588,140
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16,205	14,643	13,571	152,764	473	206	21,092	21,298	193	3,729	3,922	—	43,759,184	43,759,184	1,331	1,680	11,451	44,304,694
Area	39.4	556	1.86	221	0.01	0.30	—	0.30	0.39	—	0.39	0.00	826	826	0.03	0.01	—	829
Energy	8.88	4.44	80.7	67.8	0.48	6.14	—	6.14	6.14	—	6.14	—	116,469	116,469	12.8	0.83	—	117,037
Water	—	—	—	—	—	—	—	—	—	—	—	2,400	626	3,026	8.36	5.26	—	4,801
Waste	—	—	—	—	—	—	—	—	—	—	—	11,253	0.00	11,253	1,125	0.00	—	39,372

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,098	1,098
Total	16,253	15,204	13,654	153,053	473	212	21,092	21,304	200	3,729	3,929	13,653	43,877,104	43,890,757	2,477	1,687	12,550	44,467,832

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	394	358	281	4,329	11.7	4.72	483	488	4.42	85.4	89.8	—	1,190,466	1,190,466	32.5	40.4	670	1,203,979
Hospital	206	187	147	2,265	6.10	2.47	253	255	2.31	44.7	47.0	—	622,689	622,689	17.0	21.1	350	629,757
User Defined Commercial	122,715	111,546	87,324	1,347,656	3,633	1,468	150,367	151,835	1,376	26,587	27,963	—	370,565,061	370,565,061	10,126	12,566	208,412	374,771,409
Elementary School	246	223	175	2,699	7.28	2.94	301	304	2.76	53.2	56.0	—	742,155	742,155	20.3	25.2	417	750,579
General Heavy Industry	167	152	119	1,839	4.96	2.00	205	207	1.88	36.3	38.2	—	505,581	505,581	13.8	17.1	284	511,320
High Turnover (Sit Down Restaurant)	1,090	990	775	11,965	32.3	13.0	1,335	1,348	12.2	236	248	—	3,290,004	3,290,004	89.9	112	1,850	3,327,349

Apartments	0.87	0.78	0.69	11.2	0.03	0.01	1.28	1.29	0.01	0.23	0.24	—	3,147	3,147	0.08	0.10	1.78	3,182
Condo/Townhouse	0.25	0.23	0.20	3.27	0.01	< 0.005	0.38	0.38	< 0.005	0.07	0.07	—	921	921	0.02	0.03	0.52	931
Single Family Housing	0.40	0.36	0.32	5.11	0.01	0.01	0.59	0.59	0.01	0.10	0.11	—	1,440	1,440	0.04	0.05	0.81	1,456
Regional Shopping Center	317	298	169	2,241	5.48	2.32	223	225	2.17	39.4	41.6	—	559,174	559,174	20.3	22.3	309	566,649
Total	125,136	113,757	88,991	1,373,013	3,701	1,495	153,169	154,664	1,402	27,082	28,484	—	377,480,638	377,480,638	10,320	12,804	212,296	381,766,611
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	369	333	334	3,425	10.6	4.72	483	488	4.42	85.4	89.8	—	1,081,998	1,081,998	34.9	44.2	17.4	1,096,073
Hospital	193	174	175	1,791	5.54	2.47	253	255	2.31	44.7	47.0	—	565,954	565,954	18.3	23.1	9.08	573,316
User Defined Commercial	114,895	103,686	104,088	1,066,127	3,299	1,469	150,367	151,836	1,377	26,587	27,964	—	336,801,627	336,801,627	10,873	13,772	5,404	341,182,800
Elementary School	230	208	208	2,135	6.61	2.94	301	304	2.76	53.2	56.0	—	674,535	674,535	21.8	27.6	10.8	683,309
General Heavy Industry	157	141	142	1,455	4.50	2.00	205	207	1.88	36.3	38.2	—	459,516	459,516	14.8	18.8	7.37	465,494
High Turnover (Sit Down Restaurant)	1,020	921	924	9,465	29.3	13.0	1,335	1,348	12.2	236	248	—	2,990,240	2,990,240	96.5	122	48.0	3,029,138
Apartments Mid Rise	0.82	0.73	0.83	8.62	0.03	0.01	1.28	1.29	0.01	0.23	0.24	—	2,859	2,859	0.08	0.11	0.05	2,895

Condo/T	0.24	0.21	0.24	2.52	0.01	< 0.005	0.38	0.38	< 0.005	0.07	0.07	—	837	837	0.02	0.03	0.01	847
Single Family Housing	0.37	0.33	0.38	3.95	0.01	0.01	0.59	0.59	0.01	0.10	0.11	—	1,308	1,308	0.04	0.05	0.02	1,324
Regional Shopping Center	295	275	200	1,939	4.99	2.32	223	225	2.18	39.4	41.6	—	509,398	509,398	23.2	24.6	8.01	517,305
Total	117,161	105,740	106,073	1,086,353	3,361	1,496	153,169	154,665	1,403	27,082	28,485	—	343,088,272	343,088,272	11,083	14,032	5,505	347,552,501
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	51.1	46.1	42.9	483	1.50	0.65	66.7	67.4	0.61	11.8	12.4	—	138,436	138,436	4.20	5.31	36.2	140,161
Hospital	32.0	28.9	26.9	303	0.94	0.41	41.8	42.3	0.38	7.40	7.78	—	86,800	86,800	2.64	3.33	22.7	87,881
User Defined Commercial	15,898	14,361	13,345	150,307	465	203	20,773	20,975	190	3,673	3,863	—	43,092,145	43,092,145	1,308	1,653	11,278	43,628,814
Elementary School	30.0	27.1	25.2	284	0.88	0.38	39.3	39.6	0.36	6.94	7.30	—	81,437	81,437	2.47	3.12	21.3	82,452
General Heavy Industry	19.9	17.9	16.7	188	0.58	0.25	26.0	26.2	0.24	4.59	4.83	—	53,853	53,853	1.64	2.07	14.1	54,524
High Turnover (Sit Down Restaurant)	131	122	88.6	936	2.62	1.18	115	117	1.10	20.4	21.5	—	242,642	242,642	9.20	10.4	62.7	246,033
Apartments Mid Rise	0.14	0.13	0.13	1.54	< 0.005	< 0.005	0.22	0.22	< 0.005	0.04	0.04	—	459	459	0.01	0.02	0.12	465
Condo/Townhouse	0.04	0.03	0.04	0.43	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	127	127	< 0.005	< 0.005	0.03	128
Single Family Housing	0.07	0.06	0.06	0.73	< 0.005	< 0.005	0.10	0.11	< 0.005	0.02	0.02	—	216	216	0.01	0.01	0.06	219

Regional Shopping Center	42.0	39.3	25.6	260	0.68	0.31	29.7	30.0	0.29	5.25	5.55	—	63,068	63,068	2.73	2.91	16.1	64,019
Total	16,205	14,643	13,571	152,764	473	206	21,092	21,298	193	3,729	3,922	—	43,759,184	43,759,184	1,331	1,680	11,451	44,304,694

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	394	358	281	4,329	11.7	4.72	483	488	4.42	85.4	89.8	—	1,190,466	1,190,466	32.5	40.4	670	1,203,979
Hospital	206	187	147	2,265	6.10	2.47	253	255	2.31	44.7	47.0	—	622,689	622,689	17.0	21.1	350	629,757
User Defined Commercial	122,715	111,546	87,324	1,347,656	3,633	1,468	150,367	151,835	1,376	26,587	27,963	—	370,565,061	370,565,061	10,126	12,566	208,412	374,771,409
Elementary School	246	223	175	2,699	7.28	2.94	301	304	2.76	53.2	56.0	—	742,155	742,155	20.3	25.2	417	750,579
General Heavy Industry	167	152	119	1,839	4.96	2.00	205	207	1.88	36.3	38.2	—	505,581	505,581	13.8	17.1	284	511,320
High Turnover (Sit Down Restaurant)	1,090	990	775	11,965	32.3	13.0	1,335	1,348	12.2	236	248	—	3,290,004	3,290,004	89.9	112	1,850	3,327,349
Apartments Mid Rise	0.87	0.78	0.69	11.2	0.03	0.01	1.28	1.29	0.01	0.23	0.24	—	3,147	3,147	0.08	0.10	1.78	3,182

Condo/Townhouse	0.25	0.23	0.20	3.27	0.01	< 0.005	0.38	0.38	< 0.005	0.07	0.07	—	921	921	0.02	0.03	0.52	931
Single Family Housing	0.40	0.36	0.32	5.11	0.01	0.01	0.59	0.59	0.01	0.10	0.11	—	1,440	1,440	0.04	0.05	0.81	1,456
Regional Shopping Center	317	298	169	2,241	5.48	2.32	223	225	2.17	39.4	41.6	—	559,174	559,174	20.3	22.3	309	566,649
Total	125,136	113,757	88,991	1,373,013	3,701	1,495	153,169	154,664	1,402	27,082	28,484	—	377,480,638	377,480,638	10,320	12,804	212,296	381,766,611
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	369	333	334	3,425	10.6	4.72	483	488	4.42	85.4	89.8	—	1,081,998	1,081,998	34.9	44.2	17.4	1,096,073
Hospital	193	174	175	1,791	5.54	2.47	253	255	2.31	44.7	47.0	—	565,954	565,954	18.3	23.1	9.08	573,316
User Defined Commercial	114,895	103,686	104,088	1,066,127	3,299	1,469	150,367	151,836	1,377	26,587	27,964	—	336,801,627	336,801,627	10,873	13,772	5,404	341,182,800
Elementary School	230	208	208	2,135	6.61	2.94	301	304	2.76	53.2	56.0	—	674,535	674,535	21.8	27.6	10.8	683,309
General Heavy Industry	157	141	142	1,455	4.50	2.00	205	207	1.88	36.3	38.2	—	459,516	459,516	14.8	18.8	7.37	465,494
High Turnover (Sit Down Restaurant)	1,020	921	924	9,465	29.3	13.0	1,335	1,348	12.2	236	248	—	2,990,240	2,990,240	96.5	122	48.0	3,029,138
Apartments Mid Rise	0.82	0.73	0.83	8.62	0.03	0.01	1.28	1.29	0.01	0.23	0.24	—	2,859	2,859	0.08	0.11	0.05	2,895

Condo/Townhouse	0.24	0.21	0.24	2.52	0.01	< 0.005	0.38	0.38	< 0.005	0.07	0.07	—	837	837	0.02	0.03	0.01	847
Single Family Housing	0.37	0.33	0.38	3.95	0.01	0.01	0.59	0.59	0.01	0.10	0.11	—	1,308	1,308	0.04	0.05	0.02	1,324
Regional Shopping Center	295	275	200	1,939	4.99	2.32	223	225	2.18	39.4	41.6	—	509,398	509,398	23.2	24.6	8.01	517,305
Total	117,161	105,740	106,073	1,086,353	3,361	1,496	153,169	154,665	1,403	27,082	28,485	—	343,088,272	343,088,272	11,083	14,032	5,505	347,552,501
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	51.1	46.1	42.9	483	1.50	0.65	66.7	67.4	0.61	11.8	12.4	—	138,436	138,436	4.20	5.31	36.2	140,161
Hospital	32.0	28.9	26.9	303	0.94	0.41	41.8	42.3	0.38	7.40	7.78	—	86,800	86,800	2.64	3.33	22.7	87,881
User Defined Commercial	15,898	14,361	13,345	150,307	465	203	20,773	20,975	190	3,673	3,863	—	43,092,145	43,092,145	1,308	1,653	11,278	43,628,814
Elementary School	30.0	27.1	25.2	284	0.88	0.38	39.3	39.6	0.36	6.94	7.30	—	81,437	81,437	2.47	3.12	21.3	82,452
General Heavy Industry	19.9	17.9	16.7	188	0.58	0.25	26.0	26.2	0.24	4.59	4.83	—	53,853	53,853	1.64	2.07	14.1	54,524
High Turnover (Sit Down Restaurant)	131	122	88.6	936	2.62	1.18	115	117	1.10	20.4	21.5	—	242,642	242,642	9.20	10.4	62.7	246,033
Apartments Mid Rise	0.14	0.13	0.13	1.54	< 0.005	< 0.005	0.22	0.22	< 0.005	0.04	0.04	—	459	459	0.01	0.02	0.12	465
Condo/Townhouse	0.04	0.03	0.04	0.43	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	127	127	< 0.005	< 0.005	0.03	128

Single Family Housing	0.07	0.06	0.06	0.73	< 0.005	< 0.005	0.10	0.11	< 0.005	0.02	0.02	—	216	216	0.01	0.01	0.06	219
Regional Shopping Center	42.0	39.3	25.6	260	0.68	0.31	29.7	30.0	0.29	5.25	5.55	—	63,068	63,068	2.73	2.91	16.1	64,019
Total	16,205	14,643	13,571	152,764	473	206	21,092	21,298	193	3,729	3,922	—	43,759,184	43,759,184	1,331	1,680	11,451	44,304,694

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	60,494	60,494	10.5	1.39	—	61,172
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	50,363	50,363	8.78	1.16	—	50,927
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	18,831	18,831	3.28	0.43	—	19,042
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	6,231	6,231	1.09	0.14	—	6,301
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	15,221	15,221	2.65	0.35	—	15,391
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	19,367	19,367	3.38	0.44	—	19,584

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	46.2	46.2	0.01	< 0.005	—	46.7
Condo/T ownhous e	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4	< 0.005	< 0.005	—	11.5
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	21.7	21.7	< 0.005	< 0.005	—	21.9
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	5,071	5,071	0.88	0.12	—	5,127
Total	—	—	—	—	—	—	—	—	—	—	—	—	175,656	175,656	30.6	4.04	—	177,624
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	60,494	60,494	10.5	1.39	—	61,172
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	50,363	50,363	8.78	1.16	—	50,927
User Defined Commerci al	—	—	—	—	—	—	—	—	—	—	—	—	18,831	18,831	3.28	0.43	—	19,042
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	6,231	6,231	1.09	0.14	—	6,301
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	15,221	15,221	2.65	0.35	—	15,391
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	19,367	19,367	3.38	0.44	—	19,584
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	46.2	46.2	0.01	< 0.005	—	46.7

Condo/Townhous	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4	< 0.005	< 0.005	—	11.5
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	21.7	21.7	< 0.005	< 0.005	—	21.9
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	5,071	5,071	0.88	0.12	—	5,127
Total	—	—	—	—	—	—	—	—	—	—	—	—	175,656	175,656	30.6	4.04	—	177,624
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	10,016	10,016	1.75	0.23	—	10,128
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	8,338	8,338	1.45	0.19	—	8,432
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	3,118	3,118	0.54	0.07	—	3,153
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032	0.18	0.02	—	1,043
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	2,520	2,520	0.44	0.06	—	2,548
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	3,207	3,207	0.56	0.07	—	3,242
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	7.64	7.64	< 0.005	< 0.005	—	7.73
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88	< 0.005	< 0.005	—	1.90
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	3.59	3.59	< 0.005	< 0.005	—	3.63

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	839	839	0.15	0.02	—	849
Total	—	—	—	—	—	—	—	—	—	—	—	—	29,082	29,082	5.07	0.67	—	29,408

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	60,494	60,494	10.5	1.39	—	61,172
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	50,363	50,363	8.78	1.16	—	50,927
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	18,831	18,831	3.28	0.43	—	19,042
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	6,231	6,231	1.09	0.14	—	6,301
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	15,221	15,221	2.65	0.35	—	15,391
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	19,367	19,367	3.38	0.44	—	19,584
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	46.6	46.6	0.01	< 0.005	—	47.1
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	11.9	11.9	< 0.005	< 0.005	—	12.0

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	22.6	22.6	< 0.005	< 0.005	—	22.8
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	5,071	5,071	0.88	0.12	—	5,127
Total	—	—	—	—	—	—	—	—	—	—	—	—	175,658	175,658	30.6	4.04	—	177,626
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	60,494	60,494	10.5	1.39	—	61,172
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	50,363	50,363	8.78	1.16	—	50,927
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	18,831	18,831	3.28	0.43	—	19,042
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	6,231	6,231	1.09	0.14	—	6,301
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	15,221	15,221	2.65	0.35	—	15,391
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	19,367	19,367	3.38	0.44	—	19,584
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	46.6	46.6	0.01	< 0.005	—	47.1
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	11.9	11.9	< 0.005	< 0.005	—	12.0
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	22.6	22.6	< 0.005	< 0.005	—	22.8

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	5,071	5,071	0.88	0.12	—	5,127
Total	—	—	—	—	—	—	—	—	—	—	—	—	175,658	175,658	30.6	4.04	—	177,626
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	10,016	10,016	1.75	0.23	—	10,128
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	8,338	8,338	1.45	0.19	—	8,432
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	3,118	3,118	0.54	0.07	—	3,153
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032	0.18	0.02	—	1,043
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	2,520	2,520	0.44	0.06	—	2,548
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	3,207	3,207	0.56	0.07	—	3,242
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	7.71	7.71	< 0.005	< 0.005	—	7.80
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1.96	1.96	< 0.005	< 0.005	—	1.98
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	3.74	3.74	< 0.005	< 0.005	—	3.78
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	839	839	0.15	0.02	—	849
Total	—	—	—	—	—	—	—	—	—	—	—	—	29,082	29,082	5.07	0.67	—	29,408

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	12.7	6.37	116	97.3	0.69	8.80	—	8.80	8.80	—	8.80	—	138,180	138,180	12.2	0.26	—	138,563
Hospital	10.1	5.07	92.1	77.4	0.55	7.00	—	7.00	7.00	—	7.00	—	109,900	109,900	9.73	0.21	—	110,205
User Defined Commercial	3.97	1.98	36.0	30.3	0.22	2.74	—	2.74	2.74	—	2.74	—	43,012	43,012	3.81	0.08	—	43,131
Elementary School	2.68	1.34	24.3	20.4	0.15	1.85	—	1.85	1.85	—	1.85	—	29,041	29,041	2.57	0.05	—	29,121
General Heavy Industry	9.76	4.88	88.7	74.5	0.53	6.74	—	6.74	6.74	—	6.74	—	105,827	105,827	9.37	0.20	—	106,120
High Turnover (Sit Down Restaurant)	8.70	4.35	79.1	66.4	0.47	6.01	—	6.01	6.01	—	6.01	—	94,323	94,323	8.35	0.18	—	94,585
Apartments Mid Rise	0.02	0.01	0.16	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	197	197	0.02	< 0.005	—	198
Condo/Townhouse	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.5	50.5	< 0.005	< 0.005	—	50.6
Single Family Housing	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	151	151	0.01	< 0.005	—	152

Regional Shopping Center	0.70	0.35	6.32	5.31	0.04	0.48	—	0.48	0.48	—	0.48	—	7,539	7,539	0.67	0.01	—	7,560
Total	48.7	24.3	443	372	2.66	33.6	—	33.6	33.6	—	33.6	—	528,220	528,220	46.7	0.99	—	529,685
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	12.7	6.37	116	97.3	0.69	8.80	—	8.80	8.80	—	8.80	—	138,180	138,180	12.2	0.26	—	138,563
Hospital	10.1	5.07	92.1	77.4	0.55	7.00	—	7.00	7.00	—	7.00	—	109,900	109,900	9.73	0.21	—	110,205
User Defined Commercial	3.97	1.98	36.0	30.3	0.22	2.74	—	2.74	2.74	—	2.74	—	43,012	43,012	3.81	0.08	—	43,131
Elementary School	2.68	1.34	24.3	20.4	0.15	1.85	—	1.85	1.85	—	1.85	—	29,041	29,041	2.57	0.05	—	29,121
General Heavy Industry	9.76	4.88	88.7	74.5	0.53	6.74	—	6.74	6.74	—	6.74	—	105,827	105,827	9.37	0.20	—	106,120
High Turnover (Sit Down Restaurant)	8.70	4.35	79.1	66.4	0.47	6.01	—	6.01	6.01	—	6.01	—	94,323	94,323	8.35	0.18	—	94,585
Apartments Mid Rise	0.02	0.01	0.16	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	197	197	0.02	< 0.005	—	198
Condo/Townhouse	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.5	50.5	< 0.005	< 0.005	—	50.6
Single Family Housing	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	151	151	0.01	< 0.005	—	152
Regional Shopping Center	0.70	0.35	6.32	5.31	0.04	0.48	—	0.48	0.48	—	0.48	—	7,539	7,539	0.67	0.01	—	7,560

Total	48.7	24.3	443	372	2.66	33.6	—	33.6	33.6	—	33.6	—	528,220	528,220	46.7	0.99	—	529,685
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	2.32	1.16	21.1	17.8	0.13	1.61	—	1.61	1.61	—	1.61	—	22,877	22,877	2.02	0.04	—	22,941
Hospital	1.85	0.92	16.8	14.1	0.10	1.28	—	1.28	1.28	—	1.28	—	18,195	18,195	1.61	0.03	—	18,246
User Defined Commercial	0.72	0.36	6.58	5.53	0.04	0.50	—	0.50	0.50	—	0.50	—	7,121	7,121	0.63	0.01	—	7,141
Elementary School	0.49	0.24	4.44	3.73	0.03	0.34	—	0.34	0.34	—	0.34	—	4,808	4,808	0.43	0.01	—	4,821
General Heavy Industry	1.78	0.89	16.2	13.6	0.10	1.23	—	1.23	1.23	—	1.23	—	17,521	17,521	1.55	0.03	—	17,569
High Turnover (Sit Down Restaurant)	1.59	0.79	14.4	12.1	0.09	1.10	—	1.10	1.10	—	1.10	—	15,616	15,616	1.38	0.03	—	15,660
Apartments Mid Rise	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.6	32.6	< 0.005	< 0.005	—	32.7
Condo/Townhouse	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.36	8.36	< 0.005	< 0.005	—	8.39
Single Family Housing	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.0	25.0	< 0.005	< 0.005	—	25.1
Regional Shopping Center	0.13	0.06	1.15	0.97	0.01	0.09	—	0.09	0.09	—	0.09	—	1,248	1,248	0.11	< 0.005	—	1,252
Total	8.89	4.44	80.8	67.8	0.48	6.14	—	6.14	6.14	—	6.14	—	87,453	87,453	7.74	0.16	—	87,695

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	12.7	6.37	116	97.3	0.69	8.80	—	8.80	8.80	—	8.80	—	138,180	138,180	12.2	0.26	—	138,563
Hospital	10.1	5.07	92.1	77.4	0.55	7.00	—	7.00	7.00	—	7.00	—	109,900	109,900	9.73	0.21	—	110,205
User Defined Commercial	3.97	1.98	36.0	30.3	0.22	2.74	—	2.74	2.74	—	2.74	—	43,012	43,012	3.81	0.08	—	43,131
Elementary School	2.68	1.34	24.3	20.4	0.15	1.85	—	1.85	1.85	—	1.85	—	29,041	29,041	2.57	0.05	—	29,121
General Heavy Industry	9.76	4.88	88.7	74.5	0.53	6.74	—	6.74	6.74	—	6.74	—	105,827	105,827	9.37	0.20	—	106,120
High Turnover (Sit Down Restaurant)	8.70	4.35	79.1	66.4	0.47	6.01	—	6.01	6.01	—	6.01	—	94,323	94,323	8.35	0.18	—	94,585
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.70	0.35	6.32	5.31	0.04	0.48	—	0.48	0.48	—	0.48	—	7,539	7,539	0.67	0.01	—	7,560
Total	48.7	24.3	442	372	2.65	33.6	—	33.6	33.6	—	33.6	—	527,821	527,821	46.7	0.99	—	529,285

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	12.7	6.37	116	97.3	0.69	8.80	—	8.80	8.80	—	8.80	—	138,180	138,180	12.2	0.26	—	138,563
Hospital	10.1	5.07	92.1	77.4	0.55	7.00	—	7.00	7.00	—	7.00	—	109,900	109,900	9.73	0.21	—	110,205
User Defined Commercial	3.97	1.98	36.0	30.3	0.22	2.74	—	2.74	2.74	—	2.74	—	43,012	43,012	3.81	0.08	—	43,131
Elementary School	2.68	1.34	24.3	20.4	0.15	1.85	—	1.85	1.85	—	1.85	—	29,041	29,041	2.57	0.05	—	29,121
General Heavy Industry	9.76	4.88	88.7	74.5	0.53	6.74	—	6.74	6.74	—	6.74	—	105,827	105,827	9.37	0.20	—	106,120
High Turnover (Sit Down Restaurant)	8.70	4.35	79.1	66.4	0.47	6.01	—	6.01	6.01	—	6.01	—	94,323	94,323	8.35	0.18	—	94,585
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.70	0.35	6.32	5.31	0.04	0.48	—	0.48	0.48	—	0.48	—	7,539	7,539	0.67	0.01	—	7,560
Total	48.7	24.3	442	372	2.65	33.6	—	33.6	33.6	—	33.6	—	527,821	527,821	46.7	0.99	—	529,285
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	2.32	1.16	21.1	17.8	0.13	1.61	—	1.61	1.61	—	1.61	—	22,877	22,877	2.02	0.04	—	22,941
Hospital	1.85	0.92	16.8	14.1	0.10	1.28	—	1.28	1.28	—	1.28	—	18,195	18,195	1.61	0.03	—	18,246
User Defined Commercial	0.72	0.36	6.58	5.53	0.04	0.50	—	0.50	0.50	—	0.50	—	7,121	7,121	0.63	0.01	—	7,141
Elementary School	0.49	0.24	4.44	3.73	0.03	0.34	—	0.34	0.34	—	0.34	—	4,808	4,808	0.43	0.01	—	4,821
General Heavy Industry	1.78	0.89	16.2	13.6	0.10	1.23	—	1.23	1.23	—	1.23	—	17,521	17,521	1.55	0.03	—	17,569
High Turnover (Sit Down Restaurant)	1.59	0.79	14.4	12.1	0.09	1.10	—	1.10	1.10	—	1.10	—	15,616	15,616	1.38	0.03	—	15,660
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.13	0.06	1.15	0.97	0.01	0.09	—	0.09	0.09	—	0.09	—	1,248	1,248	0.11	< 0.005	—	1,252
Total	8.88	4.44	80.7	67.8	0.48	6.14	—	6.14	6.14	—	6.14	—	87,387	87,387	7.73	0.16	—	87,629

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2,568	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	282	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	315	291	14.9	1,772	0.11	2.38	—	2.38	3.14	—	3.14	—	7,280	7,280	0.31	0.06	—	7,307
Total	315	3,141	14.9	1,772	0.11	2.38	—	2.38	3.14	—	3.14	0.00	7,280	7,280	0.31	0.06	—	7,307
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2,568	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	282	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	2,850	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	469	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	39.4	36.4	1.86	221	0.01	0.30	—	0.30	0.39	—	0.39	—	826	826	0.03	0.01	—	829
Total	39.4	556	1.86	221	0.01	0.30	—	0.30	0.39	—	0.39	0.00	826	826	0.03	0.01	—	829

4.3.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2,568	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	282	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	315	291	14.9	1,772	0.11	2.38	—	2.38	3.14	—	3.14	—	7,280	7,280	0.31	0.06	—	7,307
Total	315	3,141	14.9	1,772	0.11	2.38	—	2.38	3.14	—	3.14	0.00	7,280	7,280	0.31	0.06	—	7,307
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2,568	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	—	282	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	2,850	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	469	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	39.4	36.4	1.86	221	0.01	0.30	—	0.30	0.39	—	0.39	—	826	826	0.03	0.01	—	829
Total	39.4	556	1.86	221	0.01	0.30	—	0.30	0.39	—	0.39	0.00	826	826	0.03	0.01	—	829

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4,922	1,263	6,186	17.1	10.8	—	9,827
Hospital	—	—	—	—	—	—	—	—	—	—	—	1,652	426	2,078	5.75	3.62	—	3,300
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	1,532	395	1,927	5.33	3.36	—	3,061

Element School	—	—	—	—	—	—	—	—	—	—	—	250	68.2	318	0.87	0.55	—	503
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	4,126	1,062	5,189	14.4	9.04	—	8,241
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1,586	408	1,994	5.52	3.47	—	3,168
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.47	27.1	30.5	0.02	0.01	—	33.4
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.68	5.28	5.95	< 0.005	< 0.005	—	6.51
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.90	13.2	14.1	0.01	< 0.005	—	14.9
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	423	110	533	1.47	0.93	—	845
Total	—	—	—	—	—	—	—	—	—	—	—	14,496	3,779	18,275	50.5	31.8	—	29,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4,922	1,263	6,186	17.1	10.8	—	9,827
Hospital	—	—	—	—	—	—	—	—	—	—	—	1,652	426	2,078	5.75	3.62	—	3,300
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	1,532	395	1,927	5.33	3.36	—	3,061
Elementary School	—	—	—	—	—	—	—	—	—	—	—	250	68.2	318	0.87	0.55	—	503

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	4,126	1,062	5,189	14.4	9.04	—	8,241
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1,586	408	1,994	5.52	3.47	—	3,168
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.47	27.1	30.5	0.02	0.01	—	33.4
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.68	5.28	5.95	< 0.005	< 0.005	—	6.51
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.90	13.2	14.1	0.01	< 0.005	—	14.9
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	423	110	533	1.47	0.93	—	845
Total	—	—	—	—	—	—	—	—	—	—	—	14,496	3,779	18,275	50.5	31.8	—	29,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	815	209	1,024	2.84	1.79	—	1,627
Hospital	—	—	—	—	—	—	—	—	—	—	—	273	70.6	344	0.95	0.60	—	546
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	254	65.4	319	0.88	0.56	—	507
Elementary School	—	—	—	—	—	—	—	—	—	—	—	41.4	11.3	52.6	0.14	0.09	—	83.2
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	683	176	859	2.38	1.50	—	1,364

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	263	67.6	330	0.91	0.58	—	524
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.57	4.48	5.06	< 0.005	< 0.005	—	5.53
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.11	0.87	0.99	< 0.005	< 0.005	—	1.08
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.15	2.19	2.34	< 0.005	< 0.005	—	2.47
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	70.0	18.2	88.2	0.24	0.15	—	140
Total	—	—	—	—	—	—	—	—	—	—	—	2,400	626	3,026	8.36	5.26	—	4,801

4.4.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4,922	1,263	6,186	17.1	10.8	—	9,827
Hospital	—	—	—	—	—	—	—	—	—	—	—	1,652	426	2,078	5.75	3.62	—	3,300
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	1,532	395	1,927	5.33	3.36	—	3,061
Elementary School	—	—	—	—	—	—	—	—	—	—	—	250	68.2	318	0.87	0.55	—	503

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	4,126	1,062	5,189	14.4	9.04	—	8,241
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1,586	408	1,994	5.52	3.47	—	3,168
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.47	27.1	30.5	0.02	0.01	—	33.4
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.68	5.28	5.95	< 0.005	< 0.005	—	6.51
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.90	13.2	14.1	0.01	< 0.005	—	14.9
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	423	110	533	1.47	0.93	—	845
Total	—	—	—	—	—	—	—	—	—	—	—	14,496	3,779	18,275	50.5	31.8	—	29,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4,922	1,263	6,186	17.1	10.8	—	9,827
Hospital	—	—	—	—	—	—	—	—	—	—	—	1,652	426	2,078	5.75	3.62	—	3,300
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	1,532	395	1,927	5.33	3.36	—	3,061
Elementary School	—	—	—	—	—	—	—	—	—	—	—	250	68.2	318	0.87	0.55	—	503
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	4,126	1,062	5,189	14.4	9.04	—	8,241

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1,586	408	1,994	5.52	3.47	—	3,168
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.47	27.1	30.5	0.02	0.01	—	33.4
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.68	5.28	5.95	< 0.005	< 0.005	—	6.51
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.90	13.2	14.1	0.01	< 0.005	—	14.9
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	423	110	533	1.47	0.93	—	845
Total	—	—	—	—	—	—	—	—	—	—	—	14,496	3,779	18,275	50.5	31.8	—	29,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	815	209	1,024	2.84	1.79	—	1,627
Hospital	—	—	—	—	—	—	—	—	—	—	—	273	70.6	344	0.95	0.60	—	546
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	254	65.4	319	0.88	0.56	—	507
Elementary School	—	—	—	—	—	—	—	—	—	—	—	41.4	11.3	52.6	0.14	0.09	—	83.2
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	683	176	859	2.38	1.50	—	1,364
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	263	67.6	330	0.91	0.58	—	524

Apartments	—	—	—	—	—	—	—	—	—	—	—	0.57	4.48	5.06	< 0.005	< 0.005	—	5.53
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.11	0.87	0.99	< 0.005	< 0.005	—	1.08
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.15	2.19	2.34	< 0.005	< 0.005	—	2.47
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	70.0	18.2	88.2	0.24	0.15	—	140
Total	—	—	—	—	—	—	—	—	—	—	—	2,400	626	3,026	8.36	5.26	—	4,801

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	6,495	0.00	6,495	649	0.00	—	22,725
Hospital	—	—	—	—	—	—	—	—	—	—	—	35,848	0.00	35,848	3,583	0.00	—	125,421
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Elementary School	—	—	—	—	—	—	—	—	—	—	—	2,824	0.00	2,824	282	0.00	—	9,882

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	5,580	0.00	5,580	558	0.00	—	19,523
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	15,685	0.00	15,685	1,568	0.00	—	54,875
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.56	0.00	3.56	0.36	0.00	—	12.4
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	4.31	0.00	4.31	0.43	0.00	—	15.1
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	1,512	0.00	1,512	151	0.00	—	5,289
Total	—	—	—	—	—	—	—	—	—	—	—	67,971	0.00	67,971	6,793	0.00	—	237,808
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	6,495	0.00	6,495	649	0.00	—	22,725
Hospital	—	—	—	—	—	—	—	—	—	—	—	35,848	0.00	35,848	3,583	0.00	—	125,421
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Elementary School	—	—	—	—	—	—	—	—	—	—	—	2,824	0.00	2,824	282	0.00	—	9,882
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	5,580	0.00	5,580	558	0.00	—	19,523

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	15,685	0.00	15,685	1,568	0.00	—	54,875
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.56	0.00	3.56	0.36	0.00	—	12.4
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	4.31	0.00	4.31	0.43	0.00	—	15.1
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	1,512	0.00	1,512	151	0.00	—	5,289
Total	—	—	—	—	—	—	—	—	—	—	—	67,971	0.00	67,971	6,793	0.00	—	237,808
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1,075	0.00	1,075	107	0.00	—	3,762
Hospital	—	—	—	—	—	—	—	—	—	—	—	5,935	0.00	5,935	593	0.00	—	20,765
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Elementary School	—	—	—	—	—	—	—	—	—	—	—	468	0.00	468	46.7	0.00	—	1,636
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	924	0.00	924	92.3	0.00	—	3,232
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	2,597	0.00	2,597	260	0.00	—	9,085

Apartments	—	—	—	—	—	—	—	—	—	—	—	3.04	0.00	3.04	0.30	0.00	—	10.6
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.59	0.00	0.59	0.06	0.00	—	2.06
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.71	0.00	0.71	0.07	0.00	—	2.50
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25.0	0.00	—	876
Total	—	—	—	—	—	—	—	—	—	—	—	11,253	0.00	11,253	1,125	0.00	—	39,372

4.5.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	6,495	0.00	6,495	649	0.00	—	22,725
Hospital	—	—	—	—	—	—	—	—	—	—	—	35,848	0.00	35,848	3,583	0.00	—	125,421
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Elementary School	—	—	—	—	—	—	—	—	—	—	—	2,824	0.00	2,824	282	0.00	—	9,882
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	5,580	0.00	5,580	558	0.00	—	19,523

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	15,685	0.00	15,685	1,568	0.00	—	54,875
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.56	0.00	3.56	0.36	0.00	—	12.4
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	4.31	0.00	4.31	0.43	0.00	—	15.1
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	1,512	0.00	1,512	151	0.00	—	5,289
Total	—	—	—	—	—	—	—	—	—	—	—	67,971	0.00	67,971	6,793	0.00	—	237,808
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	6,495	0.00	6,495	649	0.00	—	22,725
Hospital	—	—	—	—	—	—	—	—	—	—	—	35,848	0.00	35,848	3,583	0.00	—	125,421
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Elementary School	—	—	—	—	—	—	—	—	—	—	—	2,824	0.00	2,824	282	0.00	—	9,882
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	5,580	0.00	5,580	558	0.00	—	19,523

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	15,685	0.00	15,685	1,568	0.00	—	54,875
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.56	0.00	3.56	0.36	0.00	—	12.4
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	4.31	0.00	4.31	0.43	0.00	—	15.1
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	1,512	0.00	1,512	151	0.00	—	5,289
Total	—	—	—	—	—	—	—	—	—	—	—	67,971	0.00	67,971	6,793	0.00	—	237,808
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1,075	0.00	1,075	107	0.00	—	3,762
Hospital	—	—	—	—	—	—	—	—	—	—	—	5,935	0.00	5,935	593	0.00	—	20,765
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Elementary School	—	—	—	—	—	—	—	—	—	—	—	468	0.00	468	46.7	0.00	—	1,636
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	924	0.00	924	92.3	0.00	—	3,232
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	2,597	0.00	2,597	260	0.00	—	9,085

Apartments	—	—	—	—	—	—	—	—	—	—	—	3.04	0.00	3.04	0.30	0.00	—	10.6
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.59	0.00	0.59	0.06	0.00	—	2.06
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.71	0.00	0.71	0.07	0.00	—	2.50
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25.0	0.00	—	876
Total	—	—	—	—	—	—	—	—	—	—	—	11,253	0.00	11,253	1,125	0.00	—	39,372

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.5	31.5
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.65	9.65
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,174	2,174

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,823	3,823
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	336	336
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65.5	65.5
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	167	167
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.8	12.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,635	6,635
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.5	31.5
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.65	9.65
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,174	2,174
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,823	3,823

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	336	336
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65.5	65.5
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	167	167
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.8	12.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,635	6,635
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.22	5.22
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.58	2.58
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	360	360
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	633	633
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	55.6	55.6
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.8	10.8

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27.6	27.6
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.12	2.12
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,098	1,098

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.5	31.5
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.65	9.65
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,174	2,174
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,823	3,823
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	336	336
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65.5	65.5

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	167	167
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.8	12.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,635	6,635
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.5	31.5
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.65	9.65
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,174	2,174
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,823	3,823
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	336	336
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65.5	65.5
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	167	167
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.8	12.8

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,635	6,635
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.22	5.22
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.58	2.58
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	360	360
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	633	633
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	55.6	55.6
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.8	10.8
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27.6	27.6
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.12	2.12
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,098	1,098

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	126,226	28,640	9,072	34,875,217	1,747,118	396,420	125,563	482,716,169
Hospital	66,024	47,547	41,696	21,866,780	913,853	658,111	577,126	302,663,305

User Defined Commercial	39,291,159	8,915,140	2,823,800	10,855,868,351	543,838,271	123,396,574	39,084,886	150,258,653,916
Elementary School	78,691	0.00	0.00	20,515,862	1,089,181	0.00	0.00	283,964,923
General Heavy Industry	32,816	53,607	42,502	13,566,842	454,207	741,987	588,273	187,781,880
High Turnover (Sit Down Restaurant)	274,347	299,341	348,840	105,324,340	1,407,965	4,143,256	4,828,383	834,883,547
Apartments Mid Rise	250	226	188	86,828	4,638	4,186	3,487	1,609,428
Condo/Townhouse	65.9	73.3	56.5	23,943	1,221	1,358	1,048	443,801
Single Family Housing	113	114	103	40,853	2,100	2,122	1,902	757,239
Regional Shopping Center	100,855	123,216	56,372	35,658,531	589,415	805,800	368,655	214,908,440

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	126,226	28,640	9,072	34,875,217	1,747,118	396,420	125,563	482,716,169
Hospital	66,024	47,547	41,696	21,866,780	913,853	658,111	577,126	302,663,305
User Defined Commercial	39,291,159	8,915,140	2,823,800	10,855,868,351	543,838,271	123,396,574	39,084,886	150,258,653,916
Elementary School	78,691	0.00	0.00	20,515,862	1,089,181	0.00	0.00	283,964,923
General Heavy Industry	32,816	53,607	42,502	13,566,842	454,207	741,987	588,273	187,781,880
High Turnover (Sit Down Restaurant)	274,347	299,341	348,840	105,324,340	1,407,965	4,143,256	4,828,383	834,883,547
Apartments Mid Rise	250	226	188	86,828	4,638	4,186	3,487	1,609,428
Condo/Townhouse	65.9	73.3	56.5	23,943	1,221	1,358	1,048	443,801
Single Family Housing	113	114	103	40,853	2,100	2,122	1,902	757,239

Regional Shopping Center	100,855	123,216	56,372	35,658,531	589,415	805,800	368,655	214,908,440

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	46
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	9
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	12
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	46
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	9
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	12
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
160712100	53,570,700	60,976,500	20,325,500	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	298,384,794	74.0	0.0129	0.0017	431,157,203
Hospital	248,411,321	74.0	0.0129	0.0017	342,916,581
User Defined Commercial	92,880,455	74.0	0.0129	0.0017	134,209,511
Elementary School	30,732,752	74.0	0.0129	0.0017	90,614,703
General Heavy Industry	75,074,457	74.0	0.0129	0.0017	330,207,974
High Turnover (Sit Down Restaurant)	95,528,707	74.0	0.0129	0.0017	294,313,473
Apartments Mid Rise	227,719	74.0	0.0129	0.0017	614,927
Condo/Townhouse	56,049	74.0	0.0129	0.0017	157,593
Single Family Housing	106,899	74.0	0.0129	0.0017	471,974
Regional Shopping Center	25,010,161	74.0	0.0129	0.0017	23,523,530

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	298,384,794	74.0	0.0129	0.0017	431,157,203
Hospital	248,411,321	74.0	0.0129	0.0017	342,916,581

User Defined Commercial	92,880,455	74.0	0.0129	0.0017	134,209,511
Elementary School	30,732,752	74.0	0.0129	0.0017	90,614,703
General Heavy Industry	75,074,457	74.0	0.0129	0.0017	330,207,974
High Turnover (Sit Down Restaurant)	95,528,707	74.0	0.0129	0.0017	294,313,473
Apartments Mid Rise	229,720	74.0	0.0129	0.0017	0.00
Condo/Townhouse	58,475	74.0	0.0129	0.0017	0.00
Single Family Housing	111,401	74.0	0.0129	0.0017	0.00
Regional Shopping Center	25,010,161	74.0	0.0129	0.0017	23,523,530

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,303,340,507	1,809,340
Hospital	772,828,357	8,601,801
User Defined Commercial	716,977,939	5,634,023
Elementary School	116,895,272	12,511,672
General Heavy Industry	1,930,937,500	11,661,897
High Turnover (Sit Down Restaurant)	742,322,047	3,415,609
Apartments Mid Rise	1,621,914	80,107,690
Condo/Townhouse	317,331	15,607,079
Single Family Housing	423,108	39,759,388
Regional Shopping Center	197,895,852	3,731,318

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

General Office Building	2,303,340,507	1,809,340
Hospital	772,828,357	8,601,801
User Defined Commercial	716,977,939	5,634,023
Elementary School	116,895,272	12,511,672
General Heavy Industry	1,930,937,500	11,661,897
High Turnover (Sit Down Restaurant)	742,322,047	3,415,609
Apartments Mid Rise	1,621,914	80,107,690
Condo/Townhouse	317,331	15,607,079
Single Family Housing	423,108	39,759,388
Regional Shopping Center	197,895,852	3,731,318

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	12,052	—
Hospital	66,517	—
User Defined Commercial	0.00	—
Elementary School	5,241	—
General Heavy Industry	10,354	—
High Turnover (Sit Down Restaurant)	29,103	—
Apartments Mid Rise	34.1	—
Condo/Townhouse	6.60	—
Single Family Housing	8.00	—
Regional Shopping Center	2,805	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	12,052	—
Hospital	66,517	—
User Defined Commercial	0.00	—
Elementary School	5,241	—
General Heavy Industry	10,354	—
High Turnover (Sit Down Restaurant)	29,103	—
Apartments Mid Rise	34.1	—
Condo/Townhouse	6.60	—
Single Family Housing	8.00	—
Regional Shopping Center	2,805	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Hospital	Chillers	R-134a	1,430	< 0.005	2.00	2.00	23.0
Hospital	Household refrigerators and/or freezers	R-134a	1,430	< 0.005	0.60	0.00	1.00
Hospital	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Hospital	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00

Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Hospital	Chillers	R-134a	1,430	< 0.005	2.00	2.00	23.0
Hospital	Household refrigerators and/or freezers	R-134a	1,430	< 0.005	0.60	0.00	1.00
Hospital	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Hospital	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20.2	annual days of extreme heat
Extreme Precipitation	6.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	45.0
AQ-PM	39.7
AQ-DPM	80.4
Drinking Water	16.8
Lead Risk Housing	47.5
Pesticides	0.00
Toxic Releases	30.5
Traffic	12.0
Effect Indicators	—
CleanUp Sites	93.2
Groundwater	96.5
Haz Waste Facilities/Generators	86.3
Impaired Water Bodies	97.5
Solid Waste	67.1

Sensitive Population	—
Asthma	93.0
Cardio-vascular	72.5
Low Birth Weights	72.9
Socioeconomic Factor Indicators	—
Education	42.3
Housing	64.5
Linguistic	5.64
Poverty	79.3
Unemployment	51.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	25.21493648
Employed	21.37815989
Median HI	9.046580264
Education	—
Bachelor's or higher	76.90234826
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	1.475683306
Active commuting	93.25035288
Social	—
2-parent households	5.594764532

Voting	56.19145387
Neighborhood	—
Alcohol availability	4.516874118
Park access	81.35506224
Retail density	99.34556653
Supermarket access	64.40395226
Tree canopy	75.4908251
Housing	—
Homeownership	4.632362376
Housing habitability	0.41062492
Low-inc homeowner severe housing cost burden	81.6501989
Low-inc renter severe housing cost burden	50.84049788
Uncrowded housing	57.46182471
Health Outcomes	—
Insured adults	76.99217246
Arthritis	40.2
Asthma ER Admissions	14.7
High Blood Pressure	17.7
Cancer (excluding skin)	55.0
Asthma	19.7
Coronary Heart Disease	31.2
Chronic Obstructive Pulmonary Disease	16.6
Diagnosed Diabetes	51.3
Life Expectancy at Birth	0.0
Cognitively Disabled	0.6
Physically Disabled	16.6
Heart Attack ER Admissions	28.1

Mental Health Not Good	29.3
Chronic Kidney Disease	64.9
Obesity	23.9
Pedestrian Injuries	100.0
Physical Health Not Good	35.8
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	26.9
Current Smoker	11.7
No Leisure Time for Physical Activity	54.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	94.5
Elderly	64.7
English Speaking	76.8
Foreign-born	28.5
Outdoor Workers	71.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	6.0
Traffic Density	20.7
Traffic Access	67.9
Other Indices	—
Hardship	39.8
Other Decision Support	—
2016 Voting	48.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	78.0
Healthy Places Index Score for Project Location (b)	31.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Based on asumed net increase in SF and Citywide Buildout Summary.
Operations: Vehicle Data	Defaults assumed. Copied commercial - General Office Building inputs to User Defined Commercial.
Operations: Energy Use	Defaults assumed.
Operations: Water and Waste Water	Defaults assumed.

Appendix C
Parks Inventory

CPA	Name	Acreage	Jurisdiction	Location	Type	Linear Facility	Status	Notes
Arden Arcade	University Park	3.4	City	City Limits	Neighborhood	No	Existing	
Arden Arcade	Del Paso Regional Park	77.67	City	City Limits	Regional	No	Existing	Not including Haggin Oaks Golf Complex/Natural Habitat Area
Arden Arcade	Campus Commons Golf Course	29.7	Non-City	City Limits	Golf Course	No	Existing	
Arden Arcade	Haggin Oaks Golf Complex	407.7	City	City Limits	Golf Course	No	Existing	
Arden Arcade	Del Paso Regional Park Natural Habitat Area	139.99	City	City Limits	Natural Habitat Area	No	Existing	Includes Longview Oaks Natural Preserve
Arden Arcade	American River Parkway	601.87	Non-City	City Limits	Non-City	Yes	Existing	Arden Arcade segment
Arden Arcade	Plover School Park	0.5	Non-City	City Limits	Non-City	No	Existing	
Arden Arcade	Ashton Park	9.73	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Bellview Park	4.16	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Bohemian Park	7.11	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Cottage Park	7.42	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Crabtree Park	4.34	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Cresta Park	4.71	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Deterding Park	2.75	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Eastern Oak Park	4.35	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Howe Park	34.87	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Jonas Larkspur Park	7.93	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	La Sierra Park	7.55	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Oak Meadow Park	5.55	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Orville Wright Park	4.13	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Santa Anita Park	6.07	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Seely Park	4.79	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Swanston Park	9.58	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Valley Oak Park	9.18	Non-City	Unincorporated	Non-City	No	Existing	
Arden Arcade	Windemere Park	0.87	Non-City	Unincorporated	Non-City	No	Existing	
Central City	Albert Winn Park	2.50	City	City Limits	Neighborhood	No	Existing	
Central City	Ali Youssefi Square	0.51	City	City Limits	Neighborhood	No	Existing	
Central City	Brooks Truitt Park	0.88	City	City Limits	Neighborhood	No	Existing	
Central City	Cannery Plaza	0.22	City	City Limits	Neighborhood	No	Existing	
Central City	Crocker Park	2.37	City	City Limits	Neighborhood	No	Existing	
Central City	Emiliano Zapata Park	1.05	City	City Limits	Neighborhood	No	Existing	
Central City	Franklin D. Roosevelt Park	2.50	City	City Limits	Neighborhood	No	Existing	
Central City	Fremont Community Garden	0.44	City	City Limits	Neighborhood	No	Existing	
Central City	J. Neely Johhnson Park	0.92	City	City Limits	Neighborhood	No	Existing	
Central City	John Fremont Park	2.5	City	City Limits	Neighborhood	No	Existing	
Central City	John Muir Children's Park	2.50	City	City Limits	Neighborhood	No	Existing	
Central City	Leland Stanford Park	2.74	City	City Limits	Neighborhood	No	Existing	
Central City	O'Neil Field	4.88	City	City Limits	Neighborhood	No	Existing	
Central City	Southside Community Garden	0.75	City	City Limits	Neighborhood	No	Existing	
Central City	Ulysses S. Grant Park	2.37	City	City Limits	Neighborhood	No	Existing	
Central City	Washington Park	1.56	City	City Limits	Neighborhood	No	Existing	
Central City	7th Street Promenade	0.44	City	City Limits	Community	Yes	Existing	
Central City	Cesar E. Chavez Plaza	2.50	City	City Limits	Community	No	Existing	
Central City	James W. Marshall Park	2.50	City	City Limits	Community	No	Existing	
Central City	Matsui Waterfront Park (Robert T.)	1.98	City	City Limits	Community	Yes	Existing	
Central City	Pioneer Landing Park	2.33	City	City Limits	Community	Yes	Existing	
Central City	Southside Park	19.50	City	City Limits	Community	No	Existing	
Central City	Township 9 Park Site	15.97	City	City Limits	Community	Yes	Existing	
Central City	William McKinley Park	31.88	City	City Limits	Community	No	Existing	
Central City	Sacramento River Parkway (Central Area)	13.24	City	City Limits	Parkway	Yes	Existing	13.24 acres City-maintained; 75.90 total in CPA
Central City	Sacramento Historic Old City Cemetery	30.44	City	City Limits	Regional	No	Existing	
Central City	Sutter's Landing Regional Park	166.83	City	City Limits	Regional	No	Existing	
Central City	Tiscornia Park	13.28	City	City Limits	Regional	Yes	Existing	
Central City	American River Parkway	82.07	Non-City	City Limits	Non-City	Yes	Existing	Central City segment
Central City	Capitol Park	35.70	Non-City	City Limits	Non-City	No	Existing	
Central City	Governor's Mansion	0.78	Non-City	City Limits	Non-City	No	Existing	
Central City	Leland Stanford State Historic Park	0.60	Non-City	City Limits	Non-City	No	Existing	

Central City	Old Sacramento State Historic Park	6.40	Non-City	City Limits	Non-City	No	Existing	
Central City	Sutter's Fort and State Indian Museum	5.80	Non-City	City Limits	Non-City	No	Existing	
Central City	Depot Park	1.49	City	City Limits	Neighborhood	No	Proposed	
Central City	Peach Paseo	0.49	City	City Limits	Neighborhood	No	Proposed	
Central City	Pear Paseo	0.42	City	City Limits	Neighborhood	No	Proposed	
Central City	Persimmon Paseo	0.18	City	City Limits	Neighborhood	No	Proposed	
Central City	Victory Park	0.82	City	City Limits	Neighborhood	No	Proposed	
Central City	Victory Promenade	0.75	City	City Limits	Neighborhood	No	Proposed	
Central City	Mirasol Park and Community Garden		City	City Limits	Neighborhood	No	Proposed	
Central City	Twin Rivers Basketball Court		City	City Limits	Neighborhood	No	Proposed	
Central City	Sacramento River Parkway (future)	7.60	City	City Limits	Parkway	No	Proposed	
Central City	Two Rivers Trail Park	3.03	City	City Limits	Regional	No	Proposed	
Central City	Bicycle Easement	1.04	City	City Limits	Bike Easement	No	Proposed	
Central City	4-Way Parklets	2.88	City	City Limits	TBD (Neighborhood)	No	Proposed	
Central City	Central Shops Plaza	3.04	City	City Limits	TBD	No	Proposed	
Central City	Kaiser Promenade	0.77	City	City Limits	TBD (Community)	No	Proposed	
Central City	Market Plaza	0.65	City	City Limits	TBD (Community)	No	Proposed	
Central City	MLS Promenade	0.69	City	City Limits	TBD (Community)	No	Proposed	
Central City	Museum Plaza	5.65	City	City Limits	TBD (Community)	No	Proposed	
Central City	Riverfront Park	1.11	City	City Limits	TBD (Neighborhood)	No	Proposed	
Central City	Under I-5 Experience	2.70	City	City Limits	TBD (Neighborhood)	No	Proposed	
Central City	Vista Connector to 4-Way	0.42	City	City Limits	TBD (Community)	No	Proposed	
Central City	Vista Park	9.28	City	City Limits	TBD (Community)	No	Proposed	
East Sacramento	Alan and Helen Post Park	0.9	City	City Limits	Neighborhood	No	Existing	
East Sacramento	Bertha Henschel Park	2.53	City	City Limits	Neighborhood	No	Existing	
East Sacramento	East Lawn Childrens Park	0.35	City	City Limits	Neighborhood	No	Existing	
East Sacramento	Glenn Hall Park	7.08	City	City Limits	Neighborhood	No	Existing	
East Sacramento	Magoichi Oki Park	8.9	City	City Limits	Neighborhood	Yes	Existing	
East Sacramento	Michael Hemovitz Park	0.14	City	City Limits	Neighborhood	No	Existing	
East Sacramento	R. Burnnett Miller Park	1.35	City	City Limits	Neighborhood	No	Existing	
East Sacramento	Ricardo Favela Park	0.13	City	City Limits	Neighborhood	No	Existing	
East Sacramento	River Park	1.58	City	City Limits	Neighborhood	No	Existing	
East Sacramento	Sutter Park	0.64	City	City Limits	Neighborhood	No	Existing	
East Sacramento	East Portal Park	7.38	City	City Limits	Community	No	Existing	
East Sacramento	Glenbrook Park	17.46	City	City Limits	Community	Yes	Existing	
East Sacramento	Glenbrook River Access	3.87	City	City Limits	Parkway	Yes	Existing	
East Sacramento	Magoichi Oki Open Space	6	City	City Limits	Open Space	Yes	Existing	
East Sacramento	American River Parkway	391.05	Non-City	City Limits	Non-City	Yes	Existing	East Sacramento segment
East Sacramento	Park ES 3 - Russ Solomon Park	0.68	City	City Limits	TBD (Neighborhood)	No	Proposed	
Fruitridge Broadway	Artivio Guerrero Park	2.50	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Bill Bean Jr. Memorial Park at Colonial Manor	4.48	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Camellia Park	1.95	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Colonial Park	3.03	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Earl Warren Park	4.62	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Fourth Avenue Park	1.07	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Greenfair Park	0.67	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Lawrence Park	5.02	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Mae Fong Park	8.62	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Martin Luther King Jr. Community Garden	0.3	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Max Baer Park	3.95	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Temple Avenue Park	1.06	City	City Limits	Neighborhood	No	Existing	
Fruitridge Broadway	Army Depot Park	19.96	City	City Limits	Community	No	Existing	
Fruitridge Broadway	C. K. McClatchy Park	15.42	City	City Limits	Community	No	Existing	
Fruitridge Broadway	Coloma Park	3.03	City	City Limits	Community	No	Existing	
Fruitridge Broadway	Danny Nunn Park	12.44	City	City Limits	Community	No	Existing	
Fruitridge Broadway	George Sim Park	13.92	City	City Limits	Community	No	Existing	
Fruitridge Broadway	Oak Park	8.10	City	City Limits	Community	No	Existing	Not including open space part
Fruitridge Broadway	Tahoe Park	17.82	City	City Limits	Community	No	Existing	

Fruitridge Broadway	Tahoe Tallac Park	6.81	City	City Limits	Community	No	Existing	
Fruitridge Broadway	Granite Regional Park	71.2	City	City Limits	Regional	No	Existing	Not including open space part
Fruitridge Broadway	Granite Regional Park Open Space	9.25	City	City Limits	Open Space	No	Existing	
Fruitridge Broadway	Oak Park Open Space	1.9	City	City Limits	Open Space	No	Existing	
Fruitridge Broadway	Boys and Girls Club of Greater Sacramento	1.97	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	C. B. Wire Park	5.30	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Calvine Station Park	1.76	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Cottonwood Park	1.64	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Countryside Community Park	11.94	Non-City	Unincorporated	Non-City	Yes	Existing	
Fruitridge Broadway	Danbury Parkway	3.89	Non-City	Unincorporated	Non-City	Yes	Existing	
Fruitridge Broadway	Fountain Plaza Park	0.77	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Fruitridge Park	11.32	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Hampton Park & Rizal Community Center	12.57	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Hardester Park	0.71	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Illa Collin Park	6.98	Non-City	Unincorporated	Non-City	Yes	Existing	
Fruitridge Broadway	Jack W. Davis Park	0.69	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Kennedy Park	1.50	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Nicholas Park	9.73	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Norman Waters Park	5.73	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Olde Florintown Park	8.35	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Pacific Park	9.08	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Rutter Park & Swim Center	6.32	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Sheldon Park	13.15	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Sky Park	3.89	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Southwoods Park	3.47	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Sunrise Florin Park & Fletcher Farm Community	5.22	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Tillotson Parkway	25.62	Non-City	Unincorporated	Non-City	Yes	Existing	Acreage overestimated due to partial location outside CPA
Fruitridge Broadway	Toby Johnson Park	5.61	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Vintage Park	7.00	Non-City	Unincorporated	Non-City	No	Existing	
Fruitridge Broadway	Willowood Park	1.51	Non-City	Unincorporated	Non-City	No	Existing	
Land Park	Brockway Park	0.93	City	City Limits	Neighborhood	No	Existing	
Land Park	Emil Bahnfleth Park	6.28	City	City Limits	Neighborhood	No	Existing	
Land Park	Plaza Cervantes	0.66	City	City Limits	Neighborhood	No	Existing	
Land Park	Belle Cooledge Community Center Park	10.4	City	City Limits	Community	No	Existing	
Land Park	Belle Cooledge Park	8.6	City	City Limits	Community	No	Existing	
Land Park	James Mangan Park	8.29	City	City Limits	Community	No	Existing	
Land Park	Sierra 2 Park	2.59	City	City Limits	Community	No	Existing	
Land Park	William Curtis Park	18.35	City	City Limits	Community	Yes	Existing	
Land Park	Sacramento River Parkway (Land Park Area)	33.62	City	City Limits	Parkway	Yes	Existing	
Land Park	Frederick Miller Regional Park	40.44	City	City Limits	Regional	No	Existing	
Land Park	William Land Regional Park	115.35	City	City Limits	Regional	No	Existing	
Land Park	William Land Golf Course	92	City	City Limits	Golf Course	No	Existing	
Land Park	Chicory Bend Park	10.41	City	City Limits	Open Space	No	Existing	
Land Park	Sacramento River Parkway (extension)	0.63	City	City Limits	Parkway	No	Proposed	
North Natomas	Alder Park	2.04	City	City Limits	Neighborhood	No	Existing	
North Natomas	Autumn Meadow Park	6.85	City	City Limits	Neighborhood	No	Existing	
North Natomas	Blue Oak Park	0.99	City	City Limits	Neighborhood	No	Existing	
North Natomas	California Lilac Park	3.12	City	City Limits	Neighborhood	No	Existing	
North Natomas	Cottonwood Park	4.95	City	City Limits	Neighborhood	No	Existing	
North Natomas	Dogwood Park	3.02	City	City Limits	Neighborhood	No	Existing	
North Natomas	Egret Park[1]	8.52	City	City Limits	Neighborhood	Yes	Existing	Not including open space part
North Natomas	Elderberry Park	2.86	City	City Limits	Neighborhood	No	Existing	
North Natomas	Golden Poppy Park	2.03	City	City Limits	Neighborhood	No	Existing	
North Natomas	Harrier Park	0.82	City	City Limits	Neighborhood	Yes	Existing	
North Natomas	Heron Park	3.93	City	City Limits	Neighborhood	No	Existing	
North Natomas	Hummingbird Park	4.67	City	City Limits	Neighborhood	No	Existing	
North Natomas	Kokomo Park	6.98	City	City Limits	Neighborhood	No	Existing	
North Natomas	Linden Park	4.99	City	City Limits	Neighborhood	No	Existing	

North Natomas	Magnolia Park	6.43	City	City Limits	Neighborhood	No	Existing	
North Natomas	Northborough Park	4.26	City	City Limits	Neighborhood	No	Existing	
North Natomas	Peregrine Park	7.71	City	City Limits	Neighborhood	No	Existing	
North Natomas	Quail Park	6.43	City	City Limits	Neighborhood	No	Existing	
North Natomas	Red Tail Hawk Park	6.21	City	City Limits	Neighborhood	No	Existing	
North Natomas	Redbud Park	1.82	City	City Limits	Neighborhood	No	Existing	
North Natomas	River Birch Park	21.36	City	City Limits	Neighborhood	No	Existing	
North Natomas	River View Park	5.19	City	City Limits	Neighborhood	No	Existing	
North Natomas	Sparrow Community Garden	0.13	City	City Limits	Neighborhood	No	Existing	
North Natomas	Sparrow Park	1.77	City	City Limits	Neighborhood	No	Existing	
North Natomas	Sundance Park	2.00	City	City Limits	Neighborhood	No	Existing	
North Natomas	Swainson's Hawk Park	5.72	City	City Limits	Neighborhood	No	Existing	
North Natomas	Sycamore Park	4.67	City	City Limits	Neighborhood	No	Existing	
North Natomas	Valley Oak Park	8.69	City	City Limits	Neighborhood	No	Existing	
North Natomas	Westhampton Park	4.34	City	City Limits	Neighborhood	No	Existing	
North Natomas	Willow Park	2.50	City	City Limits	Neighborhood	No	Existing	
North Natomas	Burberry Community Park	13.9	City	City Limits	Community	No	Existing	
North Natomas	Fisherman's Lake Parkway	10.37	City	City Limits	Community	Yes	Existing	Not including open space part
North Natomas	North Natomas Community Park	39.02	City	City Limits	Community	Yes	Existing	Not including open space part
North Natomas	Regency Community Park	41.67	City	City Limits	Community	Yes	Existing	
North Natomas	San Juan Reservoir Park	33.74	City	City Limits	Community	No	Existing	
North Natomas	Tanzanite Community Park (Basin 6A)	31.26	City	City Limits	Community	No	Existing	
North Natomas	Westlake Community Park	10.32	City	City Limits	Community	No	Existing	
North Natomas	Wild Rose Park	9.56	City	City Limits	Community	No	Existing	
North Natomas	Witter Ranch Park	9.01	City	City Limits	Community	No	Existing	
North Natomas	Walter S. Ueda Parkway	24.01	City	City Limits	Parkway	Yes	Existing	North Natomas segment
North Natomas	North Natomas Regional Park	212.31	City	City Limits	Regional	No	Existing	
North Natomas	Fisherman's Lake Open Space	25.03	City	City Limits	Open Space	Yes	Existing	
North Natomas	North Natomas Park Nature Area	7.34	City	City Limits	Open Space	Yes	Existing	
North Natomas	Witter Ranch State Historic Park	25.00	Non-City	City Limits	Non-City	No	Existing	
North Natomas	Airfield Park	10.1	Non-City	Unincorporated	Neighborhood	No	Existing	Proposed conversion to City park
North Natomas	Alleghany Apt Bike Trail	0.83	Non-City	Unincorporated	Non-City	Yes	Existing	
North Natomas	Black Locust Park Trail	0.45	Non-City	Unincorporated	Non-City	Yes	Existing	
North Natomas	Blackbird Park	9.93	Non-City	Unincorporated	Community	No	Existing	Proposed conversion to City park
North Natomas	Creekside Neighborhood Trail	0.52	Non-City	Unincorporated	Non-City	Yes	Existing	
North Natomas	Creekside Trail	4.66	Non-City	Unincorporated	Non-City	Yes	Existing	
North Natomas	Detension Basin	8.06	Non-City	Unincorporated	Non-City	No	Existing	
North Natomas	East Drainage Canal Trail	10.44	Non-City	Unincorporated	Non-City	Yes	Existing	
North Natomas	Hamptons Village Bike Trail	0.63	Non-City	Unincorporated	Non-City	Yes	Existing	
North Natomas	I-5 Landscape Corridor Trail	1.71	Non-City	Unincorporated	Non-City	Yes	Existing	
North Natomas	Meadows Community Park	11.20	Non-City	Unincorporated	Community	No	Existing	Proposed conversion to City park
North Natomas	Park Site 2D (Basin 8B)	5.07	Non-City	Unincorporated	Neighborhood	No	Existing	Proposed conversion to City park
North Natomas	Promenade At Natomas	1.49	Non-City	Unincorporated	Non-City	Yes	Existing	
North Natomas	Skylark Park (Park Site 3G)	2.56	Non-City	Unincorporated	Neighborhood	No	Existing	Proposed conversion to City park
North Natomas	West Canal Bike Trail	2.39	Non-City	Unincorporated	Non-City	Yes	Existing	
North Natomas	Commerce Station Park	4.00	City	City Limits	Neighborhood	No	Proposed	
North Natomas	Northlake Parks - Lot C	2.40	City	City Limits	Neighborhood	No	Proposed	
North Natomas	Northlake Parks - Lot D	1.80	City	City Limits	Neighborhood	No	Proposed	
North Natomas	Northlake Parks - Lot E	2.20	City	City Limits	Neighborhood	No	Proposed	
North Natomas	Northlake Parks - Lot F	2.01	City	City Limits	Neighborhood	No	Proposed	
North Natomas	Northlake Parks - Lot B	12.40	City	City Limits	Community	No	Proposed	
North Natomas	Panhandle Future Park Site 1	6.00	City	City Limits	Community	No	Proposed	
North Natomas	Panhandle Future Park Site 2	12.40	City	City Limits	Community	No	Proposed	
North Natomas	Ninos Parkway	48.02	City	City Limits	Parkway	No	Proposed	
North Sacramento	Dixieanne Tot Lot	0.15	City	City Limits	Neighborhood	No	Existing	
North Sacramento	Five Star Park	0.35	City	City Limits	Neighborhood	No	Existing	
North Sacramento	Gateway Park	3.89	City	City Limits	Neighborhood	Yes	Existing	
North Sacramento	Jack Rea Park	0.35	City	City Limits	Neighborhood	No	Existing	

North Sacramento	John Mackey Memorial Park at Kenwood Oaks	11.40	City	City Limits	Neighborhood	No	Existing	
North Sacramento	Margarette "Mama" Marks Park	4.16	City	City Limits	Neighborhood	No	Existing	
North Sacramento	North Pointe Park	5.43	City	City Limits	Neighborhood	No	Existing	
North Sacramento	Robert Brookins Park	6.82	City	City Limits	Neighborhood	No	Existing	FKA Nuevo Park
North Sacramento	Redwood Park	3.12	City	City Limits	Neighborhood	No	Existing	
North Sacramento	Richardson Village Park	8.94	City	City Limits	Neighborhood	No	Existing	
North Sacramento	Strawberry Manor Park	1.30	City	City Limits	Neighborhood	No	Existing	
North Sacramento	Triangle Park	1.00	City	City Limits	Neighborhood	No	Existing	
North Sacramento	Winner's Circle Park	1.89	City	City Limits	Neighborhood	No	Existing	
North Sacramento	Carl Johnston Park	24.75	City	City Limits	Community	No	Existing	
North Sacramento	Charles Robertson Park	9.18	City	City Limits	Community	No	Existing	
North Sacramento	Hagginwood Park	15.50	City	City Limits	Community	Yes	Existing	
North Sacramento	Robla Community Park	17.83	City	City Limits	Community	No	Existing	
North Sacramento	Woodlake Park	6.04	City	City Limits	Community	No	Existing	
North Sacramento	Sacramento Northern Parkway	62.38	City	City Limits	Parkway	Yes	Existing	North Sacramento segment
North Sacramento	Walter S. Ueda Parkway	491.84	Non-City	City Limits	Parkway	Yes	Existing	North Sacramento segment 101.91 acres; 491.84 total Non-City maintained
North Sacramento	Hansen Ranch Regional Park	265.41	City	City Limits	Open Space	No	Existing	
North Sacramento	American River Parkway	305.82	Non-City	City Limits	Non-City	Yes	Existing	North sacramento segment
North Sacramento	Park Site NS1	2.50	City	City Limits	Neighborhood	No	Proposed	
North Sacramento	Park Site NS2	5.29	City	City Limits	Neighborhood	No	Proposed	
Pocket	Charter Pointe Park	5.15	City	City Limits	Neighborhood	Yes	Existing	
Pocket	Cool Wind Way Park	1.45	City	City Limits	Neighborhood	Yes	Existing	
Pocket	Edwin Z'Berg Park	2.81	City	City Limits	Neighborhood	No	Existing	
Pocket	Eileen Dutra Park	0.35	City	City Limits	Neighborhood	Yes	Existing	
Pocket	Lewis Park	3.28	City	City Limits	Neighborhood	No	Existing	
Pocket	Parkway Oaks Park	9.44	City	City Limits	Neighborhood	No	Existing	
Pocket	Portuguese Community Park	2.98	City	City Limits	Neighborhood	Yes	Existing	
Pocket	Reginald Renfree Park	6.98	City	City Limits	Neighborhood	No	Existing	
Pocket	Richard Marriott Park	8.15	City	City Limits	Neighborhood	No	Existing	
Pocket	Shore Park	9.25	City	City Limits	Neighborhood	No	Existing	
Pocket	Sojourner Truth Park	6.01	City	City Limits	Neighborhood	Yes	Existing	
Pocket	Tony Court Park	0.85	City	City Limits	Neighborhood	No	Existing	
Pocket	Zacharias Park	6.17	City	City Limits	Neighborhood	Yes	Existing	
Pocket	Frank Seymour Park	43.52	City	City Limits	Community	Yes	Existing	
Pocket	Garcia Bend Park	17.87	City	City Limits	Community	No	Existing	
Pocket	Joseph Reichmuth Park	23.89	City	City Limits	Community	No	Existing	Not including open space part
Pocket	North Point Way River Access	5.43	City	City Limits	Parkway	Yes	Existing	
Pocket	Pocket Canal Parkway	54.56	City	City Limits	Parkway	Yes	Existing	
Pocket	Sacramento River Parkway (Pocket Area)	9.11	City	City Limits	Parkway	Yes	Existing	Pocket segment
Pocket	Joseph Reichmuth Park Open Space	18.76	City	City Limits	Open Space	No	Existing	
Pocket	Sacramento River Parkway (future)	0.63	City	City Limits	Parkway	No	Proposed	Pocket segment
Pocket	Del Rio Trail	45	City	City Limits	Parkway	No	Proposed	
South Area	24th Street Bypass Park	7.27	City	City Limits	Neighborhood	No	Existing	
South Area	Anthony Park	1.69	City	City Limits	Neighborhood	No	Existing	
South Area	Argonaut Park	8.85	City	City Limits	Neighborhood	No	Existing	
South Area	Charlie Jensen Park	2.53	City	City Limits	Neighborhood	No	Existing	
South Area	Edward Kemble Park	1.71	City	City Limits	Neighborhood	No	Existing	
South Area	Freeport Park	4.08	City	City Limits	Neighborhood	No	Existing	
South Area	Hampton Park	3.86	City	City Limits	Neighborhood	No	Existing	
South Area	Hite Park	5.82	City	City Limits	Neighborhood	No	Existing	
South Area	John Cabrillo Park	5.78	City	City Limits	Neighborhood	No	Existing	
South Area	John Reith Park	1.31	City	City Limits	Neighborhood	No	Existing	
South Area	Levar Burton Park	3.14	City	City Limits	Neighborhood	No	Existing	
South Area	Manuel E. Silva Park	3.17	City	City Limits	Neighborhood	No	Existing	
South Area	Mark Hopkins Park	6.30	City	City Limits	Neighborhood	No	Existing	
South Area	Martin Luther King, Jr. Park	1.51	City	City Limits	Neighborhood	No	Existing	
South Area	Meadowview Park	8.13	City	City Limits	Neighborhood	No	Existing	
South Area	Phoenix Green	1.88	City	City Limits	Neighborhood	No	Existing	

South Area	Pollack Ranch Park	7.50	City	City Limits	Neighborhood	No	Existing	
South Area	Steve Jones Park	6.65	City	City Limits	Neighborhood	No	Existing	
South Area	Willie Caston Park	6.27	City	City Limits	Neighborhood	No	Existing	
South Area	Wood Park	5.58	City	City Limits	Neighborhood	No	Existing	
South Area	Woodbine Park	6.34	City	City Limits	Neighborhood	No	Existing	
South Area	Airport Little League Park	9.67	City	City Limits	Community	No	Existing	
South Area	Bill Conlin Youth Sport Complex	20.13	City	City Limits	Community	No	Existing	
South Area	Cosumnes River College Park	7.27	City	City Limits	Community	No	Existing	
South Area	Franklin Boyce Community Park	12.17	City	City Limits	Community	No	Existing	
South Area	Jacinto Creek Park	11.81	City	City Limits	Community	Yes	Existing	
South Area	North Laguna Creek Park	22.06	City	City Limits	Community	Yes	Existing	
South Area	Pannell/Meadowview Community Center Park	12.37	City	City Limits	Community	No	Existing	
South Area	Roy Nielsen Park	10.08	City	City Limits	Community	No	Existing	
South Area	Shasta Community Park	18.14	City	City Limits	Community	No	Existing	
South Area	Valley Hi Community Park	19.83	City	City Limits	Community	No	Existing	
South Area	William Chorley Park	31.54	City	City Limits	Community	No	Existing	
South Area	Jacinto Creek Parkway	14.63	City	City Limits	Parkway	Yes	Existing	
South Area	Bartley Cavanaugh Golf Course	99.57	City	City Limits	Golf Course	No	Existing	
South Area	Bing Maloney Golf Course	171.68	City	City Limits	Golf Course	No	Existing	
South Area	Lot B Open Space	7.85	City	City Limits	Open Space	No	Existing	
South Area	Lot D Open Space	14.01	City	City Limits	Open Space	No	Existing	
South Area	North Laguna Creek Wildlife Area	119.53	City	City Limits	Open Space	Yes	Existing	
South Area	Maple Park	1.07	Non-City	City Limits	Non-City	No	Existing	
South Area	Bowling Green Park	7.12	Non-City	Unincorporated	Non-City	No	Existing	
South Area	Copperstone Village Trail	0.56	Non-City	Unincorporated	Non-City	No	Existing	
South Area	Crowfoot Park	2.10	Non-City	Unincorporated	Non-City	No	Existing	
South Area	Florin Creek Park	11.97	Non-City	Unincorporated	Non-City	No	Existing	
South Area	Parkway Swimming Club	0.88	Non-City	Unincorporated	Non-City	No	Existing	
South Area	Rainbow Park	1.84	Non-City	Unincorporated	Non-City	No	Existing	
South Area	Royal Park	2.72	Non-City	Unincorporated	Non-City	No	Existing	
South Area	South Sacramento Bikeways	1.72	Non-City	Unincorporated	Non-City	No	Existing	
South Area	Park Site P1 Delta Shores Future	2.49	City	City Limits	TBD (Neighborhood)	No	Proposed	
South Area	Park Site P2 Delta Shores Future	6.72	City	City Limits	TBD (Neighborhood)	No	Proposed	
South Area	Park Site P3 Delta Shores Future	4.66	City	City Limits	TBD (Neighborhood)	No	Proposed	
South Area	Park Site P4 Delta Shores Future	2.00	City	City Limits	TBD (Neighborhood)	No	Proposed	
South Area	Park Site P5 Delta Shores Future	2.00	City	City Limits	TBD (Neighborhood)	No	Proposed	
South Area	Park Site P6 Delta Shores Future	2.55	City	City Limits	TBD (Neighborhood)	No	Proposed	
South Area	Park Site P7 Delta Shores Future	4.85	City	City Limits	TBD (Neighborhood)	No	Proposed	
South Area	Park Site P8 Delta Shores Future	5.52	City	City Limits	TBD (Neighborhood)	No	Proposed	
South Area	Park Site P9 Delta Shores Future	26.59	City	City Limits	TBD (Community)	No	Proposed	
South Natomas	Chuckwagon Park	5.31	City	City Limits	Neighborhood	No	Existing	
South Natomas	Gardenland Park	6.05	City	City Limits	Neighborhood	No	Existing	
South Natomas	Ninos Park	4.18	City	City Limits	Neighborhood	Yes	Existing	
South Natomas	Oakbrook Park	4.80	City	City Limits	Neighborhood	No	Existing	
South Natomas	River Otter Park	1.88	City	City Limits	Neighborhood	No	Existing	
South Natomas	Sally Hudson Park	0.70	City	City Limits	Neighborhood	No	Existing	
South Natomas	Shorebird Park	2.00	City	City Limits	Neighborhood	No	Existing	
South Natomas	Strauch Park	3.24	City	City Limits	Neighborhood	Yes	Existing	
South Natomas	Thomas Jefferson Park	6.60	City	City Limits	Neighborhood	No	Existing	
South Natomas	Two Rivers Park	3.03	City	City Limits	Neighborhood	No	Existing	
South Natomas	Manuel Barandas Park	13.03	City	City Limits	Community	No	Existing	
South Natomas	Natomas Oak Park	13.24	City	City Limits	Community	Yes	Existing	
South Natomas	Northgate Park	15.95	City	City Limits	Community	No	Existing	
South Natomas	Orchard Park	13.60	City	City Limits	Community	No	Existing	
South Natomas	South Natomas Community Park	25.11	City	City Limits	Community	No	Existing	
South Natomas	Bannon Creek Park & Parkway	18.44	City	City Limits	Parkway	Yes	Existing	
South Natomas	Ninos Parkway	47.55	City	City Limits	Parkway	Yes	Existing	
South Natomas	Sacramento Northern Parkway	3.41	City	City Limits	Parkway	Yes	Existing	South Natomas segment

South Natomas	Walter S. Ueda Parkway	4.10	City	City Limits	Parkway	Yes	Existing	South Natomas segment
South Natomas	Bannon Creek Preserve	5.78	City	City Limits	Open Space	Yes	Existing	
South Natomas	Sand Cove Park	10.30	City	City Limits	Open Space	Yes	Existing	
South Natomas	American River Parkway	391.86	Non-City	City Limits	Non-City	No	Existing	
South Natomas	Discovery Park	28.50	Non-City	City Limits	Non-City	Yes	Existing	
South Natomas	Garden Highway Bikeway	12.44	Non-City	City Limits	Non-City	Yes	Existing	
South Natomas	Heritage Place Bike Trail	0.59	Non-City	Unincorporated	Non-City	Yes	Existing	
South Natomas	I-5 North Natomas Bike Trails	1.11	Non-City	Unincorporated	Non-City	Yes	Existing	
South Natomas	Main Drainage Canal Bike Trail	1.51	Non-City	Unincorporated	Non-City	Yes	Existing	
South Natomas	Manuel Barabdas Park Creekside Trail	1.09	Non-City	Unincorporated	Non-City	Yes	Existing	
South Natomas	Park Plaza	1.62	Non-City	Unincorporated	Non-City	No	Existing	
South Natomas	Park Site SN2	4.02	Non-City	Unincorporated	Non-City	Yes	Existing	
South Natomas	Park Site SN4	0.23	Non-City	Unincorporated	Neighborhood	No	Existing	Proposed conversion to City park
South Natomas	Ueda Parkway	26.37	Non-City	Unincorporated	Non-City	No	Existing	
South Natomas	Unity Parkside Village Bike Trail	0.41	Non-City	Unincorporated	Non-City	Yes	Existing	
South Natomas	Cove Park	2.84	City	City Limits	Community	No	Proposed	

Appendix D
Noise Modeling Output

Appendix D-1

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Baseline Conditions																		
1	El Centro Rd	Hankview Rd	Radio Rd	11,323	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.3	57	123	264	569
2	El Centro Rd/W El Camino Rd	Radio Rd	I-80	13,346	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.0	63	137	295	635
3	W Elkhorn Blvd	E Commerce Way	Natomas Blvd	16,654	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	89	192	413	889
4	Del Paso Rd	Power Line Rd	I-5	22,683	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.0	74	158	341	735
5	Del Paso Rd	I-5	Natomas Blvd	43,098	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.3	90	194	419	902
6	Del Paso Rd	Natomas Blvd	Gateway Park Blvd	19,110	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.8	52	113	243	524
7	San Juan Rd	El Centro Rd	Duckhorn Dr	6,529	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.6	32	69	149	321
8	Del Paso Rd	Gateway Park Blvd	Northgate Blvd	20,728	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.1	55	119	257	553
9	Northgate Blvd	Main Ave	North Market Blvd	26,556	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.2	65	141	303	653
10	Northgate Blvd	North Market Blvd	I-80	44,860	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	93	200	430	926
11	Natomas Blvd	W Elkhorn Blvd	Del Paso Rd	27,718	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.4	67	145	312	672
12	Truxel Rd	Arena Blvd	I-80	58,072	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.4	169	364	785	1691
13	Truxel Rd	Del Paso Rd	Arena Blvd	23,934	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.6	94	202	435	937
14	North Market Blvd	Truxel Rd	Northgate Blvd	13,251	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.7	51	111	239	514
15	Arena Blvd	I-5	Truxel Rd	20,670	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	149	321	691
16	Arena Blvd	El Centro Rd	I-5	26,798	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.7	82	177	381	822
17	E Commerce Way	W Elkhorn Blvd	N Park Dr	7,967	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.5	37	79	170	366
18	E Commerce Way	N Park Dr	Del Paso Rd	20,412	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.5	69	148	318	686
19	E Commerce Way	Del Paso Rd	Arena Blvd	16,077	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	72	155	333	718
20	Del Paso Blvd	Globe Ave	El Camino Ave	9,443	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.2	26	55	119	257
21	Del Paso Blvd	El Camino Ave	Marysville Blvd	11,841	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.1	30	64	139	299
22	Del Paso Blvd	Marysville Blvd	Arcade Blvd	4,948	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.3	17	36	78	167
23	Rio Linda Blvd	Main Ave	Bell Rd	8,189	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	37	80	173	373
24	Rio Linda Blvd	Grand Ave	Arcade Blvd	11,605	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	38	81	175	376
25	Rio Linda Blvd	Arcade Blvd	Lampasas Ave	14,445	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.6	44	94	202	435

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-2

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Baseline Conditions																		
26	Marysville Blvd	Rio Linda Blvd	Bell Ave	7,057	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.9	34	73	157	338
27	Marysville Blvd	I-80	Arcade Blvd	26,277	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.6	51	110	236	509
28	Marysville Blvd	Arcade Blvd	Del Paso Blvd	10,436	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.6	27	59	128	275
29	Norwood Ave	Main Ave	I-80	31,376	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	157	339	730
30	Norwood Ave	Silver Eagle Rd	El Camino Ave	9,872	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.3	26	57	123	265
31	El Camino Ave	Grove Ave	Del Paso Blvd	13,508	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.0	25	54	117	253
32	El Camino Ave	Del Paso Blvd	I-80 Business	32,946	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.6	59	127	275	592
33	Arden Way	Del Paso Blvd	Royal Oaks Dr	23,574	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.7	60	130	280	603
34	Arden Way	Royal Oaks Dr	I-80 Business	36,503	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.1	101	218	469	1010
35	Grand Ave	Norwood Ave	Rio Linda Blvd	7,218	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.0	21	46	100	215
36	Silver Eagle Rd	Northgate Blvd	Norwood Ave	13,760	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.5	20	43	92	199
37	Main Ave	Northgate Blvd	Norwood Ave	16,244	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.1	47	101	218	470
38	Main Ave	Norwood Ave	Rio Linda Blvd	9,054	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.5	32	69	148	319
39	Main Ave	Marysville Blvd	Raley Blvd	1,334	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	51.0	5	12	25	54
40	W Elkhorn Blvd	Natomas Blvd	Rio Linda Blvd	17,935	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.6	93	201	434	934
41	Arcade Blvd	Marysville Blvd	Roseville Rd	18,241	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.0	40	86	185	399
42	Raley Blvd	Ascot Ave	Bell Ave	20,156	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.8	84	180	388	835
43	Bell Ave	Norwood Ave	Winters St	13,660	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.3	42	90	195	419
44	Roseville Rd	Arcade Blvd	Watt Ave	17,645	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	76	165	355	764
45	Winters St	Bell Ave	I-80	15,021	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.7	45	96	207	447
46	Royal Oaks Dr	Arden Way	SR-160	6,406	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.8	15	33	71	154
47	Dry Creek Rd	Marysville Blvd	Grand Ave	3,335	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.6	13	28	60	128
48	Arden Garden Connector	Northgate Blvd	Del Paso Blvd	24,657	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.9	62	134	288	621
49	San Juan Rd	Truxel Rd	Northgate Blvd	18,885	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.2	65	140	302	651
50	W El Camino Ave	I-80	I-5	20,833	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	150	323	695

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-3

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Baseline Conditions																		
51	W El Camino Ave	I-5	Truxel Rd	25,760	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.6	80	172	372	801
52	W El Camino Ave	Truxel Rd	Northgate Blvd	18,730	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.1	41	87	188	406
53	W El Camino Ave	Northgate Blvd	Grove Ave	14,327	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.3	26	57	122	263
54	Garden Hwy	I-80	Orchard Ln	1,805	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.0	14	29	63	136
55	Garden Hwy	Gateway Oaks Dr	I-5	16,199	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.5	59	127	273	588
56	Northgate Blvd	I-80	San Juan Rd	32,742	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	75	162	348	751
57	Northgate Blvd	Silver Eagle Rd	Arden Garden Connector	21,246	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.3	56	121	261	563
58	Truxel Rd	W El Camino Ave	Garden Hwy	16,374	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.1	47	102	220	473
59	Truxel Rd	San Juan Rd	W El Camino Ave	25,272	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.0	63	136	293	632
60	Truxel Rd	I-80	San Juan Rd	41,435	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.6	110	237	510	1099
61	I St	5th St	12th St	22,315	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.6	27	59	127	275
62	I St	21st St	29th St	5,190	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.2	10	22	48	104
63	L St	5th St	15th St	11,148	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.6	17	37	80	173
64	L St	15th St	29th St	5,091	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.8	13	28	61	132
65	P St	16th St	29th St	8,019	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.8	18	38	83	179
66	J St	3rd St	7th St	22,413	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.2	35	76	164	354
67	J St	21st St	29th St	13,311	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.0	25	54	116	250
68	Q St	3rd St	10th St	15,630	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.0	22	47	101	217
69	7th St	P St	J St	5,328	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.4	11	23	49	106
70	12th St	D St	I St	8,053	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.2	14	30	65	139
71	N St	10th St	16th St	7,786	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.0	14	29	63	136
72	15th St	X St	Broadway	9,653	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.6	20	44	94	202
73	15th St	J St	P St	10,570	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.0	21	46	100	215
74	16th St	P St	W St	15,551	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.0	22	46	100	216
75	29th St	J St	P St	11,761	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.4	23	50	107	230

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-4

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Baseline Conditions																		
76	30th St	P St	J St	9,331	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.4	20	43	92	198
77	Alhambra Blvd	Stockton Blvd	Broadway	13,762	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.1	26	55	119	256
78	Broadway	3rd St	5th St	10,285	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.2	16	35	76	164
79	Broadway	Riverside Blvd	Franklin Blvd	20,420	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.2	26	56	120	259
80	Richards Blvd	Bercut Dr	N 7th St	26,432	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.2	65	140	302	651
81	Exposition Blvd	SR-160	I-80 Business	22,903	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.6	59	127	275	592
82	Exposition Blvd	I-80 Business	Arden Way	35,049	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.9	98	212	456	983
83	Arden Way	I-80 Business	Exposition Blvd	54,546	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.8	132	284	613	1320
84	El Camino Ave	I-80 Business	Howe Ave	38,432	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.8	84	180	388	835
85	Marconi Ave	I-80 Business	Bell St	25,704	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.1	64	138	297	639
86	Auburn Blvd	Howe Ave	Watt Ave	8,722	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.4	31	67	144	311
87	Auburn Blvd	Watt Ave	SR-244	21,160	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.2	56	121	260	561
88	Auburn Blvd	El Camino Ave	Arcade Blvd	8,986	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.5	32	68	147	317
89	American River Dr	Howe Ave	Watt Ave	11,057	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.8	29	62	133	286
90	Heritage Ln	Arden Way	Exposition Blvd	8,178	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.5	23	50	108	234
91	Howe Ave	US-50	Fair Oaks Blvd	55,633	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.2	164	354	763	1644
92	Howe Ave	Fair Oaks Blvd	Hurley Way	51,674	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.1	102	219	472	1018
93	Howe Ave	Hurley Way	El Camino Ave	29,860	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.7	71	152	328	706
94	Howe Ave	El Camino Ave	Auburn Blvd	16,596	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	37	81	174	375
95	Alta Arden Ex	Howe Ave	Fulton Ave	16,244	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	72	156	336	723
96	Fair Oaks Blvd	Howe Ave	Munroe St	29,904	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.7	71	152	328	707
97	Fair Oaks Blvd	Munroe St	Watt Ave	28,901	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	149	321	691
98	Fair Oaks Blvd	Watt Ave	Eastern Ave	42,434	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.3	89	192	414	892
99	Watt Ave	Fair Oaks Blvd	US-50	84,384	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.2	141	304	655	1411
100	Elvas Ave/56th St	52nd St	H St	8,239	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.1	30	64	139	299

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-5

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Baseline Conditions																		
101	Elvas Ave	J ST	Folsom Blvd	18,988	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.2	65	141	303	653
102	H St	Alhambra Blvd	45th St	13,876	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.2	26	55	119	257
103	H St	45th St	Carlson Dr	17,635	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.2	30	65	140	302
104	J St	Alhambra Blvd	56th St	15,781	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.7	28	60	130	280
105	Folsom Blvd	47th St	65th St	18,426	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.1	40	87	186	402
106	Folsom Blvd	Howe Ave	Jackson Hwy	38,544	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.3	66	142	305	657
107	Power Inn Rd	US 50	14th Ave	62,511	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.4	145	311	671	1446
108	Stockton Blvd	Alhambra Blvd	US-50	14,504	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.3	27	57	123	265
109	Jackson Hwy	Folsom Blvd	S Watt Ave	14,807	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.5	68	147	316	680
110	Hornet Dr	US-50 WB Ramps	Folsom Blvd	19,139	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.8	52	113	244	525
111	La Rivera Dr	Watt Ave	Folsom Blvd	18,052	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.0	40	85	184	396
112	Carlson Dr	Moddison Ave	H St	10,602	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.0	22	46	100	215
113	College Town Dr	Hornet Dr	La Rivera Dr	19,172	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.2	41	89	191	412
114	39th St	Folsom Blvd	J St	4,451	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	54.6	9	20	44	94
115	59th St	Folsom Blvd	Broadway	10,580	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.3	17	36	77	167
116	C St	33rd St	McKinley Blvd	5,865	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.1	19	40	87	187
117	Sutterville Rd	Riverside Blvd	Freeport Blvd	15,111	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.2	35	76	163	352
118	Sutterville Rd	24th St	Franklin Blvd	26,241	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.6	51	110	236	508
119	Seamas Ave	I-5	S Land Park Dr	15,872	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.0	46	100	215	463
120	Fruitridge Rd	S Land Park Dr	Freeport Blvd	17,294	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.4	49	106	228	491
121	Fruitridge Rd	Freeport Blvd	Franklin Blvd	27,704	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.4	67	145	312	672
122	Fruitridge Rd	Franklin Blvd	SR-99	26,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.3	66	142	305	657
123	Franklin Blvd	Broadway	5th Ave	7,171	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.3	17	36	77	166
124	Franklin Blvd	Sutterville Rd	Fruitridge Rd	20,994	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.6	44	94	203	438
125	Freeport Blvd	Sutterville Rd (S)	Fruitridge Rd	24,087	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.2	48	103	223	480

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-6

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Baseline Conditions																		
126	Riverside Blvd	Broadway	2nd Ave	12,519	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.4	31	67	144	310
127	Riverside Blvd	Sutterville Rd	Seamas Ave	6,932	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.8	21	45	97	209
128	Land Park Dr	Broadway	Vallejo Way	13,011	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.9	25	53	114	247
129	S Land Park Dr	Sutterville Rd	Seamas Ave	5,067	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.8	13	28	61	131
130	24th St	Sutterville Rd	Fruitridge Rd	9,357	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.7	33	70	151	326
131	Stockton Blvd	US-50	Broadway	26,523	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.0	40	85	184	396
132	Stockton Blvd	Broadway	Fruitridge Rd	19,570	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.3	42	90	194	418
133	Broadway	Alhambra Blvd	Stockton Blvd	15,768	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.4	36	78	168	362
134	Broadway	Stockton Blvd	65th St	16,311	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.9	29	62	133	287
135	65th St	Elvas Ave	14th Ave	30,693	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	72	155	334	719
136	Power Inn Rd	14th Ave	Fruitridge Rd	37,908	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.2	104	223	481	1036
137	12th Ave	Martin Luther King Jr Blvd	SR-99	19,016	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.9	25	53	115	247
138	14th Ave	65th St	Power Inn Rd	12,848	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.1	40	87	187	402
139	Florin Perkins Rd	Folsom Blvd	Fruitridge Rd	11,297	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.0	46	100	214	462
140	Fruitridge Rd	SR-99	44th St	31,033	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	72	156	336	724
141	Fruitridge Rd	44th St	Stockton Blvd	30,409	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	71	154	332	715
142	Fruitridge Rd	Stockton Blvd	65th St	20,061	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.0	54	117	251	542
143	Fruitridge Rd	65th St	Florin Perkins Rd	18,052	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.0	63	136	293	632
144	Fruitridge Rd	Florin Perkins Rd	S Watt Ave	14,102	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.3	66	142	306	658
145	Martin Luther King Jr Blvd	Broadway	Fruitridge Rd	9,458	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.5	20	43	93	199
146	T St	Stockton Blvd	59th St	3,039	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	54.6	9	20	43	94
147	33rd St	4th Ave	12th Ave	4,770	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	54.9	10	21	46	98
148	Raley Blvd	Bell Ave	I-80	33,804	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.7	96	207	445	960
149	S Watt Ave	US-50	Kiefer Blvd	53,280	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.7	130	280	603	1300
150	Florin Rd	Riverside Blvd	Havenside Dr	9,950	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.0	34	73	157	339

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-7

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Baseline Conditions																		
151	Florin Rd	Havenside Dr	I-5	38,574	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	105	226	486	1048
152	Riverside Blvd/Pocket Rd	Florin Rd	Greenhaven dr	10,076	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.0	34	74	159	342
153	Pocket Rd	Greenhaven dr	Freeport Blvd	28,830	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	149	320	690
154	43rd Ave	Gloria Dr	13th St	6,460	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.1	25	55	118	254
155	S Land Park Dr	Windbridge Dr	Florin Rd	4,257	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.0	12	25	54	117
156	Gloria Dr	Florin Rd	43rd Ave	4,229	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.0	12	25	54	117
157	Greenhaven Dr	Gloria Dr	Florin Rd	5,565	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.9	18	39	84	181
158	Freeport Blvd	Pocket Rd	South City Limits	11,727	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.5	58	125	270	582
159	Freeport Blvd	Florin Rd	Pocket Rd	17,356	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	76	163	351	756
160	24th St	Fruitridge Rd	Florin Rd	16,026	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.0	47	100	216	466
161	24th St	Florin Rd	Meadowview Rd	15,144	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.8	45	97	208	449
162	Meadowview Rd	Freeport Blvd	Brookfield Dr	31,108	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	156	337	726
163	Florin Rd	Freeport Blvd	Franklin Blvd	36,030	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.5	80	172	371	800
164	43rd Ave/Blair Ave	13th St	Freeport Blvd	7,647	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.2	22	48	104	223
165	47th Ave	24th St	Franklin Blvd	23,856	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.9	29	62	133	287
166	Franklin Blvd	Fruitridge Rd	47th Ave	16,703	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.2	48	103	222	479
167	Stockon Blvd	Florin Rd	Mack Rd	30,333	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	71	154	331	713
168	65th St	14th Ave	Fruitridge Rd	23,525	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	75	162	350	754
169	65th Ex	Elder Creek Rd	Stockton Blvd	21,719	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	71	154	332	714
170	Power Inn Rd	Fruitridge Rd	Florin Rd	29,621	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	88	189	408	879
171	S Watt Ave	Kiefer Blvd	Jackson Hwy	40,501	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.5	108	233	502	1082
172	Florin Rd	Franklin Blvd	SR-99	44,392	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	92	198	427	920
173	Florin Rd	SR-99	65th St	57,361	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.6	109	235	506	1091
174	Florin Rd	65th St	Stockton Blvd	36,269	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.6	80	173	373	804
175	Florin Rd	Stockton Blvd	Power Inn Rd	29,785	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.7	70	152	327	705

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-8

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Baseline Conditions																		
176	Florin Rd	Power Inn Rd	Florin Perkins Rd	23,756	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.2	48	102	221	476
177	Elder Creek Rd	Stockton Blvd	Florin Perkins Rd	27,088	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.8	83	178	384	828
178	Elder Creek Rd	South Watt Avenue	Hedge Ave	7,203	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.0	34	74	159	342
179	Florin Perkins Rd	Fruitridge Rd	Elder Creek Rd	20,583	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	149	320	689
180	Florin Perkins Rd	Elder Creek Rd	Florin Rd	21,658	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	71	154	331	713
181	Mack Rd	Meadowview Rd	Franklin Blvd	22,280	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	157	337	727
182	Mack Rd	Franklin Blvd	Center Pkwy	25,886	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.6	80	173	373	803
183	Mack Rd	Center Pkwy	Stockton Blvd	38,136	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	104	224	483	1040
184	Center Pkwy	Tangerine Ave	Mack Rd	7,035	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.5	27	58	125	269
185	Center Pkwy	Mack Rd	Bruceville Rd	6,590	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.2	26	56	120	258
186	Valley Hi Dr	Franklin Blvd	Center Pkwy	8,894	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.9	25	53	115	247
187	Valley Hi Dr	Center Pkwy	Mack Rd	20,939	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.6	44	94	203	437
188	Bruceville Rd	Valley Hi Dr	Consumnes River Blvd	19,630	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.9	53	115	248	534
189	Bruceville Rd	Consumnes River Blvd	Calvine Rd	37,068	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.1	102	220	474	1020
190	Franklin Blvd	Village Wood Dr	Big Horn Blvd	24,123	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.3	77	165	356	766
191	Franklin Blvd	Mack Rd	Turnbridge Dr	25,572	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.5	80	172	370	797
192	Franklin Blvd	47th Ave	Turnbridge Dr	24,672	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.9	62	134	289	622
193	Stockton Blvd	Fruitridge Rd	Florin Rd	29,651	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.7	70	151	326	703
194	65th Ex	Stockton Blvd	Florin Rd	19,924	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.4	42	91	196	423
195	Power Inn Rd	Florin Rd	Elsie Ave	29,391	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.1	87	188	406	874
196	47th Ave	Franklin Blvd	SR-99	29,691	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.7	70	152	326	703
197	47th Ave	SR-99	Stockton Blvd	35,641	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.5	79	171	369	794
198	Franklin Blvd	Mack Rd	Village Wood Dr	27,950	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.4	68	146	314	676
199	Elkhorn Blvd	SR-99	E Commerce Way	20,794	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.2	103	222	478	1031
200	Freeport Blvd	Sutterville Rd (N)	Sutterville Rd (S)	27,747	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.4	67	145	312	672

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-9

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Baseline Conditions																		
201	Folsom Blvd	US-50	Howe Ave	20,303	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.5	68	147	317	683
202	Cosumnes River Blvd	Franklin Blvd	Center Pkwy	22,868	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.4	91	196	422	909
203	Freeport Blvd	21st St	Sutterville Rd (N)	14,825	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.4	27	58	125	269
204	Freeport Blvd	Broadway	21st St	6,728	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.7	21	44	95	205
205	Land Park Dr	Vallejo Way	13th Ave (S)	10,552	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.0	21	46	100	214
206	Land Park Dr	13th Ave (S)	Sutterville Rd	7,848	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.7	18	38	82	176
207	Riverside Blvd	7th Ave	Sutterville Rd	10,198	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.5	27	58	126	271
208	Riverside Blvd	2nd Ave	7th Ave	10,675	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.7	28	60	130	279
209	24th St	Donner Way	Sutterville Rd	541	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	47.1	3	6	14	30
210	Sutterville Rd	Freeport Blvd	Sutterville Bypass	27,246	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.8	52	112	242	521
211	5th St	Broadway	Vallejo Way	6,764	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.0	16	34	74	159
212	Broadway	5th St	Riverside Blvd	11,981	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.5	23	50	108	233
213	Elder Creek Rd	Florin Perkins Rd	S Watt Ave	13,118	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.6	51	110	237	511
214	Richards Blvd	N 7th St	N 12th St	23,324	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.1	47	101	218	470
215	12th St	Richards Blvd	D St	19,549	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.3	42	90	194	418
216	16th St	Richards Blvd	I St	24,175	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.2	48	104	223	481
217	N 7th St	B St	F St	10,095	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.1	16	35	75	162
218	Florin Rd	I-5	Freeport Blvd	31,565	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.0	73	158	340	733
219	Cosumnes River Blvd	Center Pkwy	SR-99	54,422	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.1	162	349	752	1620
220	Garden Hwy	Orchard Ln	Gateway Oaks Dr	4,464	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.9	16	34	72	156
221	J St	7th St	10th St	15,710	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.7	28	60	130	280
222	J St	10th St	16th St	18,070	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	142	307
223	P St	16th St	9th St	7,378	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.4	17	36	78	169
224	P St	9th St	2nd St	12,493	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.7	24	52	111	240
225	Franklin Blvd	5th Ave	Sutterville Rd	9,388	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.5	20	43	92	198

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-10

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Baseline Conditions																		
226	J St/Fair Oaks Blvd	H St	Howe Ave	41,226	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.1	88	189	406	875
227	Folsom Blvd	Jackson Hwy	S Watt Ave	18,387	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.1	64	138	297	639
228	Riverside Blvd/43rd Ave	Florin Rd	Gloria Dr	21,980	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.4	58	124	267	576
229	Freeport Blvd	Fruitridge Rd	Florin Rd	20,607	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.9	85	183	393	848
230	Garden Hwy	I-5	Truxel Rd	20,787	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	149	322	694
231	Garden Hwy	Truxel Rd	Northgate Blvd	23,149	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.4	92	197	425	916
232	Norwood Ave	I-80	Silver Eagle Rd	28,290	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.9	53	115	248	534

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-11

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Future 2040 Conditions																		
1	El Centro Rd	Hankview Rd	Radio Rd	19,600	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.7	82	177	381	820
2	El Centro Rd/W El Camino Rd	Radio Rd	I-80	17,800	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.3	77	166	357	769
3	W Elkhorn Blvd	E Commerce Way	Natomas Blvd	23,900	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.8	113	244	525	1131
4	Del Paso Rd	Power Line Rd	I-5	26,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.6	81	175	377	812
5	Del Paso Rd	I-5	Natomas Blvd	53,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.2	104	224	482	1039
6	Del Paso Rd	Natomas Blvd	Gateway Park Blvd	24,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.8	62	133	286	615
7	San Juan Rd	El Centro Rd	Duckhorn Dr	7,900	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.4	36	78	169	364
8	Del Paso Rd	Gateway Park Blvd	Northgate Blvd	24,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.9	63	135	290	625
9	Northgate Blvd	Main Ave	North Market Blvd	31,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	156	337	725
10	Northgate Blvd	North Market Blvd	I-80	50,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.0	100	215	464	999
11	Natomas Blvd	W Elkhorn Blvd	Del Paso Rd	31,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.0	73	157	339	730
12	Truxel Rd	Arena Blvd	I-80	64,500	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.9	181	391	842	1814
13	Truxel Rd	Del Paso Rd	Arena Blvd	27,000	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.1	102	219	471	1015
14	North Market Blvd	Truxel Rd	Northgate Blvd	20,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.5	68	146	314	676
15	Arena Blvd	I-5	Truxel Rd	26,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.7	81	175	378	814
16	Arena Blvd	El Centro Rd	I-5	33,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.7	95	205	442	952
17	E Commerce Way	W Elkhorn Blvd	N Park Dr	22,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	157	338	727
18	E Commerce Way	N Park Dr	Del Paso Rd	32,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.6	94	202	436	939
19	E Commerce Way	Del Paso Rd	Arena Blvd	28,200	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	104	225	485	1045
20	Del Paso Blvd	Globe Ave	El Camino Ave	12,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.4	31	67	144	310
21	Del Paso Blvd	El Camino Ave	Marysville Blvd	14,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.0	34	73	158	341
22	Del Paso Blvd	Marysville Blvd	Arcade Blvd	5,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.8	18	39	83	179
23	Rio Linda Blvd	Main Ave	Bell Rd	9,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.4	42	91	195	420
24	Rio Linda Blvd	Grand Ave	Arcade Blvd	13,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.1	41	87	188	406
25	Rio Linda Blvd	Arcade Blvd	Lampasas Ave	17,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.3	49	105	227	489

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-12

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input											Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]				
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Future 2040 Conditions																		
1	Marysville Blvd	Rio Linda Blvd	Bell Ave	10,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.4	43	92	198	426
2	Marysville Blvd	I-80	Arcade Blvd	28,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.0	54	117	251	541
3	Marysville Blvd	Arcade Blvd	Del Paso Blvd	12,200	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	142	305
4	Norwood Ave	Main Ave	I-80	36,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.6	80	173	373	803
5	Norwood Ave	Silver Eagle Rd	El Camino Ave	12,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	143	308
6	El Camino Ave	Grove Ave	Del Paso Blvd	18,500	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.4	31	67	145	312
7	El Camino Ave	Del Paso Blvd	I-80 Business	34,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.8	61	131	283	610
8	Arden Way	Del Paso Blvd	Royal Oaks Dr	26,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.2	65	140	303	652
9	Arden Way	Royal Oaks Dr	I-80 Business	44,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.9	116	249	537	1156
10	Grand Ave	Norwood Ave	Rio Linda Blvd	7,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.3	23	49	105	226
11	Silver Eagle Rd	Northgate Blvd	Norwood Ave	16,600	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.3	23	49	105	225
12	Main Ave	Northgate Blvd	Norwood Ave	21,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.3	56	121	262	564
13	Main Ave	Norwood Ave	Rio Linda Blvd	16,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.1	47	102	220	473
14	Main Ave	Marysville Blvd	Raley Blvd	3,100	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	54.6	9	20	44	95
15	W Elkhorn Blvd	Natomas Blvd	Rio Linda Blvd	25,500	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.1	118	254	548	1181
16	Arcade Blvd	Marysville Blvd	Roseville Rd	20,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.4	42	91	197	424
17	Raley Blvd	Ascot Ave	Bell Ave	23,000	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.4	91	197	423	912
18	Bell Ave	Norwood Ave	Winters St	16,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.0	47	101	217	468
19	Roseville Rd	Arcade Blvd	Watt Ave	29,400	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.5	107	231	499	1074
20	Winters St	Bell Ave	I-80	20,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.0	54	116	251	540
21	Royal Oaks Dr	Arden Way	SR-160	6,800	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.1	16	34	74	160
22	Dry Creek Rd	Marysville Blvd	Grand Ave	2,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.0	12	25	54	117
23	Arden Garden Connector	Northgate Blvd	Del Paso Blvd	27,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.3	66	143	308	663
24	San Juan Rd	Truxel Rd	Northgate Blvd	23,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	75	162	349	751
25	W El Camino Ave	I-80	I-5	22,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	157	339	729

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-13

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input											Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]				
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Future 2040 Conditions																		
1	W El Camino Ave	I-5	Truxel Rd	29,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.1	87	187	403	868
2	W El Camino Ave	Truxel Rd	Northgate Blvd	25,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.5	50	107	231	499
3	W El Camino Ave	Northgate Blvd	Grove Ave	21,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.1	35	75	161	347
4	Garden Hwy	I-80	Orchard Ln	1,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.0	14	29	63	136
5	Garden Hwy	Gateway Oaks Dr	I-5	15,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.3	57	123	265	571
6	Northgate Blvd	I-80	San Juan Rd	37,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.7	82	176	379	816
7	Northgate Blvd	Silver Eagle Rd	Arden Garden Connector	23,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.7	61	130	281	605
8	Truxel Rd	W El Camino Ave	Garden Hwy	29,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	150	322	694
9	Truxel Rd	San Juan Rd	W El Camino Ave	33,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	76	164	354	762
10	Truxel Rd	I-80	San Juan Rd	41,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.6	109	235	507	1091
11	I St	5th St	12th St	24,600	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.0	29	63	136	293
12	I St	21st St	29th St	7,400	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.8	13	28	61	132
13	L St	5th St	15th St	11,800	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.8	18	39	83	180
14	L St	15th St	29th St	7,100	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.2	16	35	76	165
15	P St	16th St	29th St	8,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.0	18	40	85	184
16	J St	3rd St	7th St	20,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.8	33	71	154	332
17	J St	21st St	29th St	11,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.1	22	47	102	220
18	Q St	3rd St	10th St	17,400	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.5	23	50	108	233
19	7th St	P St	J St	5,500	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.5	11	23	50	108
20	12th St	D St	I St	5,300	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.3	11	23	49	105
21	N St	10th St	16th St	10,100	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.1	16	35	75	162
22	15th St	X St	Broadway	7,800	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.7	18	38	81	175
23	15th St	J St	P St	6,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.0	16	34	74	158
24	16th St	P St	W St	20,700	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.3	26	56	121	261
25	29th St	J St	P St	14,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.3	26	57	122	263

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-14

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Future 2040 Conditions																		
1	30th St	P St	J St	9,900	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.7	21	44	95	205
2	Alhambra Blvd	Stockton Blvd	Broadway	13,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.1	26	55	118	255
3	Broadway	3rd St	5th St	13,400	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.4	20	42	91	195
4	Broadway	Riverside Blvd	Franklin Blvd	27,800	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.5	32	68	148	318
5	Richards Blvd	Bercut Dr	N 7th St	37,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.7	82	177	382	823
6	Exposition Blvd	SR-160	I-80 Business	26,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.1	64	139	299	644
7	Exposition Blvd	I-80 Business	Arden Way	36,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.1	102	219	471	1015
8	Arden Way	I-80 Business	Exposition Blvd	57,900	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.1	137	296	638	1374
9	El Camino Ave	I-80 Business	Howe Ave	43,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.3	90	194	419	902
10	Marconi Ave	I-80 Business	Bell St	26,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.3	66	142	306	659
11	Auburn Blvd	Howe Ave	Watt Ave	8,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.4	31	67	144	310
12	Auburn Blvd	Watt Ave	SR-244	22,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.6	59	127	274	590
13	Auburn Blvd	El Camino Ave	Arcade Blvd	11,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.5	37	79	170	367
14	American River Dr	Howe Ave	Watt Ave	12,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.2	30	65	140	302
15	Heritage Ln	Arden Way	Exposition Blvd	8,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.6	24	51	110	238
16	Howe Ave	US-50	Fair Oaks Blvd	58,600	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.5	170	367	790	1702
17	Howe Ave	Fair Oaks Blvd	Hurley Way	53,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	104	225	484	1043
18	Howe Ave	Hurley Way	El Camino Ave	30,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	72	155	335	721
19	Howe Ave	El Camino Ave	Auburn Blvd	17,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.9	39	84	181	389
20	Alta Arden Ex	Howe Ave	Fulton Ave	17,100	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	75	161	347	749
21	Fair Oaks Blvd	Howe Ave	Munroe St	30,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	72	155	333	718
22	Fair Oaks Blvd	Munroe St	Watt Ave	29,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.7	71	152	328	707
23	Fair Oaks Blvd	Watt Ave	Eastern Ave	44,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	92	199	428	922
24	Watt Ave	Fair Oaks Blvd	US-50	90,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.5	148	318	685	1476
25	Elvas Ave/56th St	52nd St	H St	9,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.7	32	70	151	324

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-15

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Future 2040 Conditions																		
1	Elvas Ave	J ST	Folsom Blvd	20,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.5	69	148	318	685
2	H St	Alhambra Blvd	45th St	14,100	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.2	26	56	121	260
3	H St	45th St	Carlson Dr	18,100	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	143	307
4	J St	Alhambra Blvd	56th St	16,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.9	29	62	134	288
5	Folsom Blvd	47th St	65th St	20,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.4	42	91	197	424
6	Folsom Blvd	Howe Ave	Jackson Hwy	45,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	157	338	728
7	Power Inn Rd	US 50	14th Ave	68,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.8	154	332	715	1540
8	Stockton Blvd	Alhambra Blvd	US-50	5,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.7	13	28	60	130
9	Jackson Hwy	Folsom Blvd	S Watt Ave	22,600	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.3	90	194	418	902
10	Hornet Dr	US-50 WB Ramps	Folsom Blvd	25,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.0	63	136	293	630
11	La Rivera Dr	Watt Ave	Folsom Blvd	19,100	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.2	41	89	191	411
12	Carlson Dr	Moddison Ave	H St	10,500	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.9	21	46	99	214
13	College Town Dr	Hornet Dr	La Rivera Dr	24,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.3	49	105	225	486
14	39th St	Folsom Blvd	J St	4,200	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	54.3	9	19	42	90
15	59th St	Folsom Blvd	Broadway	13,000	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.2	19	41	89	192
16	C St	33rd St	McKinley Blvd	7,200	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.0	21	46	100	215
17	Sutterville Rd	Riverside Blvd	Freeport Blvd	15,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.4	36	78	169	364
18	Sutterville Rd	24th St	Franklin Blvd	29,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.1	55	119	256	552
19	Seamas Ave	I-5	S Land Park Dr	17,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.5	50	108	232	500
20	Fruitridge Rd	S Land Park Dr	Freeport Blvd	18,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.6	51	110	237	511
21	Fruitridge Rd	Freeport Blvd	Franklin Blvd	31,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.0	73	158	340	733
22	Fruitridge Rd	Franklin Blvd	SR-99	30,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	71	154	331	713
23	Franklin Blvd	Broadway	5th Ave	7,500	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.5	17	37	79	171
24	Franklin Blvd	Sutterville Rd	Fruitridge Rd	21,100	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.6	44	95	204	440
25	Freeport Blvd	Sutterville Rd (S)	Fruitridge Rd	28,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.0	54	117	252	542

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-16

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Future 2040 Conditions																		
1	Riverside Blvd	Broadway	2nd Ave	13,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.8	33	71	154	331
2	Riverside Blvd	Sutterville Rd	Seamas Ave	6,300	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.4	20	42	91	196
3	Land Park Dr	Broadway	Vallejo Way	13,100	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.9	25	53	115	248
4	S Land Park Dr	Sutterville Rd	Seamas Ave	5,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.0	14	29	63	135
5	24th St	Sutterville Rd	Fruitridge Rd	11,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	37	81	173	374
6	Stockton Blvd	US-50	Broadway	19,500	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.6	32	70	150	323
7	Stockton Blvd	Broadway	Fruitridge Rd	16,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	37	80	172	372
8	Broadway	Alhambra Blvd	Stockton Blvd	22,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.9	46	99	213	459
9	Broadway	Stockton Blvd	65th St	21,800	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.1	35	75	161	348
10	65th St	Elvas Ave	14th Ave	34,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.4	78	168	362	780
11	Power Inn Rd	14th Ave	Fruitridge Rd	37,600	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.2	103	222	478	1030
12	12th Ave	Martin Luther King Jr Blvd	SR-99	20,400	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.2	26	56	120	259
13	14th Ave	65th St	Power Inn Rd	16,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.0	47	100	216	466
14	Florin Perkins Rd	Folsom Blvd	Fruitridge Rd	10,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.7	45	96	207	446
15	Fruitridge Rd	SR-99	44th St	32,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	74	160	345	744
16	Fruitridge Rd	44th St	Stockton Blvd	33,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	76	164	352	759
17	Fruitridge Rd	Stockton Blvd	65th St	19,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.0	54	116	250	539
18	Fruitridge Rd	65th St	Florin Perkins Rd	17,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.8	62	133	286	616
19	Fruitridge Rd	Florin Perkins Rd	S Watt Ave	15,100	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	148	320	689
20	Martin Luther King Jr Blvd	Broadway	Fruitridge Rd	13,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.1	26	55	118	255
21	T St	Stockton Blvd	59th St	3,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.0	10	22	47	101
22	33rd St	4th Ave	12th Ave	5,800	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.7	11	24	52	112
23	Raley Blvd	Bell Ave	I-80	38,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	105	225	486	1046
24	S Watt Ave	US-50	Kiefer Blvd	65,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.6	149	320	689	1485
25	Florin Rd	Riverside Blvd	Havenside Dr	9,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.9	34	72	156	336

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-17

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Future 2040 Conditions																		
1	Florin Rd	Havenside Dr	I-5	38,600	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	105	226	487	1048
2	Riverside Blvd/Pocket Rd	Florin Rd	Greenhaven dr	9,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.8	33	72	155	334
3	Pocket Rd	Greenhaven dr	Freeport Blvd	30,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	72	155	333	718
4	43rd Ave	Gloria Dr	13th St	6,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.2	26	56	120	258
5	S Land Park Dr	Windbridge Dr	Florin Rd	5,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.1	14	30	64	137
6	Gloria Dr	Florin Rd	43rd Ave	4,500	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.3	12	26	56	121
7	Greenhaven Dr	Gloria Dr	Florin Rd	5,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.9	18	39	84	182
8	Freeport Blvd	Pocket Rd	South City Limits	12,100	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.6	59	128	276	594
9	Freeport Blvd	Florin Rd	Pocket Rd	18,200	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.4	78	168	362	780
10	24th St	Fruitridge Rd	Florin Rd	21,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.3	57	123	265	571
11	24th St	Florin Rd	Meadowview Rd	21,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.3	57	122	262	565
12	Meadowview Rd	Freeport Blvd	Brookfield Dr	34,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.3	78	167	360	776
13	Florin Rd	Freeport Blvd	Franklin Blvd	42,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.3	90	193	417	897
14	43rd Ave/Blair Ave	13th St	Freeport Blvd	7,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.3	23	49	105	226
15	47th Ave	24th St	Franklin Blvd	28,900	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.7	33	70	151	326
16	Franklin Blvd	Fruitridge Rd	47th Ave	17,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.3	49	105	226	487
17	Stockon Blvd	Florin Rd	Mack Rd	33,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.3	77	166	357	768
18	65th St	14th Ave	Fruitridge Rd	28,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.0	85	184	396	852
19	65th Ex	Elder Creek Rd	Stockton Blvd	24,200	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.3	77	165	356	768
20	Power Inn Rd	Fruitridge Rd	Florin Rd	34,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.8	97	209	451	971
21	S Watt Ave	Kiefer Blvd	Jackson Hwy	54,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.8	132	284	612	1318
22	Florin Rd	Franklin Blvd	SR-99	50,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.0	100	216	466	1003
23	Florin Rd	SR-99	65th St	63,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.0	117	251	541	1165
24	Florin Rd	65th St	Stockton Blvd	40,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.1	87	186	402	865
25	Florin Rd	Stockton Blvd	Power Inn Rd	36,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.6	80	173	373	803

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-18

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Future 2040 Conditions																		
1	Florin Rd	Power Inn Rd	Florin Perkins Rd	27,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.8	52	113	243	523
2	Elder Creek Rd	Stockton Blvd	Florin Perkins Rd	30,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.3	89	193	415	894
3	Elder Creek Rd	South Watt Avenue	Hedge Ave	15,600	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.4	57	123	266	573
4	Florin Perkins Rd	Fruitridge Rd	Elder Creek Rd	22,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	157	339	729
5	Florin Perkins Rd	Elder Creek Rd	Florin Rd	19,200	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.3	66	142	305	658
6	Mack Rd	Meadowview Rd	Franklin Blvd	22,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.0	73	158	340	731
7	Mack Rd	Franklin Blvd	Center Pkwy	29,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.1	88	189	407	876
8	Mack Rd	Center Pkwy	Stockton Blvd	41,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.6	110	236	509	1097
9	Center Pkwy	Tangerine Ave	Mack Rd	7,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.8	28	61	132	284
10	Center Pkwy	Mack Rd	Bruceville Rd	6,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.4	27	57	123	266
11	Valley Hi Dr	Franklin Blvd	Center Pkwy	10,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.4	27	58	124	267
12	Valley Hi Dr	Center Pkwy	Mack Rd	21,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.8	45	96	208	448
13	Bruceville Rd	Valley Hi Dr	Consumnes River Blvd	22,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.6	59	127	275	592
14	Bruceville Rd	Consumnes River Blvd	Calvine Rd	38,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	105	226	487	1050
15	Franklin Blvd	Village Wood Dr	Big Horn Blvd	27,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.8	84	180	388	836
16	Franklin Blvd	Mack Rd	Turnbridge Dr	28,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.0	85	184	397	854
17	Franklin Blvd	47th Ave	Turnbridge Dr	28,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.5	68	146	315	678
18	Stockton Blvd	Fruitridge Rd	Florin Rd	29,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.7	71	152	328	707
19	65th Ex	Stockton Blvd	Florin Rd	21,100	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.6	44	95	204	440
20	Power Inn Rd	Florin Rd	Elsie Ave	32,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	93	200	430	927
21	47th Ave	Franklin Blvd	SR-99	35,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.5	80	172	370	797
22	47th Ave	SR-99	Stockton Blvd	41,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	88	190	409	882
23	Franklin Blvd	Mack Rd	Village Wood Dr	32,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.0	74	160	344	741
24	Elkhorn Blvd	SR-99	E Commerce Way	26,900	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.3	122	264	568	1224
25	Freeport Blvd	Sutterville Rd (N)	Sutterville Rd (S)	31,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	157	338	729

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-19

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Future 2040 Conditions																		
201	Folsom Blvd	US-50	Howe Ave	26,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.6	81	174	375	808
202	Cosumnes River Blvd	Franklin Blvd	Center Pkwy	27,600	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.2	103	222	478	1030
203	Freeport Blvd	21st St	Sutterville Rd (N)	19,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.5	32	68	147	317
204	Freeport Blvd	Broadway	21st St	12,200	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	142	305
205	Land Park Dr	Vallejo Way	13th Ave (S)	10,800	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.1	22	47	101	218
206	Land Park Dr	13th Ave (S)	Sutterville Rd	8,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.8	18	38	83	178
207	Riverside Blvd	7th Ave	Sutterville Rd	12,200	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	142	305
208	Riverside Blvd	2nd Ave	7th Ave	12,200	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	142	305
209	24th St	Donner Way	Sutterville Rd	1,900	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	52.5	7	15	32	68
210	Sutterville Rd	Freeport Blvd	Sutterville Bypass	29,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.2	55	119	257	555
211	5th St	Broadway	Vallejo Way	7,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.4	17	36	78	168
212	Broadway	5th St	Riverside Blvd	17,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.0	29	63	137	295
213	Elder Creek Rd	Florin Perkins Rd	S Watt Ave	17,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.8	61	132	285	614
214	Richards Blvd	N 7th St	N 12th St	24,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.3	49	105	227	488
215	12th St	Richards Blvd	D St	16,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.7	38	82	176	379
216	16th St	Richards Blvd	I St	30,300	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.2	56	121	260	559
217	N 7th St	B St	F St	20,200	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.1	26	55	119	257
218	Florin Rd	I-5	Freeport Blvd	35,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.4	78	169	364	785
219	Cosumnes River Blvd	Center Pkwy	SR-99	59,200	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.5	171	369	795	1713
220	Garden Hwy	Orchard Ln	Gateway Oaks Dr	4,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.8	15	33	72	155
221	J St	7th St	10th St	14,500	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.3	27	57	123	265
222	J St	10th St	16th St	17,800	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.2	30	65	141	304
223	P St	16th St	9th St	8,200	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.9	18	39	84	181
224	P St	9th St	2nd St	13,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.0	25	54	116	250
225	Franklin Blvd	5th Ave	Sutterville Rd	11,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.1	22	47	102	220

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-20

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Future 2040 Conditions																		
226	J St/Fair Oaks Blvd	H St	Howe Ave	42,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	89	191	411	886
227	Folsom Blvd	Jackson Hwy	S Watt Ave	17,900	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.0	63	135	292	628
228	Riverside Blvd/43rd Ave	Florin Rd	Gloria Dr	20,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.2	55	120	258	555
229	Freeport Blvd	Fruitridge Rd	Florin Rd	23,900	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.6	94	202	434	936
230	Garden Hwy	I-5	Truxel Rd	14,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.1	55	119	257	553
231	Garden Hwy	Truxel Rd	Northgate Blvd	25,900	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.9	99	213	458	987
232	Norwood Ave	I-80	Silver Eagle Rd	31,300	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.4	57	123	265	572

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-21

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative No Project Conditions																		
1	El Centro Rd	Hankview Rd	Radio Rd	26,500	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.0	100	216	465	1002
2	El Centro Rd/W El Camino Rd	Radio Rd	I-80	25,900	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.9	99	213	458	987
3	W Elkhorn Blvd	E Commerce Way	Natomas Blvd	37,500	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.8	153	329	709	1527
4	Del Paso Rd	Power Line Rd	I-5	30,200	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	89	192	413	890
5	Del Paso Rd	I-5	Natomas Blvd	55,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.4	106	229	492	1061
6	Del Paso Rd	Natomas Blvd	Gateway Park Blvd	26,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.2	65	140	302	650
7	San Juan Rd	El Centro Rd	Duckhorn Dr	12,600	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.4	50	107	231	497
8	Del Paso Rd	Gateway Park Blvd	Northgate Blvd	26,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.1	65	139	300	645
9	Northgate Blvd	Main Ave	North Market Blvd	33,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	76	163	351	756
10	Northgate Blvd	North Market Blvd	I-80	52,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.2	103	222	479	1031
11	Natomas Blvd	W Elkhorn Blvd	Del Paso Rd	48,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.9	98	211	454	978
12	Truxel Rd	Arena Blvd	I-80	70,200	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	74.2	192	413	891	1919
13	Truxel Rd	Del Paso Rd	Arena Blvd	37,500	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.5	126	272	586	1264
14	North Market Blvd	Truxel Rd	Northgate Blvd	24,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	76	165	354	764
15	Arena Blvd	I-5	Truxel Rd	31,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	92	198	427	919
16	Arena Blvd	El Centro Rd	I-5	38,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	104	225	484	1043
17	E Commerce Way	W Elkhorn Blvd	N Park Dr	31,600	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.4	92	198	426	917
18	E Commerce Way	N Park Dr	Del Paso Rd	39,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.4	106	227	490	1056
19	E Commerce Way	Del Paso Rd	Arena Blvd	31,800	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.8	113	244	525	1132
20	Del Paso Blvd	Globe Ave	El Camino Ave	14,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.0	34	73	158	341
21	Del Paso Blvd	El Camino Ave	Marysville Blvd	15,200	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.2	35	76	164	353
22	Del Paso Blvd	Marysville Blvd	Arcade Blvd	5,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.0	18	40	85	184
23	Rio Linda Blvd	Main Ave	Bell Rd	11,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.1	47	102	220	473
24	Rio Linda Blvd	Grand Ave	Arcade Blvd	15,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.8	45	97	208	448
25	Rio Linda Blvd	Arcade Blvd	Lampasas Ave	18,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.7	52	111	240	517

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-22

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative No Project Conditions																		
26	Marysville Blvd	Rio Linda Blvd	Bell Ave	13,900	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.9	53	114	246	531
27	Marysville Blvd	I-80	Arcade Blvd	29,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.1	55	118	255	548
28	Marysville Blvd	Arcade Blvd	Del Paso Blvd	12,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.5	32	68	147	317
29	Norwood Ave	Main Ave	I-80	37,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.7	82	177	381	820
30	Norwood Ave	Silver Eagle Rd	El Camino Ave	13,300	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.6	32	70	150	323
31	El Camino Ave	Grove Ave	Del Paso Blvd	19,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.6	32	69	149	321
32	El Camino Ave	Del Paso Blvd	I-80 Business	36,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.0	63	136	293	632
33	Arden Way	Del Paso Blvd	Royal Oaks Dr	29,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.7	70	151	325	700
34	Arden Way	Royal Oaks Dr	I-80 Business	46,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.1	118	254	548	1180
35	Grand Ave	Norwood Ave	Rio Linda Blvd	8,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.4	23	50	107	230
36	Silver Eagle Rd	Northgate Blvd	Norwood Ave	17,400	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.5	23	50	108	233
37	Main Ave	Northgate Blvd	Norwood Ave	25,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.0	63	135	291	627
38	Main Ave	Norwood Ave	Rio Linda Blvd	16,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.2	48	104	223	481
39	Main Ave	Marysville Blvd	Raley Blvd	3,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.3	10	23	49	105
40	W Elkhorn Blvd	Natomas Blvd	Rio Linda Blvd	41,400	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.2	163	351	757	1631
41	Arcade Blvd	Marysville Blvd	Roseville Rd	20,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.5	43	93	200	431
42	Raley Blvd	Ascot Ave	Bell Ave	22,900	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.4	91	196	422	909
43	Bell Ave	Norwood Ave	Winters St	19,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.9	54	115	248	535
44	Roseville Rd	Arcade Blvd	Watt Ave	29,300	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.5	107	231	498	1072
45	Winters St	Bell Ave	I-80	20,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.0	54	117	252	542
46	Royal Oaks Dr	Arden Way	SR-160	7,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.2	16	35	76	163
47	Dry Creek Rd	Marysville Blvd	Grand Ave	3,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.8	13	29	62	133
48	Arden Garden Connector	Northgate Blvd	Del Paso Blvd	30,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	72	156	335	722
49	San Juan Rd	Truxel Rd	Northgate Blvd	25,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.5	79	170	367	791
50	W El Camino Ave	I-80	I-5	36,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.1	101	218	470	1014

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-23

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative No Project Conditions																		
51	W El Camino Ave	I-5	Truxel Rd	31,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	92	198	428	921
52	W El Camino Ave	Truxel Rd	Northgate Blvd	28,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.9	53	114	246	531
53	W El Camino Ave	Northgate Blvd	Grove Ave	22,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.3	36	77	165	356
54	Garden Hwy	I-80	Orchard Ln	3,900	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.4	23	49	106	227
55	Garden Hwy	Gateway Oaks Dr	I-5	16,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.6	59	128	276	595
56	Northgate Blvd	I-80	San Juan Rd	39,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.0	85	184	396	852
57	Northgate Blvd	Silver Eagle Rd	Arden Garden Connector	26,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.2	65	141	303	654
58	Truxel Rd	W El Camino Ave	Garden Hwy	33,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	76	163	352	758
59	Truxel Rd	San Juan Rd	W El Camino Ave	35,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.5	80	172	370	797
60	Truxel Rd	I-80	San Juan Rd	44,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.9	115	248	533	1149
61	I St	5th St	12th St	26,600	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	143	309
62	I St	21st St	29th St	8,700	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.5	15	32	68	147
63	L St	5th St	15th St	18,000	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.6	24	51	110	238
64	L St	15th St	29th St	9,500	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.5	20	43	93	200
65	P St	16th St	29th St	9,900	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.7	21	44	95	205
66	J St	3rd St	7th St	22,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.2	35	76	164	354
67	J St	21st St	29th St	11,500	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.3	23	49	105	227
68	Q St	3rd St	10th St	21,600	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.4	27	58	125	269
69	7th St	P St	J St	5,800	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.7	11	24	52	112
70	12th St	D St	I St	7,500	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.8	13	29	62	133
71	N St	10th St	16th St	12,000	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.9	18	39	84	182
72	15th St	X St	Broadway	8,200	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.9	18	39	84	181
73	15th St	J St	P St	6,800	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.1	16	34	74	160
74	16th St	P St	W St	21,500	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.4	27	58	124	268
75	29th St	J St	P St	15,200	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.6	27	59	127	273

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-24

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative No Project Conditions																		
76	30th St	P St	J St	10,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.9	21	46	99	212
77	Alhambra Blvd	Stockton Blvd	Broadway	13,800	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.1	26	55	119	256
78	Broadway	3rd St	5th St	13,000	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.2	19	41	89	192
79	Broadway	Riverside Blvd	Franklin Blvd	29,500	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.8	33	71	153	331
80	Richards Blvd	Bercut Dr	N 7th St	42,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	89	191	411	886
81	Exposition Blvd	SR-160	I-80 Business	26,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.3	66	142	305	657
82	Exposition Blvd	I-80 Business	Arden Way	37,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.2	103	222	477	1028
83	Arden Way	I-80 Business	Exposition Blvd	59,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.1	139	300	646	1391
84	El Camino Ave	I-80 Business	Howe Ave	44,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.4	92	198	426	917
85	Marconi Ave	I-80 Business	Bell St	27,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.4	67	144	311	670
86	Auburn Blvd	Howe Ave	Watt Ave	8,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.2	30	65	141	303
87	Auburn Blvd	Watt Ave	SR-244	22,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.5	58	126	271	583
88	Auburn Blvd	El Camino Ave	Arcade Blvd	11,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	38	81	174	376
89	American River Dr	Howe Ave	Watt Ave	12,200	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	142	305
90	Heritage Ln	Arden Way	Exposition Blvd	8,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.8	24	52	113	243
91	Howe Ave	US-50	Fair Oaks Blvd	58,200	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.4	169	365	786	1694
92	Howe Ave	Fair Oaks Blvd	Hurley Way	53,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.2	104	224	482	1038
93	Howe Ave	Hurley Way	El Camino Ave	30,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	72	155	334	719
94	Howe Ave	El Camino Ave	Auburn Blvd	17,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.8	39	83	179	387
95	Alta Arden Ex	Howe Ave	Fulton Ave	17,400	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	76	163	352	757
96	Fair Oaks Blvd	Howe Ave	Munroe St	30,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	72	155	335	721
97	Fair Oaks Blvd	Munroe St	Watt Ave	30,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	71	153	329	710
98	Fair Oaks Blvd	Watt Ave	Eastern Ave	44,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.4	92	198	426	918
99	Watt Ave	Fair Oaks Blvd	US-50	89,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.5	147	316	682	1469
100	Elvas Ave/56th St	52nd St	H St	9,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.7	32	70	151	324

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-25

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

				Input										Output				
	Segment Description and Location					Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative No Project Conditions																		
101	Elvas Ave	J ST	Folsom Blvd	20,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	149	321	692
102	H St	Alhambra Blvd	45th St	15,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.6	28	59	128	276
103	H St	45th St	Carlson Dr	18,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.4	31	67	145	313
104	J St	Alhambra Blvd	56th St	15,200	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.6	27	59	127	273
105	Folsom Blvd	47th St	65th St	20,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.5	43	93	201	433
106	Folsom Blvd	Howe Ave	Jackson Hwy	43,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	71	153	330	711
107	Power Inn Rd	US 50	14th Ave	67,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.8	153	329	708	1526
108	Stockton Blvd	Alhambra Blvd	US-50	5,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.3	14	31	66	142
109	Jackson Hwy	Folsom Blvd	S Watt Ave	13,900	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.2	65	140	303	652
110	Hornet Dr	US-50 WB Ramps	Folsom Blvd	25,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.0	63	135	292	629
111	La Rivera Dr	Watt Ave	Folsom Blvd	19,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.2	41	88	190	410
112	Carlson Dr	Moddison Ave	H St	10,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.0	22	47	100	216
113	College Town Dr	Hornet Dr	La Rivera Dr	23,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.1	47	102	220	475
114	39th St	Folsom Blvd	J St	4,300	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	54.4	9	20	43	92
115	59th St	Folsom Blvd	Broadway	13,200	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.3	19	42	90	193
116	C St	33rd St	McKinley Blvd	7,300	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.0	22	47	101	217
117	Sutterville Rd	Riverside Blvd	Freeport Blvd	16,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	37	81	174	375
118	Sutterville Rd	24th St	Franklin Blvd	29,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.1	55	119	257	553
119	Seamas Ave	I-5	S Land Park Dr	18,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.6	51	109	235	506
120	Fruitridge Rd	S Land Park Dr	Freeport Blvd	19,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.8	52	113	242	522
121	Fruitridge Rd	Freeport Blvd	Franklin Blvd	31,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	157	338	729
122	Fruitridge Rd	Franklin Blvd	SR-99	30,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	71	153	329	710
123	Franklin Blvd	Broadway	5th Ave	8,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.9	18	39	85	183
124	Franklin Blvd	Sutterville Rd	Fruitridge Rd	20,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.6	44	94	203	437
125	Freeport Blvd	Sutterville Rd (S)	Fruitridge Rd	30,200	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.2	56	120	259	558

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-26

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

				Input										Output				
		Segment Description and Location				Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative No Project Conditions																		
126	Riverside Blvd	Broadway	2nd Ave	13,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.5	32	69	148	318
127	Riverside Blvd	Sutterville Rd	Seamas Ave	6,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.5	20	43	93	200
128	Land Park Dr	Broadway	Vallejo Way	13,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.0	25	54	116	250
129	S Land Park Dr	Sutterville Rd	Seamas Ave	5,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.3	14	31	66	142
130	24th St	Sutterville Rd	Fruitridge Rd	11,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	38	81	174	376
131	Stockton Blvd	US-50	Broadway	20,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.7	33	71	152	328
132	Stockton Blvd	Broadway	Fruitridge Rd	20,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.5	43	93	199	430
133	Broadway	Alhambra Blvd	Stockton Blvd	23,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.2	48	103	221	476
134	Broadway	Stockton Blvd	65th St	21,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.1	35	74	160	346
135	65th St	Elvas Ave	14th Ave	34,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.4	78	169	364	783
136	Power Inn Rd	14th Ave	Fruitridge Rd	38,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	104	224	482	1039
137	12th Ave	Martin Luther King Jr Blvd	SR-99	20,500	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.2	26	56	120	259
138	14th Ave	65th St	Power Inn Rd	15,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.9	46	99	213	458
139	Florin Perkins Rd	Folsom Blvd	Fruitridge Rd	11,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.9	45	98	211	454
140	Fruitridge Rd	SR-99	44th St	32,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	75	161	346	745
141	Fruitridge Rd	44th St	Stockton Blvd	33,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.3	77	165	356	767
142	Fruitridge Rd	Stockton Blvd	65th St	20,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.1	55	118	254	548
143	Fruitridge Rd	65th St	Florin Perkins Rd	20,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.5	68	146	314	676
144	Fruitridge Rd	Florin Perkins Rd	S Watt Ave	14,300	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.3	66	143	308	664
145	Martin Luther King Jr Blvd	Broadway	Fruitridge Rd	13,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.9	25	53	114	246
146	T St	Stockton Blvd	59th St	3,100	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	54.6	9	20	44	95
147	33rd St	4th Ave	12th Ave	5,600	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.6	11	24	51	109
148	Raley Blvd	Bell Ave	I-80	42,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.7	111	239	515	1109
149	S Watt Ave	US-50	Kiefer Blvd	66,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.6	150	323	696	1500
150	Florin Rd	Riverside Blvd	Havenside Dr	9,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.8	33	72	155	334

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-27

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative No Project Conditions																		
151	Florin Rd	Havenside Dr	I-5	38,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	105	227	488	1052
152	Riverside Blvd/Pocket Rd	Florin Rd	Greenhaven dr	9,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.9	34	73	157	338
153	Pocket Rd	Greenhaven dr	Freeport Blvd	30,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	71	153	329	710
154	43rd Ave	Gloria Dr	13th St	6,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.2	26	56	121	261
155	S Land Park Dr	Windbridge Dr	Florin Rd	5,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.3	14	31	66	142
156	Gloria Dr	Florin Rd	43rd Ave	4,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.4	12	27	57	123
157	Greenhaven Dr	Gloria Dr	Florin Rd	5,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.9	18	39	84	182
158	Freeport Blvd	Pocket Rd	South City Limits	12,000	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.6	59	127	274	591
159	Freeport Blvd	Florin Rd	Pocket Rd	17,900	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.3	77	166	358	772
160	24th St	Fruitridge Rd	Florin Rd	21,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.3	57	122	263	567
161	24th St	Florin Rd	Meadowview Rd	20,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.1	55	119	256	551
162	Meadowview Rd	Freeport Blvd	Brookfield Dr	34,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.3	77	167	359	773
163	Florin Rd	Freeport Blvd	Franklin Blvd	42,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.3	89	192	414	892
164	43rd Ave/Blair Ave	13th St	Freeport Blvd	7,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.3	23	49	105	226
165	47th Ave	24th St	Franklin Blvd	28,400	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.6	32	69	150	322
166	Franklin Blvd	Fruitridge Rd	47th Ave	17,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.4	50	107	230	496
167	Stockon Blvd	Florin Rd	Mack Rd	34,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.3	77	166	358	771
168	65th St	14th Ave	Fruitridge Rd	28,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.0	85	184	396	852
169	65th Ex	Elder Creek Rd	Stockton Blvd	24,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.4	78	168	361	778
170	Power Inn Rd	Fruitridge Rd	Florin Rd	34,600	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.8	97	210	452	975
171	S Watt Ave	Kiefer Blvd	Jackson Hwy	55,600	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.9	134	288	621	1337
172	Florin Rd	Franklin Blvd	SR-99	49,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.0	99	214	461	994
173	Florin Rd	SR-99	65th St	63,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.0	116	251	540	1164
174	Florin Rd	65th St	Stockton Blvd	40,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.0	86	185	398	858
175	Florin Rd	Stockton Blvd	Power Inn Rd	35,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.4	79	170	366	788

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-28

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative No Project Conditions																		
176	Florin Rd	Power Inn Rd	Florin Perkins Rd	25,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.5	50	108	232	500
177	Elder Creek Rd	Stockton Blvd	Florin Perkins Rd	29,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	88	190	409	882
178	Elder Creek Rd	South Watt Avenue	Hedge Ave	14,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.1	55	118	253	546
179	Florin Perkins Rd	Fruitridge Rd	Elder Creek Rd	22,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	157	339	729
180	Florin Perkins Rd	Elder Creek Rd	Florin Rd	19,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.2	65	141	303	654
181	Mack Rd	Meadowview Rd	Franklin Blvd	22,200	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	72	156	337	725
182	Mack Rd	Franklin Blvd	Center Pkwy	28,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.0	86	186	400	862
183	Mack Rd	Center Pkwy	Stockton Blvd	40,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.5	109	234	504	1086
184	Center Pkwy	Tangerine Ave	Mack Rd	7,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.7	28	61	130	281
185	Center Pkwy	Mack Rd	Bruceville Rd	6,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.3	26	57	122	263
186	Valley Hi Dr	Franklin Blvd	Center Pkwy	9,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.3	26	57	122	264
187	Valley Hi Dr	Center Pkwy	Mack Rd	21,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.7	45	96	207	445
188	Bruceville Rd	Valley Hi Dr	Consumnes River Blvd	22,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.5	59	126	272	586
189	Bruceville Rd	Consumnes River Blvd	Calvine Rd	38,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	105	225	486	1046
190	Franklin Blvd	Village Wood Dr	Big Horn Blvd	27,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.8	84	180	388	836
191	Franklin Blvd	Mack Rd	Turnbridge Dr	29,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.1	87	187	402	866
192	Franklin Blvd	47th Ave	Turnbridge Dr	28,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	148	320	689
193	Stockton Blvd	Fruitridge Rd	Florin Rd	30,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	71	153	330	711
194	65th Ex	Stockton Blvd	Florin Rd	21,300	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.7	44	95	205	442
195	Power Inn Rd	Florin Rd	Elsie Ave	32,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	93	199	429	925
196	47th Ave	Franklin Blvd	SR-99	35,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.5	79	170	366	789
197	47th Ave	SR-99	Stockton Blvd	41,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	88	191	411	885
198	Franklin Blvd	Mack Rd	Village Wood Dr	31,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.0	74	159	342	736
199	Elkhorn Blvd	SR-99	E Commerce Way	52,300	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	74.2	191	411	885	1906
200	Freeport Blvd	Sutterville Rd (N)	Sutterville Rd (S)	32,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	75	162	350	753

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-29

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative No Project Conditions																		
201	Folsom Blvd	US-50	Howe Ave	26,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.6	81	174	374	806
202	Cosumnes River Blvd	Franklin Blvd	Center Pkwy	26,600	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.0	100	217	466	1005
203	Freeport Blvd	21st St	Sutterville Rd (N)	20,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.9	33	72	155	335
204	Freeport Blvd	Broadway	21st St	13,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.5	32	69	148	318
205	Land Park Dr	Vallejo Way	13th Ave (S)	11,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.3	23	49	105	226
206	Land Park Dr	13th Ave (S)	Sutterville Rd	8,900	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.2	19	41	89	191
207	Riverside Blvd	7th Ave	Sutterville Rd	12,300	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	142	307
208	Riverside Blvd	2nd Ave	7th Ave	13,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.5	32	69	148	318
209	24th St	Donner Way	Sutterville Rd	2,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	53.4	8	17	36	78
210	Sutterville Rd	Freeport Blvd	Sutterville Bypass	31,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.4	57	123	266	573
211	5th St	Broadway	Vallejo Way	7,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.4	17	36	79	169
212	Broadway	5th St	Riverside Blvd	17,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.1	30	64	138	298
213	Elder Creek Rd	Florin Perkins Rd	S Watt Ave	18,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.1	64	137	296	637
214	Richards Blvd	N 7th St	N 12th St	27,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.9	53	114	246	530
215	12th St	Richards Blvd	D St	19,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.3	42	90	195	420
216	16th St	Richards Blvd	I St	32,100	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.5	58	125	270	581
217	N 7th St	B St	F St	23,200	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.7	28	61	131	282
218	Florin Rd	I-5	Freeport Blvd	35,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.5	79	170	367	791
219	Cosumnes River Blvd	Center Pkwy	SR-99	58,400	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.4	170	366	788	1698
220	Garden Hwy	Orchard Ln	Gateway Oaks Dr	6,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.8	21	45	97	209
221	J St	7th St	10th St	16,900	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.0	29	63	136	293
222	J St	10th St	16th St	18,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.5	31	68	146	314
223	P St	16th St	9th St	9,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.6	20	43	93	201
224	P St	9th St	2nd St	16,200	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.8	29	61	132	285
225	Franklin Blvd	5th Ave	Sutterville Rd	11,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.1	22	47	102	220

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-30

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative No Project Conditions																		
226	J St/Fair Oaks Blvd	H St	Howe Ave	42,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	89	191	411	886
227	Folsom Blvd	Jackson Hwy	S Watt Ave	18,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.0	63	136	293	630
228	Riverside Blvd/43rd Ave	Florin Rd	Gloria Dr	21,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.3	57	122	263	567
229	Freeport Blvd	Fruitridge Rd	Florin Rd	24,400	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.7	95	204	440	949
230	Garden Hwy	I-5	Truxel Rd	15,200	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.3	56	121	261	563
231	Garden Hwy	Truxel Rd	Northgate Blvd	27,900	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.2	104	224	482	1037
232	Norwood Ave	I-80	Silver Eagle Rd	32,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.5	59	126	272	586

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-31

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative Plus Project Conditions																		
1	El Centro Rd	Hankview Rd	Radio Rd	23,600	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	93	200	431	928
2	El Centro Rd/W El Camino Rd	Radio Rd	I-80	23,000	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.4	91	197	423	912
3	W Elkhorn Blvd	E Commerce Way	Natomas Blvd	33,300	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.2	141	304	655	1411
4	Del Paso Rd	Power Line Rd	I-5	35,200	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.9	99	212	458	986
5	Del Paso Rd	I-5	Natomas Blvd	54,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.4	106	228	491	1058
6	Del Paso Rd	Natomas Blvd	Gateway Park Blvd	36,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.6	80	173	373	803
7	San Juan Rd	El Centro Rd	Duckhorn Dr	12,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.5	50	108	233	502
8	Del Paso Rd	Gateway Park Blvd	Northgate Blvd	32,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	75	162	348	750
9	Northgate Blvd	Main Ave	North Market Blvd	31,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.0	74	159	342	736
10	Northgate Blvd	North Market Blvd	I-80	49,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.9	99	214	460	992
11	Natomas Blvd	W Elkhorn Blvd	Del Paso Rd	50,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.0	100	215	464	999
12	Truxel Rd	Arena Blvd	I-80	64,500	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.9	181	391	842	1814
13	Truxel Rd	Del Paso Rd	Arena Blvd	22,600	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.3	90	194	418	902
14	North Market Blvd	Truxel Rd	Northgate Blvd	13,200	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.6	51	110	238	513
15	Arena Blvd	I-5	Truxel Rd	17,900	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.0	63	135	292	628
16	Arena Blvd	El Centro Rd	I-5	32,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.6	94	202	436	939
17	E Commerce Way	W Elkhorn Blvd	N Park Dr	30,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.3	89	193	415	894
18	E Commerce Way	N Park Dr	Del Paso Rd	27,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.8	83	178	384	828
19	E Commerce Way	Del Paso Rd	Arena Blvd	25,300	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.8	97	209	451	972
20	Del Paso Blvd	Globe Ave	El Camino Ave	11,100	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.9	29	62	133	286
21	Del Paso Blvd	El Camino Ave	Marysville Blvd	11,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.0	29	63	135	292
22	Del Paso Blvd	Marysville Blvd	Arcade Blvd	5,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.1	19	40	87	188
23	Rio Linda Blvd	Main Ave	Bell Rd	16,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.5	59	126	272	585
24	Rio Linda Blvd	Grand Ave	Arcade Blvd	21,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.2	56	120	259	558
25	Rio Linda Blvd	Arcade Blvd	Lampasas Ave	22,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.6	59	127	275	592

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-32

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input											Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]				
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative Plus Project Conditions																		
26	Marysville Blvd	Rio Linda Blvd	Bell Ave	13,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.6	51	110	237	510
27	Marysville Blvd	I-80	Arcade Blvd	19,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.2	41	88	190	410
28	Marysville Blvd	Arcade Blvd	Del Paso Blvd	7,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.3	22	48	104	224
29	Norwood Ave	Main Ave	I-80	41,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	88	190	409	881
30	Norwood Ave	Silver Eagle Rd	El Camino Ave	16,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	37	81	174	375
31	El Camino Ave	Grove Ave	Del Paso Blvd	20,100	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.8	33	71	153	329
32	El Camino Ave	Del Paso Blvd	I-80 Business	37,300	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.1	64	138	298	643
33	Arden Way	Del Paso Blvd	Royal Oaks Dr	32,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	75	161	346	745
34	Arden Way	Royal Oaks Dr	I-80 Business	46,600	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.1	119	256	552	1189
35	Grand Ave	Norwood Ave	Rio Linda Blvd	8,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.8	24	52	113	243
36	Silver Eagle Rd	Northgate Blvd	Norwood Ave	19,500	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.0	25	54	116	251
37	Main Ave	Northgate Blvd	Norwood Ave	30,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	71	154	331	713
38	Main Ave	Norwood Ave	Rio Linda Blvd	20,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.0	54	117	252	542
39	Main Ave	Marysville Blvd	Raley Blvd	5,500	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.1	14	30	64	139
40	W Elkhorn Blvd	Natomas Blvd	Rio Linda Blvd	43,000	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.4	167	360	777	1673
41	Arcade Blvd	Marysville Blvd	Roseville Rd	19,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.4	42	91	196	421
42	Raley Blvd	Ascot Ave	Bell Ave	23,500	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	93	199	429	925
43	Bell Ave	Norwood Ave	Winters St	20,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.0	54	116	251	540
44	Roseville Rd	Arcade Blvd	Watt Ave	29,700	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.5	108	233	502	1082
45	Winters St	Bell Ave	I-80	18,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.6	51	110	237	511
46	Royal Oaks Dr	Arden Way	SR-160	11,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.4	23	49	107	230
47	Dry Creek Rd	Marysville Blvd	Grand Ave	5,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.0	18	40	85	184
48	Arden Garden Connector	Northgate Blvd	Del Paso Blvd	31,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	157	337	727
49	San Juan Rd	Truxel Rd	Northgate Blvd	23,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	75	161	348	749
50	W El Camino Ave	I-80	I-5	34,600	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.8	97	210	452	975

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-33

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative Plus Project Conditions																		
51	W El Camino Ave	I-5	Truxel Rd	27,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.8	83	180	387	834
52	W El Camino Ave	Truxel Rd	Northgate Blvd	31,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.4	58	124	267	575
53	W El Camino Ave	Northgate Blvd	Grove Ave	23,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.4	36	78	169	364
54	Garden Hwy	I-80	Orchard Ln	7,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.1	35	74	160	345
55	Garden Hwy	Gateway Oaks Dr	I-5	22,200	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	72	156	337	725
56	Northgate Blvd	I-80	San Juan Rd	36,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.6	81	175	376	810
57	Northgate Blvd	Silver Eagle Rd	Arden Garden Connector	23,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.7	60	129	278	598
58	Truxel Rd	W El Camino Ave	Garden Hwy	23,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.8	61	131	282	609
59	Truxel Rd	San Juan Rd	W El Camino Ave	28,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.5	68	147	317	683
60	Truxel Rd	I-80	San Juan Rd	40,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.5	109	234	504	1086
61	I St	5th St	12th St	27,600	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.5	32	68	147	316
62	I St	21st St	29th St	10,200	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.2	16	35	76	163
63	L St	5th St	15th St	15,900	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.1	22	47	102	219
64	L St	15th St	29th St	19,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.5	32	68	147	317
65	P St	16th St	29th St	11,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.3	22	48	104	224
66	J St	3rd St	7th St	17,800	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.2	30	65	141	304
67	J St	21st St	29th St	11,800	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.5	23	50	107	231
68	Q St	3rd St	10th St	25,800	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.2	30	65	140	302
69	7th St	P St	J St	1,100	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	48.5	4	8	17	37
70	12th St	D St	I St	6,200	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.0	12	25	54	117
71	N St	10th St	16th St	12,700	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.1	19	41	88	189
72	15th St	X St	Broadway	7,900	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.7	18	38	82	177
73	15th St	J St	P St	10,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.9	21	46	99	212
74	16th St	P St	W St	22,300	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.6	27	59	127	274
75	29th St	J St	P St	20,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.9	34	72	156	336

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-34

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative Plus Project Conditions																		
76	30th St	P St	J St	15,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.6	28	59	128	276
77	Alhambra Blvd	Stockton Blvd	Broadway	8,800	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.2	19	41	88	190
78	Broadway	3rd St	5th St	22,678	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.6	28	60	129	278
79	Broadway	Riverside Blvd	Franklin Blvd	29,000	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.7	33	70	152	327
80	Richards Blvd	Bercut Dr	N 7th St	42,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.3	89	193	415	895
81	Exposition Blvd	SR-160	I-80 Business	26,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.2	65	140	301	649
82	Exposition Blvd	I-80 Business	Arden Way	32,600	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.6	94	202	435	937
83	Arden Way	I-80 Business	Exposition Blvd	65,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.6	150	322	694	1496
84	El Camino Ave	I-80 Business	Howe Ave	46,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.6	95	204	439	946
85	Marconi Ave	I-80 Business	Bell St	27,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.4	67	144	309	667
86	Auburn Blvd	Howe Ave	Watt Ave	9,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.7	33	70	152	327
87	Auburn Blvd	Watt Ave	SR-244	22,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.5	59	126	272	586
88	Auburn Blvd	El Camino Ave	Arcade Blvd	13,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.2	41	88	189	408
89	American River Dr	Howe Ave	Watt Ave	12,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.4	31	67	144	310
90	Heritage Ln	Arden Way	Exposition Blvd	5,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.1	19	40	87	188
91	Howe Ave	US-50	Fair Oaks Blvd	59,500	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.5	172	370	798	1719
92	Howe Ave	Fair Oaks Blvd	Hurley Way	55,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.4	106	229	493	1062
93	Howe Ave	Hurley Way	El Camino Ave	30,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	72	155	335	721
94	Howe Ave	El Camino Ave	Auburn Blvd	17,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.9	39	85	182	392
95	Alta Arden Ex	Howe Ave	Fulton Ave	17,300	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	75	163	350	754
96	Fair Oaks Blvd	Howe Ave	Munroe St	31,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	156	337	725
97	Fair Oaks Blvd	Munroe St	Watt Ave	32,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	74	160	345	742
98	Fair Oaks Blvd	Watt Ave	Eastern Ave	45,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	93	201	432	931
99	Watt Ave	Fair Oaks Blvd	US-50	91,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.6	149	321	691	1488
100	Elvas Ave/56th St	52nd St	H St	9,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.6	32	69	148	320

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-35

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative Plus Project Conditions																		
101	Elvas Ave	J ST	Folsom Blvd	17,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.7	61	131	282	607
102	H St	Alhambra Blvd	45th St	17,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.1	30	64	138	298
103	H St	45th St	Carlson Dr	18,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.4	31	67	145	313
104	J St	Alhambra Blvd	56th St	17,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.0	29	63	137	295
105	Folsom Blvd	47th St	65th St	19,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.3	42	90	194	417
106	Folsom Blvd	Howe Ave	Jackson Hwy	39,100	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.3	66	143	308	663
107	Power Inn Rd	US 50	14th Ave	70,900	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.9	157	339	730	1572
108	Stockton Blvd	Alhambra Blvd	US-50	17,000	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.0	29	63	137	295
109	Jackson Hwy	Folsom Blvd	S Watt Ave	17,600	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	76	164	354	763
110	Hornet Dr	US-50 WB Ramps	Folsom Blvd	25,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.0	63	135	291	627
111	La Rivera Dr	Watt Ave	Folsom Blvd	18,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.1	40	87	188	404
112	Carlson Dr	Moddison Ave	H St	12,100	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.6	23	51	109	235
113	College Town Dr	Hornet Dr	La Rivera Dr	24,200	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.2	48	104	224	482
114	39th St	Folsom Blvd	J St	5,600	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.6	11	24	51	109
115	59th St	Folsom Blvd	Broadway	16,800	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.3	23	49	105	227
116	C St	33rd St	McKinley Blvd	9,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.1	26	55	119	256
117	Sutterville Rd	Riverside Blvd	Freeport Blvd	13,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.8	33	71	154	331
118	Sutterville Rd	24th St	Franklin Blvd	27,200	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.7	52	112	242	521
119	Seamas Ave	I-5	S Land Park Dr	16,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.1	47	102	220	473
120	Fruitridge Rd	S Land Park Dr	Freeport Blvd	14,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.6	43	94	202	434
121	Fruitridge Rd	Freeport Blvd	Franklin Blvd	13,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.3	42	90	194	418
122	Fruitridge Rd	Franklin Blvd	SR-99	17,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.5	50	107	231	498
123	Franklin Blvd	Broadway	5th Ave	15,100	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.5	27	59	126	272
124	Franklin Blvd	Sutterville Rd	Fruitridge Rd	27,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.8	53	113	244	526
125	Freeport Blvd	Sutterville Rd (S)	Fruitridge Rd	35,100	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.9	62	133	286	617

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-36

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative Plus Project Conditions																		
126	Riverside Blvd	Broadway	2nd Ave	12,300	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	142	307
127	Riverside Blvd	Sutterville Rd	Seamas Ave	4,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.2	16	35	76	164
128	Land Park Dr	Broadway	Vallejo Way	15,200	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.6	27	59	127	273
129	S Land Park Dr	Sutterville Rd	Seamas Ave	5,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	57.3	14	31	66	142
130	24th St	Sutterville Rd	Fruitridge Rd	8,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.3	31	66	143	308
131	Stockton Blvd	US-50	Broadway	31,900	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.8	45	97	208	448
132	Stockton Blvd	Broadway	Fruitridge Rd	20,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.4	42	91	197	424
133	Broadway	Alhambra Blvd	Stockton Blvd	19,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.3	42	90	194	417
134	Broadway	Stockton Blvd	65th St	29,800	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.5	43	92	199	428
135	65th St	Elvas Ave	14th Ave	30,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	72	156	335	722
136	Power Inn Rd	14th Ave	Fruitridge Rd	42,600	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.7	112	241	520	1120
137	12th Ave	Martin Luther King Jr Blvd	SR-99	17,800	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.6	24	51	110	236
138	14th Ave	65th St	Power Inn Rd	18,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.6	51	110	237	511
139	Florin Perkins Rd	Folsom Blvd	Fruitridge Rd	11,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.0	46	100	215	462
140	Fruitridge Rd	SR-99	44th St	31,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.9	73	156	337	725
141	Fruitridge Rd	44th St	Stockton Blvd	34,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.4	78	168	362	780
142	Fruitridge Rd	Stockton Blvd	65th St	19,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.8	53	114	245	528
143	Fruitridge Rd	65th St	Florin Perkins Rd	21,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.8	72	154	332	716
144	Fruitridge Rd	Florin Perkins Rd	S Watt Ave	14,200	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.3	66	142	307	661
145	Martin Luther King Jr Blvd	Broadway	Fruitridge Rd	10,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.0	22	46	100	215
146	T St	Stockton Blvd	59th St	1,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	51.8	6	13	28	61
147	33rd St	4th Ave	12th Ave	4,900	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.0	10	22	46	100
148	Raley Blvd	Bell Ave	I-80	41,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.6	110	238	512	1104
149	S Watt Ave	US-50	Kiefer Blvd	70,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.9	157	337	727	1566
150	Florin Rd	Riverside Blvd	Havenside Dr	10,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.2	35	76	164	354

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-37

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative Plus Project Conditions																		
151	Florin Rd	Havenside Dr	I-5	38,500	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.3	105	225	486	1046
152	Riverside Blvd/Pocket Rd	Florin Rd	Greenhaven dr	11,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	38	81	174	376
153	Pocket Rd	Greenhaven dr	Freeport Blvd	32,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	74	160	345	742
154	43rd Ave	Gloria Dr	13th St	6,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.4	27	57	123	266
155	S Land Park Dr	Windbridge Dr	Florin Rd	3,900	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	55.6	11	24	51	110
156	Gloria Dr	Florin Rd	43rd Ave	4,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	56.1	12	25	55	118
157	Greenhaven Dr	Gloria Dr	Florin Rd	5,300	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.6	17	38	81	175
158	Freeport Blvd	Pocket Rd	South City Limits	12,900	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.9	62	134	288	620
159	Freeport Blvd	Florin Rd	Pocket Rd	18,500	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.5	79	170	366	789
160	24th St	Fruitridge Rd	Florin Rd	18,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.6	51	110	236	509
161	24th St	Florin Rd	Meadowview Rd	21,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.2	56	121	261	562
162	Meadowview Rd	Freeport Blvd	Brookfield Dr	35,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.5	79	170	366	789
163	Florin Rd	Freeport Blvd	Franklin Blvd	44,300	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.4	92	198	426	918
164	43rd Ave/Blair Ave	13th St	Freeport Blvd	8,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.6	24	51	110	238
165	47th Ave	24th St	Franklin Blvd	35,500	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	37	81	174	374
166	Franklin Blvd	Fruitridge Rd	47th Ave	20,000	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.0	54	116	251	540
167	Stockon Blvd	Florin Rd	Mack Rd	33,400	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	76	164	353	761
168	65th St	14th Ave	Fruitridge Rd	15,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.3	57	122	263	566
169	65th Ex	Elder Creek Rd	Stockton Blvd	16,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.6	59	127	274	590
170	Power Inn Rd	Fruitridge Rd	Florin Rd	34,900	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.9	98	211	455	980
171	S Watt Ave	Kiefer Blvd	Jackson Hwy	62,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	72.4	144	310	667	1438
172	Florin Rd	Franklin Blvd	SR-99	48,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.9	98	211	455	981
173	Florin Rd	SR-99	65th St	57,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.6	110	237	510	1098
174	Florin Rd	65th St	Stockton Blvd	41,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	88	189	408	879
175	Florin Rd	Stockton Blvd	Power Inn Rd	35,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.5	80	172	371	798

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-38

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative Plus Project Conditions																		
176	Florin Rd	Power Inn Rd	Florin Perkins Rd	26,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.7	52	111	239	516
177	Elder Creek Rd	Stockton Blvd	Florin Perkins Rd	31,800	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	92	198	428	921
178	Elder Creek Rd	South Watt Avenue	Hedge Ave	16,200	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.5	59	127	273	588
179	Florin Perkins Rd	Fruitridge Rd	Elder Creek Rd	23,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	74	160	346	744
180	Florin Perkins Rd	Elder Creek Rd	Florin Rd	18,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.2	65	139	300	647
181	Mack Rd	Meadowview Rd	Franklin Blvd	22,900	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.0	74	159	344	740
182	Mack Rd	Franklin Blvd	Center Pkwy	28,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.0	85	184	397	854
183	Mack Rd	Center Pkwy	Stockton Blvd	41,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.6	110	236	509	1097
184	Center Pkwy	Tangerine Ave	Mack Rd	7,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.7	28	61	130	281
185	Center Pkwy	Mack Rd	Bruceville Rd	5,800	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.6	24	51	110	237
186	Valley Hi Dr	Franklin Blvd	Center Pkwy	7,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.3	23	49	105	226
187	Valley Hi Dr	Center Pkwy	Mack Rd	19,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.4	42	91	196	423
188	Bruceville Rd	Valley Hi Dr	Consumnes River Blvd	18,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.7	52	111	240	517
189	Bruceville Rd	Consumnes River Blvd	Calvine Rd	40,000	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.5	107	231	498	1073
190	Franklin Blvd	Village Wood Dr	Big Horn Blvd	28,100	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.9	85	183	394	848
191	Franklin Blvd	Mack Rd	Turnbridge Dr	29,400	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.1	87	188	406	874
192	Franklin Blvd	47th Ave	Turnbridge Dr	29,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	150	322	694
193	Stockton Blvd	Fruitridge Rd	Florin Rd	32,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.1	75	161	347	747
194	65th Ex	Stockton Blvd	Florin Rd	17,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.9	39	84	181	389
195	Power Inn Rd	Florin Rd	Elsie Ave	32,300	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	93	201	432	931
196	47th Ave	Franklin Blvd	SR-99	35,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.4	79	170	366	788
197	47th Ave	SR-99	Stockton Blvd	41,500	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.2	88	189	408	879
198	Franklin Blvd	Mack Rd	Village Wood Dr	32,900	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.2	75	162	350	753
199	Elkhorn Blvd	SR-99	E Commerce Way	45,300	55	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.6	173	373	804	1732
200	Freeport Blvd	Sutterville Rd (N)	Sutterville Rd (S)	34,600	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.4	78	168	362	779

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-39

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative Plus Project Conditions																		
201	Folsom Blvd	US-50	Howe Ave	25,900	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.6	80	173	373	803
202	Cosumnes River Blvd	Franklin Blvd	Center Pkwy	33,700	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	71.1	118	254	546	1177
203	Freeport Blvd	21st St	Sutterville Rd (N)	22,100	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.2	35	76	163	351
204	Freeport Blvd	Broadway	21st St	10,600	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	61.7	28	60	129	278
205	Land Park Dr	Vallejo Way	13th Ave (S)	9,500	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.5	20	43	93	200
206	Land Park Dr	13th Ave (S)	Sutterville Rd	9,200	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	59.4	20	42	91	196
207	Riverside Blvd	7th Ave	Sutterville Rd	18,500	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.1	40	87	187	403
208	Riverside Blvd	2nd Ave	7th Ave	16,000	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.4	37	79	170	366
209	24th St	Donner Way	Sutterville Rd	1,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	51.2	6	12	26	56
210	Sutterville Rd	Freeport Blvd	Sutterville Bypass	32,400	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.5	59	126	272	585
211	5th St	Broadway	Vallejo Way	7,400	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	58.4	17	36	79	169
212	Broadway	5th St	Riverside Blvd	16,700	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.0	29	63	135	291
213	Elder Creek Rd	Florin Perkins Rd	S Watt Ave	20,700	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.6	69	149	321	692
214	Richards Blvd	N 7th St	N 12th St	29,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.1	55	119	256	552
215	12th St	Richards Blvd	D St	21,100	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	64.6	44	95	204	440
216	16th St	Richards Blvd	I St	28,700	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.0	54	116	250	540
217	N 7th St	B St	F St	18,400	25	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.7	24	52	112	241
218	Florin Rd	I-5	Freeport Blvd	35,100	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.4	79	169	365	786
219	Cosumnes River Blvd	Center Pkwy	SR-99	61,300	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	73.7	175	378	814	1753
220	Garden Hwy	Orchard Ln	Gateway Oaks Dr	13,900	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.8	33	72	154	333
221	J St	7th St	10th St	12,300	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.6	24	51	110	237
222	J St	10th St	16th St	20,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	62.9	33	72	155	335
223	P St	16th St	9th St	12,200	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	60.6	24	51	110	236
224	P St	9th St	2nd St	22,600	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.3	36	77	165	356
225	Franklin Blvd	5th Ave	Sutterville Rd	24,100	30	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	63.6	37	80	173	372

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D-40

Traffic Noise Model Calculations

Project: 11499 - City of Sacramento GP 2040

Noise Level Descriptor: CNEL
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						CNEL,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
2040 GP Cumulative Plus Project Conditions																		
226	J St/Fair Oaks Blvd	H St	Howe Ave	43,200	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.3	90	195	419	903
227	Folsom Blvd	Jackson Hwy	S Watt Ave	11,900	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	65.2	48	103	222	478
228	Riverside Blvd/43rd Ave	Florin Rd	Gloria Dr	22,700	40	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	66.5	59	127	273	588
229	Freeport Blvd	Fruitridge Rd	Florin Rd	23,500	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	69.5	93	199	429	925
230	Garden Hwy	I-5	Truxel Rd	27,200	45	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	68.8	83	179	385	830
231	Garden Hwy	Truxel Rd	Northgate Blvd	31,000	50	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	70.7	111	240	517	1113
232	Norwood Ave	I-80	Silver Eagle Rd	38,800	35	100	100	97.0%	2.0%	1.0%	65.0%	15.0%	20.0%	67.3	66	142	306	660

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix D

Traffic Noise Modeling Calculations - References

Citation	Reference
1	Caltrans Technical Noise Supplement. 2009 (November). Table (5-11), Pg 5-60.
2	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-26), Pg 5-60.
3	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-16), Pg 2-32.
4	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-11), Pg 5-47, 48.
5	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-26), Pg 2-55, 56.
6	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-27), Pg 2-57.
7	Caltrans Technical Noise Supplement. 2009 (November). Pg 2-53.
8	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-7), Pg 5-45.
9	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-8), Pg 5-45.
10	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-9), Pg 5-45.
11	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-13), Pg 5-49.
12	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-14), Pg 5-49.
13	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (16), Pg 67
14	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (20), Pg 69
15	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (18), Pg 69

Appendix E
Subsequent Projects

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Community Development Department Projects			
Army Depot Special Planning District Amendment	Army Depot SPD	Amend the Army Depot Special Planning District (SPD) to facilitate increased industrial, office, and support commercial job growth up to 5,200 total employees, 5.2 million square feet of total development, and to update development standards to align with the goals of the General Plan	TBD
Existing Building Electrification Strategy	Citywide	Develop a comprehensive existing building electrification strategy that identifies associated costs and addresses potential equity impacts prior to implementation of mandatory requirements.	$160,000
Existing Building Electrification Time of Replacement Ordinance	Citywide	Develop an ordinance for existing buildings requiring gas powered HVAC systems and water heaters to be replaced with electric alternatives at time of replacement.	TBD
Existing Building Electrification Building Performance Standards Ordinance	Citywide	Develop a Building Performance Standards Ordinance requiring existing commercial and multi-unit residential buildings above a certain size threshold to report energy use to the City and meet established greenhouse gas emissions performance targets by specified dates.	TBD
Parking Reform	Citywide	Amend the Sacramento City Code to revise vehicle and bicycle parking regulations to eliminate City-mandated vehicle parking minimums; expand vehicle parking maximums; to better manage existing parking supply; and to allow greater flexibility to manage the use of the curb lane and all other parking facilities.	$240,000
Central City Specific Plan Update	Central City Specific Plan Area	Update the Central City Specific Plan which was adopted in 2018.	TBD
65th Street Area Specific Plan	Area surrounding 65th and Folsom streets.	Develop specific plan in areas surrounding Sacramento State campus and adjacent commercial corridors to facilitate and guide growth and investment.	TBD
Age-Friendly Community Action Plan	Citywide	Recognizing the need to plan supportive communities for an aging population, the City of Sacramento has joined the Network of Age-Friendly States and Communities. The Sacramento Age-Friendly Community Plan focuses on the specific needs of older adults and includes goals, policies, and actions to meet these needs.	TBD
102 Acre City-Owned Site	Meadowview Neighborhood, bounded by Delta	The City purchased a 102-acre site and is preparing an an opportunities and constraints analysis to guide the City in its decision making regarding the development of the 102-acre City-owned site, which may	TBD

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
	Shores to the west and Stone Beetland property to the south	include (1) selling the site as-is, or (2) developing the site with infrastructure and public uses and selling remaining land for private development. Depending on the decision, the City may develop a specific plan to address the future development of this site. Uses may include a regional sports complex, housing, parks, commercial uses, and flood control improvements.	
Mixed Income Housing Ordinance Update	Citywide	The Mixed Income Housing Ordinance last updated in 2015 is being updated as directed in the adopted 2021-2029 Housing Element Implementation Program H1. Review Mixed Income Housing Ordinance.	$250,000
Rezone Additional Affordable Housing Sites in High Resource Areas	High Resource Areas	The adopted 2021-2029 Housing Element includes Implementation Program H12. Rezone Additional Affordable Housing Sites in High Resource Areas. The program states that the City shall redesignate and rezone sites in high resource areas, as identified by HCD and TCAC, to create more opportunities for affordable housing in areas that offer low-income children and adults the best chance at economic advancement, high educational attainment, and good physical and mental health. The City will establish an appropriate target based on an analysis of potential sites to rezone.	TBD
Permitting Requirements for Special Needs Housing	Citywide	The City shall amend the Zoning Code to allow Low Barrier Navigation Center developments by right in mixed-use zones and nonresidential zones permitting multi-unit uses (Government Code Sections 65660-65668). ▪ The City shall review and revise the Zoning Code provisions for temporary residential shelters to comply with locational restrictions and parking requirements under State law (Government Code Section 65583(a)(4)), establish a higher threshold for the number of beds permitted by right, and ensure that the zones in which shelters are permitted by right provide sufficient capacity in appropriate locations within the City where public transit and services are available. ▪ The City shall update the Zoning Code to allow SROs (i.e., residential hotels) by right in commercial and multi-unit dwelling zones.	

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
		▪ The City shall develop a processing procedure to allow for the approval of 100% affordable developments that include a percentage of supportive housing units, either 25% or 12 units, whichever is greater, without a conditional use permit or other discretionary review in all zoning districts where multi-unit and mixed-use development is permitted (Government Code Section 65651(a). ▪ Review and amend the Zoning Code, as necessary, to ensure requirements for group homes of seven or more persons are consistent with State law and fair housing requirements.	
River District Specific Plan Update	River District Specific Plan Area	Update the River District Specific Plan adopted in 2011 in an effort to encourage to support new development and encourage revitalization within the River District. The project will include updates to the River District Finance Plan and River District Special Planning District. This update may also affect the River District Design Guidelines and North 16th Street Historic District Plan.	$800,000
Marysville – Del Paso Blvd Action Plan (Forward Together)	North Sacramento	A commercial corridor action plan to identify and implement. community priorities and actions to revitalize the commercial corridor.	$600k
Stockton Blvd Plan	Stockton Blvd Plan Area	The Stockton Blvd Plan (Plan) is both a Neighborhood Action Plan and a Specific Plan. The Neighborhood Action Plan is an action-oriented plan that establishes priorities for the Neighborhood Study Area at the neighborhood-level. It identifies programs and partnerships to achieve the priorities and aims to engage and empower residents and businesses to take action to improve their neighborhoods. The Specific Plan is a tool to attract and facilitate infill development in the Specific Plan Area, the 4.5-mile Stockton Boulevard commercial corridor from Alhambra Boulevard to the north and 65th Street to the south.	$1.3M
Broadway-Stockton Special Planning District	Stockton Blvd Plan Area	Following adoption of the Stockton Blvd Plan, the Broadway-Stockton Special Planning District will be updated to reflect current community priorities and the goals, policies, and actions from the Stockton Blvd Plan, References to the 1998 Urban Design Plan will be removed from the Special Planning District and Title 17, in general.	TBD
Net-Zero Energy or Net-Positive Design	Citywide	The City shall assess the feasibility of requiring net-zero energy (NZE) or net-positive design for significant retrofitting of existing privately-owned	TBD

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
		buildings and identify incentives for NZE and net-positive design in adaptive reuse projects.	
Planning and Development Code Update	Citywide	The City shall update the Planning and Development Code to implement the 2040 General Plan, including amendments to: ▪ Rezone parcels for consistency with the 2040 General Plan land use, intensity, and density diagrams; ▪ Remove maximum residential density standards from multi-unit, commercial, and industrial zones and replace them with floor area ratio-based intensity standards and minimum residential density standards; ▪ Broaden the range of housing types allowed by-right within single-unit and duplex dwelling residential zones; ▪ Update development standards for missing-middle housing types, such as accessory dwelling units, duplexes, triplexes, fourplexes, and bungalow courts; ▪ Require new residential development of a certain size to include a variety of housing unit types and sizes; ▪ Establish requirements for electric vehicle (EV) charging infrastructure in new and expanded gas stations citywide; ▪ Establish incentives to promote efficient parcel utilization and consolidation, particularly in transit-oriented development (TOD) areas; ▪ Prohibit new drive-through restaurants in areas where a strong pedestrian and transit orientation is desired; ▪ Allow for flexibility of new commercial uses in neighborhood-oriented commercial centers; and ▪ Establish incentives to facilitate the retrofit of existing shopping centers with pedestrian amenities, EV charging, bike parking, traffic-calming features, plazas and public areas, shade trees, lighting, public art, farmers markets, retail and other services that provide for everyday needs, and community events.	TBD
Update Home Occupation Regulations	Citywide	The City shall evaluate changes to the home occupation regulations in the Planning and Development Code to allow home businesses by-right	TBD

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
		and expand eligible home business permits to allow greater variety of home businesses as part of a strategy to remove barriers to entrepreneurship, support workforce participation, promote walkability, lower vehicle miles travelled, and allow residents to provide services locally.	
Design Guidelines Update	Citywide	The City shall review its development design guidelines and standards for consistency with the 2040 General Plan goals, policies, and standards, and update as appropriate.	TBD
Heat Reduction in the Public Realm	Citywide	The City will amend development standards and guidelines so as to promote the use of heat mitigation strategies to reduce temperatures in the public realm, particularly near light rail transit (LRT) stations and along transit corridors. Requirements may include the incorporation of the following: ▪ Building design strategies (varied building heights; setbacks from sidewalks; vertical and horizontal shade features); ▪ Cooling materials, treatments, and coatings; ▪ Multiple layers of shading to maximize coverage throughout the day; and ▪ Street trees, and landscaping.	TBD
Landscape Maintenance Ordinance	Citywide	The City shall study the feasibility of a landscape maintenance ordinance that would phase out the use of gas-powered landscaping equipment. This feasibility study shall include the following: ▪ Account for and identify potential alternatives to achieve comparable landscaping results when gas-powered landscaping equipment is no longer allowed. ▪ Consider potential solutions to equity impacts on the landscaping workforce as the industry shifts to accommodate the phasing out of gas-powered landscaping equipment. ▪ Identify a landscaping industry- and workforce-informed process and criteria for determining the extent of phasing out gas-powered landscaping equipment and how to equitably shift industry practices in response.	TBD

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Update to Minimum Tree Requirements	Citywide	The City shall review and amend the planning and development code as necessary to require minimum levels of tree planting in new development and significant remodels and improve tree canopy inclusion. Review the following topics at a minimum: ▪ Requirements for trees in setback areas, particularly located to shade sidewalks and streets; ▪ Opportunities to provide incentives or requirements for inclusion of trees in front, back and side yards; ▪ Tree plantings in site plan review to place trees to maximize energy conservation; ▪ Chapter 12.56 of the City Code related tree permits for ministerial development project review; and ▪ Solar panel installation requirements to minimize potential conflicts with tree planting.	TBD
Performance Zoning	Citywide	The City shall develop zoning standards applicable to new and existing industrial and manufacturing developments to minimize or avoid adverse effects related to air quality, noise, or safety on sensitive populations in disadvantaged communities and other areas of the city where industrial and manufacturing uses are near residential uses, such as the Robla neighborhood.	TBD
Healthy Food Zoning	Citywide	The City shall update the Zoning Code to promote and protect healthy food options. Possible amendments to the code include the following: ▪ Incorporate zoning controls that prohibit tobacco sales points near school and other areas; ▪ Clearly defining “healthy food grocery stores” to ensure that businesses meeting that description have access to incentives developed with them in mind; ▪ Include standards and incentives flexible enough to accommodate “alternative” grocery stores, which use less space, require less parking, and focus on the day-to-day needs of nearby residents; or ▪ Preserve grocery store uses in underserved areas through zoning designations.	TBD

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Street Standards for Tree Canopy	Citywide	The City shall update Street Standards to optimize tree canopy and provide solutions for various street functions and conditions.	TBD
Parking Lot Shade Ordinance	Citywide	The City shall update the Parking Lot Shade Ordinance and Guidelines to ease compliance, improve site plan review and inspection, monitoring, and to strengthen requirements for ongoing maintenance and replacement of trees in parking lots. Identify when and how shading requirements may be satisfied through alternate methods such as canopies and solar arrays.	TBD
Curb Space Management Plan	Citywide	The City shall develop a plan for managing curb space throughout the city's commercial, mixed-use, and higher-density areas to facilitate the following: ▪ Balanced supply and promotion of efficient package and food deliveries; ▪ Delivery of goods to restaurants/retail; ▪ Safe pick-up/drop-off of passengers by transit, taxis, and on-demand shared ride services; ▪ The safe movement of pedestrians and bicyclists; and ▪ Support and prioritization of zero-emission vehicle activities and goods deliveries over internal combustion engine vehicles.	TBD
Transportation Demand Management (TDM) Ordinance	Citywide	The City shall update the existing Transportation Systems Management Program requirements in the City Code to promote wider adoption of transportation demand management strategies. The update should include a fee structure to support staffing for regular monitoring/reporting and provide for enforcement with meaningful penalties for non-compliance.	TBD
Missing Middle Housing Analysis and Development and Design Standards	Citywide	Project will conduct a thorough analysis of the City's Planning and Development Code and other existing land use/planning regulatory documents and implement any necessary changes or new programs, including amending Title 17 of the Sacramento City Code and design guidelines/standards to allow and encourage the production of "Missing Middle Housing" (e.g. Accessory Dwelling Units, duplexes, triplexes, fourplexes, bungalow courts) throughout the City, including in single-unit and duplex dwelling zones.	REAP Grant/ $660,000

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Density Bonus Title 17 Amendments	Citywide	The adopted 2021-2029 Housing Element includes Implementation Program H16. Update Density Bonus Ordinance. The City of Sacramento anticipates amending Title 17 of the Sacramento City Code to align with State Density Bonus Law (Government Code 65915-65918) and to clarify the use of a Floor Area Ration Bonus. to encourage the production of regulated affordable housing through bonuses, concessions, incentives and waivers.	TBD
Youth, Parks, & Community Enrichment Department Projects			
Youth, Parks & Community Enrichment (YPCE) Parks Plan Update	Citywide	Update 2005-2010 Parks & Recreation Master Plan	$400,000
Vista Park	TBD in the Railyards Specific Plan area	Master Plan & Development of a new 10-acre community park in the Railyards Specific Plan area, to include grading, amphitheater, restroom building, concession building, monument structure, play areas, walkways, lighting, open turf, and landscaping	$75,000-PIF
Delta Shores Regional Park	Between Morrison Creek and Cosumnes River Blvd.	New regional park on next to Morrison Creek, adjacent to the Delta Shores PUD	TBD
Babcock School Park Joint Use Improvements (tentative)	2400 Cormorant Way	Improvements to play structure area; field renovations; ADA access trail	TBD
Del Paso Regional Park Renfree Renovation	3565 Auburn Blvd.	Improvements to existing baseball field; concession stand; parking area	TBD
Mangan Park	2230 34th Ave.	Renovate existing neighborhood center	TBD
Sutter's Landing Regional Park Master Plan Update	Sutter's Landing Regional Park	Update Site Plan to include new park amenities, ADA Access trail and dock at the river, incorporate newly acquired western parcels, and habitat enhancements.	TBD
Sutter's Landing Regional Park	20 28th Street		TBD
ADA Access Trail and Watercraft Dock at American River	20 28th Street	ADA access trail from Concession Stand Building to American River Parkway water's edge, with watercraft dock.	TBD

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Hansen Ranch Park	400 W Ascot Ave.	Add trail head and trail markers, parking lot.	TBD
Crocker Park Redevelopment (across from Crocker Museum)	211 O Street	Redevelopment of Crocker Park with Crocker Museum as the lead project proponent.	TBD
Muir Way Park	2678 Muir Way	New Park at Muir Way using JUA.	TBD
Babcock Park	2400 Cormorant Way	New Park at Babcock Park using JUA.	TBD
Performance-Based Prioritization for the Park Project Programming Guide	Citywide	Youth, Parks, & Community Enrichment (YPCE) shall update the park project programming guide to incorporate a performance-based system for prioritizing parks and recreation investments that links facility improvement priorities to safety standards, funding availability, disadvantaged communities, public health, and recreational goals through a ranking scale that includes public health outcomes.	TBD
Department of Public Works – City Facilities			
Urban Forest Plan	Citywide	Adoption and implementation of City's Urban Forest Plan, including updates to parking lot shading ordinance and guidelines.	TBD
New City-owned parking structure in Railyards	TBD in the Railyards Specific Plan area	Construct a new parking structure with 2000+/- spaces.	TBD
Delta King Barge	Old Sacramento	Repair / Renovate the Old Sac Delta King Barge	$ 1,000,000 - Construction
Parking Garage Repairs	Various	Repair / Renovate the city's existing parking garages to fix structural, mechanical, electrical, and accessibility issues.	$ 5,000,000 - Construction
ADA Upgrades to Existing Facilities	Various	Repair / Renovate the city's existing buildings/facilities to fix structural, mechanical, electrical, and accessibility issues.	$ 1,000,000 - Construction
Library (Central)	9th and I Streets	Update / upgrade the existing Central Library first floor area	$ 1,000,000 - Construction
Sacramento Housing and Redevelopment Agency (SHRA) Projects			
1000 Block of Del Paso Blvd	1022 & 1030 Del Paso Blvd	Properties currently owned by SHRA, with plans to sale to developer for a mixed-use project. Past redevelopment discussions include three-story	TBD

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
		live/work lofts ranging from 1,200 to 1,500 square feet and would include 500 square feet for retail, office or studio use.	
Rio Linda Superblock	Rio Linda Superblock	Single family residential development with 47 units.	TBD
1224 D Street	Alkali Flat 002-0121-006	Infill development, R-3A, .15 acres SHRA owned vacant lot to be sold for development, estimate 5 units.	TBD
Marisol Village-Block F	Triangle site adjacent to future light rail station (12th/16th/ Richards/Sproule 001-0103-001 001-0103-003 001-0103-006 001-0103-010	Infill development. 80 units of affordable housing.	TBD
Sunbeam Ave Housing	510 North 12th Street/ 001-0101-004	Future project, less dedication for future Richards connection, approximately 100 units of affordable housing.	TBD
Department of Public Works Projects - Transportation			
2nd Street Realignment	2nd Street from O Street to N Street	The realignment and potential two-way conversion of 2nd Street from O Street to N Street	$2,000,000
Active Transportation Plan	Citywide	Merge and update the Bicycle Master Plan and Pedestrian Master Plans.	$924,000
Street Design Standards Amendment	Citywide	Amend Section 15: Street Design Standards to reflect crash reduction factors and include designs that support the City's climate and mobility goals (walking, bicycling, and transit).	$500,000
4th Street Pedestrian Access	4th St from I St to J St	Improve pedestrian accessibility and circulation by installing a pedestrian bridge and/or accessible ramps with lighting.	$5,900,000
14th Avenue Extension	14th Ave. from Power Inn Rd to Watt Ave.	Sacramento. Four-lane extension of 14th Avenue from Power Inn Rd to Watt Ave.	$30,000
15th Street	W St to D St	Lane reduction, separated bikeways	TBD
24th Street	24th St from Meadowview Rd to	Narrow travel lanes, add bike and pedestrian improvements, and install short medians and trees where feasible.	$6,000,000

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
	the south end of roadway		
24th Street	Fruitridge to Sutterville Road Bypass	Lane reduction, add bike and pedestrian improvements	
65th St.	65th St. from Hwy. 50 to Broadway.	Widen: 65th Street to 5 lanes from Hwy. 50 to Broadway	$6,704,632
Arena Blvd.	Arena Blvd. from El Centro Rd to Duckhorn Drive and from I-5 SB Ramps to I-5 NB Ramps.	Widen Arena Blvd. to 6 lanes from El Centro Rd to Duckhorn Drive, and from I-5 SB Ramps to I-5 NB Ramps.	TBD
Auburn Blvd.	Arden Way to Marconia Ave	Complete Streets, bike lanes, sidewalks, crossings, safety improvements	TBD
Broadway Complete Street	Broadway corridor between 3rd Street and 29th Street	The multi-phase project anchors multi-modal transportation connections and improves access for all modes through introduction of a four lane to three lane road diet, new buffered bicycle lanes, new marked pedestrian crossings and refuge islands, and multi-modal improvements at two intersections.	$12,000000
Broadway (Envision Broadway in Oak Park)	Franklin Blvd to Martin Luther King Jr. Blvd	Reduce travel lanes from 4 to 3 and add buffered bike lanes	$13,000,000
Broadway (Vision Zero Top 5)	Martin Luther King Jr. Blvd to Stockton Blvd	Reduce travel lanes from 4 to 3 and add buffered bike lanes	TBD
Cosumnes River Blvd Widening and Intersection Improvements Project	Cosumnes River Blvd, from Franklin Blvd to Bruceville Rd	Widen Cosumnes River Blvd from 2 lanes to 4 lanes. Construct improvements at the intersections with Franklin Blvd, Center Pkwy, and Bruceville Rd.	$50,000,000
Capitol Mall Revitalization	Capitol Mall from 3rd to 9th Streets	Reduce Capitol Mall from four lanes to two lanes with turn lanes at intersections. Implement pedestrian and streetscape improvements.	$20,000,000
Del Paso Rd	Del Paso Rd from city limit to east of Hovanian Drive	Widen Del Paso Rd to 4 lanes from city limit to east of Hovanian Drive	TBD

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Del Paso Rd	Del Paso Rd from El Centro to East Commerce Way	Widen Del Paso Rd. to 6 lanes from El Centro to East Commerce Way	TBD
Del Paso Blvd	Marysville Blvd to Pilgrim Court	Reduce travel lanes from 4 to 3 and add buffered bike lanes	TBD
Del Paso Regional Park Multi-Use Trail Improvements	Del Paso Regional Park	To improve an existing multi-use recreational trail beginning at the east end of Park Road in Del Paso Regional Park and extending west approximately 1400 linear feet along Arcade Creek. Additional improvements include site furniture, interpretive kiosk and informational signage.	$341,000
Docks Riverfront Promenade	R St to Pioneer Bridge	Extend pedestrian/bicycle riverfront promenade from R St to Pioneer Bridge. Relocation and reconstruction of main rail line. Pedestrian/bicycle paths, benches, lighting, interpretative signs, rail crossings, and on-street bicycle lanes.	$12,518,290
East Commerce Way	East Commerce Way from Club Center Drive to Del Paso Rd	Extend East Commerce Way from Club Center Drive to Del Paso Rd, to a 6-lane facility.	$10,166,233
East Commerce Way	East Commerce Way from planned Natomas Crossing Drive to San Juan Rd	Extend East Commerce Way from planned Natomas Crossing Drive to San Juan Rd. as a 4 lane road.	$4,994,327
East Commerce Way	East Commerce Way from Arena Blvd. to Natomas Crossing Drive	Extend East Commerce Way from Arena Blvd. to Natomas Crossing Drive, as a 6 lane road.	$4,156,528
El Camino Ave	Del Paso Blvd to the shared-use path adjacent to Steelhead Creek	Pedestrian lighting, traffic signals and coordination, pedestrian crossings	TBD
El Centro Rd.	El Centro Rd.	New Overcrossing: El Centro Rd. overcrossing.	$13,734,399
Elder Creek Rd.	Elder Creek Rd. from Power Inn Rd. and Florin Perkins Rd.	Widen Elder Creek Rd. to 4 lanes from Power Inn Rd. and Florin Perkins Rd.	$2,604,132

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Elder Creek Rd.	Pantano Dr to S. Watt Ave	Complete Streets, streetscape and safety improvements	TBD
Elder Creek Rd.	Elder Creek Rd. from Florin Perkins Rd. to South Watt Ave.	Widen Elder Creek Rd to 4 lanes from Florin Perkins Rd. to South Watt Ave.	$11,733,105
Elkhorn Boulevard	Elkhorn Boulevard from SR 99 to Power Line Road	Widen Elkhorn Boulevard from SR 99 to Power Line Road from 2 to 6 lanes.	$8,831,925
Elvas Ave.	62nd St to 65th St.	Reduce lanes, install bike lanes/cycle track	
Florin Rd	24th Street to Munson Way	Narrow travel lanes, close gaps in bike lanes, pedestrian lighting, signal improvements	TBD
Folsom Blvd Safety Improvements	59th St. to 65th St.	Lane reduction, with bike lanes from 59th St. to 65th St.	$6,000,000
Folsom Blvd Operations and Maintenance	Folsom Blvd. from Power Inn Road to Watt Avenue	Folsom Blvd. from Power Inn Road to Watt Avenue; streetscape project including pedestrian and bicycle improvements, a raised landscaped median, landscaped planters, improvements to signal operations, frontage landscaping, and enhanced connections to transit facilities.	$19,500,000
Franklin Boulevard Complete Street	Sutterville Rd/12th Ave to 38th Ave	A multi-phase project to reduce vehicle travel lanes from 5 to 3 and add buffered/separated bike facilities.	$30,000,000
Franklin Blvd	Sutterville Rd to 2nd Ave	Bike lanes, crossing improvements, sidewalks	TBD
Fruitridge Rd.	Fruitridge Rd. from Florin Perkins Rd. to S. Watt Ave.	Widen Fruitridge Rd to 4 lanes from Florin Perkins Rd. to S. Watt Ave.	TBD
Freeport Blvd.	Sutterville Rd to Florin Rd	Complete Streets, bikeways, crossings, safety improvements	TBD
Fruitridge Rd.	Fruitridge Rd. from 65th St. Expressway to Power Inn Rd.	Pavement rehabilitation and lane reduction from 5 to 3 lanes, with buffered or separated bike facilities and/or shared bus lanes.	TBD
Fruitridge Rd.	Fruitridge Rd. from Stockton Blvd. to 65th St. Expressway	Pavement rehabilitation and lane reduction from 5 to 3 lanes, with buffered or separated bike facilities and/or shared bus lanes.	TBD

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Highway 99 Meister Way Overcrossing	Meister Wy. / Hwy. 99	New Overcrossing: Meister Wy. / Hwy. 99.	$10,895,026
H Street Cycle Track	5th Street to 10th Street	As part of the Sacramento Valley Station Transit Center plan, reallocate roadway space to install two-way cycle track.	
I-5	I-5 NB from Del Paso Rd. to Hwy. 99	Add Auxiliary Lane: NB from Del Paso Rd. to Hwy. 99.	$1,070,035
I-5 / Highway 99	I-5 / Highway 99 Interchange	On/Off Ramp Improvement: Add 2nd on-ramp at I-5 / Hwy. 99 Interchange.	$269,694
I-5 at Richards Blvd. Interchange	Richards Blvd. and I-5	Sacramento, Richards Blvd. and I-5; reconstruct interchange	$100,000,000
ITS Expansion - Traffic Operation	Major corridors	Project will evaluate and implement on major corridors, Intelligent Transportation System (ITS) elements and infrastructure necessary to provide traffic responsive/coordinated signal timing and communications to the Traffic Operation Center. (Emission Benefits in kg/day: ROG 1, NOX 1)	$3,992,000
J Street	J Street from Alhambra Blvd to 39th Street	Road diet: 2 lanes from Alhambra Blvd to 39th Street. There are 2 lanes 33rd Street to 39th Street already existing.	TBD
Jackson Hwy. (SR 16)	Jackson Hwy. (SR 16) from Power Inn Rd. to South Watt Ave.	Road Realignment: 4 lane Rd. from Power Inn Rd. to South Watt Ave.	$41,903,947
La Mancha Way/Elder Creek Bridge Replacement	La Mancha Way, over Elder Creek, 0.3 mi N of Mack Rd.	La Mancha Way, over Elder Creek, 0.3 mi N of Mack Rd. Replace the existing 2 lane functionally obsolete bridge with a new 2 lane bridge.	$4,273,000
Lower American River Crossing	Between downtown Sacramento and South Natomas across the Lower American River	New all-modal bridge: between downtown Sacramento and South Natomas across the Lower American River. Includes: auto, transit, bicycle, and pedestrian facilities. Scale and features to be determined through concept and feasibility study.	$400,000,000
Mack Rd Interchange Improvements	Mack Rd at SR-99	Improve vehicle, bicycle, and pedestrian circulation at the Mack Rd Interchange with SR-99, including modifying freeway on-ramps and off-ramps. Construct improvements along Mack Rd and Stockton Blvd.	$25,000,000

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Main Ave.	Main Ave. from Norwood Ave. to Rio Linda Blvd.	Widen Main Ave to 4 lanes from Norwood Ave. to Rio Linda Blvd.	$11,733,105
Main Ave.	Main Ave. from Sacramento City limit east to Norwood Ave.	Widen Main Ave to 6 lanes from Sacramento City limit east to Norwood Ave.	$5,482,382
Main Ave.	Main Ave. from Rio Linda Blvd. to Marysville Blvd.	Road Extension: 2 lanes from Rio Linda Blvd. to Marysville Blvd.	$2,497,163
Marysville Blvd	North Ave to Arcade Blvd	Narrow to two lanes, add separated bikeway, signal improvements	TBD
Manera Rica Dr.	Manera Rica Dr. from El Centro Road to East Commerce Way	Extend segment from El Centro Road to East Commerce Way	TBD
Mangan Park	Mangan Park from 24th St. to Freeport Blvd	Bikeway Facilities: 0.6 mile in City of Sacramento Mangen Park from 24th St. to Freeport Blvd. Bike trail south in Executive Airport right-of-way.	$998,865
Morrison Creek	Morrison Creek between Power Inn Road and 65th Street Expressway	Bike connection on existing maintenance road along Morrison Creek	TBD
N Street Two-Way Conversion	N Street from 2nd Street to 21st Street	Convert one-way N Street to two-way street with traffic signal improvements. This was part of Grid 3.0.	$15,000,000
Natomas Crossing Dr.	Natomas Crossing Dr. at I-5	New Overcrossing: Natomas Crossing Dr. at I-5.	$13,734,399
Natomas Crossing Drive	Natomas Crossing Drive from Duckhorn Drive to El Centro Rd.	In City of Sacramento, build new Natomas Crossing Drive as 2 lane road from Duckhorn Drive to El Centro Rd.	$5,419,737
Ninos Parkway Phase 2	San Juan Road to Parke Channel Way	Construct a Class I trail	TBD
Northgate Blvd.		Hwy 160 to Rosin Ct.	TBD

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Northgate Blvd.	Northgate Blvd. / I-80 Interchange	On/Off Ramp Improvement: Extend existing I-5 WB off-ramp at Northgate Blvd. / I-80 Interchange. Includes: auxiliary lane to WB on-ramp.	$12,485,817
Norwood Ave	Fairbanks Ave to Main Ave	Complete Streets, walking, crossing and safety improvements	TBD
Power Inn Rd.	Power Inn Rd. from Fruitridge Rd. to Florin Ave.	Widen Power Inn Rd to 6 lanes from Fruitridge Rd. to Florin Ave.	TBD
R Street Streetscape Improvements	R Street, from 2nd St. to 18th St.	R Street, from 2nd St. to 18th St., provide paving and streetscape improvements, including curb, gutter, sidewalk, accessibility features, landscaping, lighting, and street furniture.	$7,866,000
Richards Blvd	3rd St to N 16th St	Streetscape, walking, bicycling improvements	TBD
R Street Signal Improvements	R Street at 29th and 30th Street	Install signalized crossings at the intersections of R Street and 29th and 30th Street.	$3,700,000
Railyards Streets	Railyards Redevelopment Area	Construct various roads in the Railyards Redevelopment Area.	$211,345,831
Raley Blvd.	Raley Blvd. from Santa Ana Ave. to Ascot Ave.	Widen Raley Blvd to 4 lanes from Santa Ana Ave. to Ascot Ave.	$1,644,715
Rio Linda & Bell Upgrade Traffic Signals	Rio Linda Blvd at Bell Ave	At intersection of Rio Linda Blvd at Bell Ave upgrade traffic signals to include left turn phase.	$405,100
Rio Linda Blvd	Main Ave north to City Limits	Complete streets, sidewalks, buffered bike lanes, improved crossings	TBD
Roseville Rd.	Roseville Rd. from Connie Dr. to Sacramento limits	Widen Roseville Rd to 4 lanes from Connie Dr. to Sacramento limits.	$4,111,787
S. Watt Ave.	S. Watt Ave. from Elder Creek Rd. to Fruitridge Rd.	Widen S. Watt Ave to 6 lanes from Elder Creek Rd. to Fruitridge Rd.	$33,523,158
S Street	Alhambra Blvd to 3rd Street	Add Bike Lanes	TBD
S. Watt Ave. / Elk Grove Florin Rd.	S. Watt Ave. / Elk Grove Florin Rd. from	Widen S. Watt Ave to 6 lanes from Fruitridge Rd. to Folsom Blvd.	$16,761,579

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
	Fruitridge Rd. to Folsom Blvd.		
Sacramento Valley Station Access	Access via 3rd Street into the Sacramento Valley Station and Interstate 5 on-ramp modifications, 401 I Street.	Provide access from 3rd Street into the Sacramento Valley Stations by extending 3rd Street and interior circulation for bus facility and site access. Phase 3: Design access improvements at 3rd and I, including reconfiguration of the northbound access ramp and modification to the southbound ramp. The Project Study Report (PSR) is to be completed by end of 2024. Awaiting notification for funding of Design and Environmental phase (PA&ED)	TBD
Sacramento Valley Station, Transit Center – Phase 3 (formerly referred as Sacramento Intermodal Transportation Facility)	401 I Street	Sacramento Valley Station, Transit Center - Phase 3 project builds on the Phase 1 Track Relocation project and the Phase 2 Historic Station Renovation that plans for the implementation of a larger regional multi-modal transportation center that can meet the region's expanded transportation needs and accommodate high speed trains, commuter rail, light rail, regional commuter and intercity buses, and bicycle access and amenities. It will involve expansion of the terminal facilities including development of a Regional Bus Mobility Center, passenger amenities and spaces, transportation operations areas, site and circulation improvements and joint development for potential housing, office, cultural and hotel uses. Council action in 2021 accepted the master plan that is following the Living Community Challenge (LCC) regenerative planning framework with onsite regenerative utility infrastructure for net positive and zero-emission energy reduced water demand. The plan includes two large public plazas, recreation park and community garden, bike trails and Chinese Commemorative Garden. The Master Plan was included in an amendment to the Railyards Specific Plan and Addendum to the 2016 Railyards SEIR adopted by Council in April 2021.	$290,000,000
Sacramento Northern Bikeway Bridge Rehabilitation	Sacramento Northern Bikeway Bridge, across the American River, east of SR-160	Rehabilitate the bicycle / pedestrian bridge with minor structural improvements; resurface the travel way. Repaint the bridge.	$6,000,000
Snowy Egret Wy.	Snowy Egret Wy. from El Centro Rd. to Commerce Wy.	New Overcrossing for the planned Snowy Egret Wy. that will run east-west from El Centro Rd. to Commerce Wy. crossing over I-5.	$18,437,737

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
SR 99 Elkhorn Boulevard Interchange	Elkhorn Blvd. interchange on Route 99	In Sacramento County: Expand the Elkhorn Blvd. interchange on Route 99 to accommodate the widening of Elkhorn Blvd. from 2 to 6 lanes	$14,869,359
Stockton Blvd	Alhambra to 47th Avenue	Complete streets, safety and mobility improvements. Lane reduction to facilitate active transportation, transit priority and/or bus rapid transit.	TBD
Sutter's Landing Bridge	Sutter's Landing Bridge	Multi-Use Crossing: Sacramento, Sutter's Landing Bridge, between American River Pkwy. and Sutter Landing Park. Construct bike/ped bridge over American River.	$35,287,691
W. El Camino Ave.	West El Camino Interchange	Widen w. El Camino to 6 lanes West El Camino Interchange. Includes: bike lanes at I-80 / Natomas Main Drainage Canal.	$40,227,789
West Canal Bike Path		Multi-use bike trail along West Drainage Canal through San Juan Park connecting Arena Boulevard to San Juan Boulevard	$5,000,000
Sacramento River Parkway	Along Sacramento River Parkway levee from Garcia Bend Park to Zacharias Park in Pocket	Multi-Use bike trail and neighborhood access points along the east levee of the Sacramento River from Garcia Bend Park to Zacharias Park	$13,000,000
Sacramento River Crossing (Broadway Bridge)	Broadway	New Southern Bridge: from Sacramento to West Sacramento across the Sacramento River to Broadway. Includes: auto, transit, bicycle and pedestrian facilities.	TBD
Sacramento River Crossing (Railyards Bridge)	I Street/Railyards Boulevard	New Northern Bridge: from Sacramento to West Sacramento across the Sacramento River. Includes: auto, transit, bicycle and pedestrian facilities. Removes vehicle traffic from the I Street Bridge and construct a new movable bridge connecting C Street in West Sacramento to Railyards Boulevard in Sacramento.	$320,000,000
I Street Bridge Deck Conversion	Upper Deck of I Street Bridge	Convert upper deck of existing I Street Bridge to multi-use connection, replacing vehicle traffic with bicycle and pedestrian infrastructure. Along with connection to the riverfront bike trail, this project also provides direct connection to Sacramento Valley Station bike network and Transit Center.	$15,000,000
14th Ave. Extension Phase 1		Extension of 14th Avenue from Power Inn Rd to Florin-Perkins. Phase I includes environmental/PE for four lane roadway and construction of two-lane roadway with class II bicycle lanes and landscape planter/sidewalks on the south side of the roadway. Also includes new	$12,000,000

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
		water and drainage facilities, new streetlights, new traffic signal at 14th Ave/Florin Perkins Rd, and modification to existing traffic signal.	
14th Ave. Extension Phase 2		14th Ave., from Power Inn Road to Florin Perkins, widen from 2 to 4 lanes. Construction includes bike lanes, landscaped center median, landscaping and sidewalk on north side of street. Retaining wall along north side of project.	$10,000,000
14th Ave. Extension Phase 3		14th Avenue from Florin-Perkins Rd to Watt Ave: extend as a four-lane road.	$16,000,000
65th Area Plan Projects		ITS, Roadway, Bike, and pedestrian improvements to implement the 65th Street Transit Station Area Specific Plan, including 67th Street Extension from Folsom Boulevard to Elvas Avenue	$12,000,000
65th St.		Widen: 5 lanes from Hwy. 50 to Broadway.	$8,000,000
ADA Improvements		Accessibility improvements to meet current accessibility requirements	$60,000,000
Bridging I-5/Riverfront Reconnection Phase 3 (SAC22530)		Environmental clearance/PE for Riverfront Reconnection. Construct connection over I-5 between approximately Capitol Ave. to "O" St. (T15998100) Phase 1 constructed under SAC24705	$9,432,709
Broadway Complete Street Phase I		Phase I: In Sacramento, Broadway from 3rd St to 16th St, convert four lane arterial to two lane arterial with buffered bike lanes, median improvements, sidewalk improvements and streetscape enhancements. Create surface street (29th St.) from X St. to Hwy 99 South. PA&ED will be completed for the entire 2-mile corridor, from 29th St. to 3rd St.	$4,414,000
Central City Specific Plan Multi-modal improvements.		Two-way conversions, three to two lane conversions, freeway ramps, buffered bike lanes, Ped, Transit, and Bike Projects (see Table A-3 from Central City Specific Plan)	$165,000,000
Cosumnes River Boulevard		Improve safety and operations of CRB and three intersections at Franklin Boulevard, Center Parkway, and Bruceville Road	$15,000,000
Del Paso Rd		In Sacramento, from I-5 N/B offramp to East Commerce (north side only), widen Del Paso Road.	$516,000
East Commerce Way A		East Commerce Way from Club Center Drive to Del Paso Rd, extend as a 6-lane facility.	$8,142,225
East Commerce Way B		Extend East Commerce Way from Arena Blvd. to Natomas Crossing Drive, as a 6 lane road.	$3,329,000

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
East Commerce Way C		Extend East Commerce Way from planned Natomas Crossing Drive to San Juan Rd. as a 4 lane road.	$4,000,000
El Centro Rd.		New Overcrossing: El Centro Rd. overcrossing.	$11,000,000
Elder Creek Rd.		Widen Elder Creek Rd to 4 lanes from Florin Perkins Rd. to South Watt Ave.	$7,000,000
Elkhorn Boulevard		In Sacramento, Elkhorn Boulevard from SR 99 to east city limits: widen from 2 to 6 lanes.	$14,000,000
Florin Rd. Safety		Various segments along Florin Road: Install raised median, install pedestrian hybrid beacons, and add pedestrian fencing to encourage crossings at protected crossing locations. (H9-03-018)	$1,414,200
Folsom Blvd Operations and Maintenance		Folsom Blvd. from Power Inn Road to Watt Avenue; streetscape project including pedestrian and bicycle improvements, a raised landscaped median, landscaped planters, improvements to signal operations, frontage landscaping, and enhanced connections to transit facilities.	$19,500,000
Folsom Blvd.		Streetscape Project: Folsom Blvd from Power Inn. to Ramona.	$6,000,000
Main Ave. A		Road Extension: 2 lanes from Rio Linda Blvd. to Marysville Blvd.	$3,000,000
Mangan Park		Bikeway Facilities: 0.6 mile in City of Sacramento Mangen Park from 24th St. to Freeport Blvd. Bike trail south in Executive Airport right-of-way.	$800,000
Northgate Blvd.		On/Off Ramp Improvement: Extend existing I-80 WB off-ramp at Northgate Blvd. / I-80 Interchange. Includes: auxiliary lane to WB on-ramp.	$15,000,000
Panhandle Roadways		Transportation improvements to implement Panhandle annexation and development	$10,000,000
Pedestrian Crossing Improvement Implementation		Crossing improvements at uncontrolled crossings	$40,000,000
Power Inn Rd.		Widen Power Inn Rd to 6 lanes from Fruitridge Rd. to 14th.	$30,000,000
Railyards Streets		Construct New Road/Bike/Ped Improvements to implement Railyards Specific Plan	$163,000,000
Raley Blvd.		Widen Raley Blvd to 4 lanes from Santa Ana Ave. to Ascot Ave.	$2,000,000

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Ramona Avenue Phase II		Ramona Avenue: Widen and add new frontage improvements from Cucamonga to Brighton. Environmental review completed under SAC22610. (No new travel lanes.)	$5,000,000
River District Transportation Improvements		Roadway, bikeway, and pedestrian improvements to implement the River District Specific Plan.	$120,000,000
Roadway Pavement Maintenance Backlog		To maintain current PCI	$400,000,000
Sacramento Intermodal Transportation Facility - Phase 3		Intermodal Facility Phase 3 project is the creation of a larger multi-modal transportation center that can meet the region's expanded transportation needs and accommodate high speed trains, commuter rail, light rail, streetcars, transit bus lines, and intercity buses. It will involve relocating the existing LRT station to a north-south alignment; expansion of the terminal facilities including passenger amenities and spaces, transportation operations areas, site and circulation improvements and joint development	$225,000,000
Short-term Bikeway Project Implementation		Priority projects identified in the Bicycle Master Plan	$52,000,000
Snowy Egret Wy.		New bike/ped overcrossing: for the planned Snowy Egret Wy. that will run east-west from El Centro Rd. to Commerce Wy. crossing over I-5.	$10,000,000
SR 99 Elkhorn Boulevard Interchange (SAC18690)		In Sacramento County: Expand the Elkhorn Blvd. interchange on Route 99 to accommodate the widening of Elkhorn Blvd. from 2 to 6 lanes	$15,000,000
SR 99 Mack Road Interchange		Sacramento. Construct improvements at the State Route 99/Mack Road interchange to improve operations and relieve congestion. The project will also construct improvements along Mack Road and Stockton Boulevard in close proximity to the interchange.	$20,000,000
Traffic Signal Grid		Traffic signal list	$8,500,000
Two Rivers Trail Phase 3		On the American River Parkway, construct a new Class I Western segment between Sutter's Landing and the California State University of Sacramento (CSUS) campus. PE for Phase 2 and 3 was completed as part of SAC24486.	$3,000,000
Two Rivers Trail Phase II		Study and design bike/ped connections between the Northern Bicycle Trail and Sutter's Landing Park (Phase 2 and 3). Build Phase 2, construct the eastern segment of the multi-use path, connecting the American	$6,398,422

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
		River Parkway at H St. in East Sacramento to the trail at Sutter's Landing Park in Midtown. Additional study future bicycle trial connections across the American River, Crossing the Capitol City Freeway, and extending east along the American River towards California State University at Sacramento. Phase 3 construction scope shown in SAC24755. (Emission Benefits in kg/day: 0.02 ROG, 0.02 NOx, 0.02 PM10) K15125000. Toll Credits for ENG	
Valley Hi Drive/La Mancha Way Safety		Valley Hi Drive/La Mancha Way between Creek Centre Court and Wyndham Drive: Install raised median to reduce access conflicts, install traffic signal, and add pedestrian fencing. (H9-03-017)	$1,706,600
Vision Zero Traffic Safety Implementation		Traffic safety improvements along the High Injury Network	$107,000,000
W. El Camino Ave.		Widen W. El Camino Ave to 6 lanes West El Camino Interchange. Includes: bike lanes at I-80 / Natomas Main Drainage Canal.	$24,000,000
Stockon Blvd Mobility Project		Improve safety, transit, and mobility on Stockton Blvd from Alhambra to 47th Street. Reduce number of lanes from four to two to accommodate BRT or Bike/Ped	$100,000,000
Police Department Projects			
Permanent Downtown Police (essential service) facility	Within the Railyards Specific Plan area	Construct a 25,000 sf 24-hour policy facility that houses 200 total staff (sworn & civilian) and includes a public counter, offices, work stations, interview rooms, locker rooms, break rooms, gym, parking lot, and conference rooms. There is also a separate 8,500 sf service garage and fueling station. Approximate acreage is 5-7.	$850.00/sq. ft.
North Natomas Police (essential service) facility	TBD in North Natomas Town Center south of New market Drive	Construct a 25,000 sf 24-hour police facility that houses 200 total staff (sworn & civilian) and includes a public counter, offices, work stations, interview rooms, locker rooms, break rooms, gym, parking lot, and conference rooms. There is also a separate 8,500 sf service garage and fueling station. Approximate acreage is 5-7.	$850.00/sq. ft.
South Area Police (essential service) Facility	TBD	Construct a 25,000 sf police facility that houses 200 total staff (sworn & civilian) and includes a public counter, offices, work stations, interview rooms, locker rooms, break rooms, gym, parking lot, and conference rooms. There is also a separate 8,500 sf. service garage and fueling station. Approximate acreage is 5-7.	$850.00/sq. ft.

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
East Area Police (essential service) Facility	TBD	Construct a 25,000 sf 24-hour police facility that houses 200 total staff (sworn & civilian) and includes a public counter, offices, work stations, interview rooms, locker rooms, break rooms, gym, parking lot, and conference rooms. There is also a separate 8,500 sf service garage and fueling station. Approximate acreage is 5-7.	$850.00/sq. ft.
Property Warehouse (Police Evidence & Supplies)	555 Sequoia Pacific	Construct 30,000 sf of additional storage space to accommodate both the demands from increased growth and from new evidence retention laws. The current facility will either be expanded or an additional facility will be built or purchased.	$500.00/sq. ft.
Police Master Strategic Plan	Citywide	The City shall update the Police Master Strategic Plan to identify and address staffing and facility needs, service goals, and deployment strategies.	TBD
Utilities Department Projects			
Various maintenance and improvement projects to buildings and infrastructure, including building repairs, pipe replacement, security upgrades, fencing, etc.	Citywide		TBD
Alternate Water Systems – Phase 2	Citywide	City to study the costs, programmatic requirements for and impacts of onsite treatment of graywater or blackwater and reuse of that water in commercial nonresidential buildings over 50,000 sq ft. and nonresidential commercial district-scale projects with over 100,000 square feet in total area. The potential costs and benefits of expanding water reuse requirements to large multi-unit residential construction will also be evaluated. The Sacramento City Code will amended as needed to implement the recommendations.	TBD
Del Paso Blvd Area Sewer Improvements	Edgewater Rd. From Traction Ave. south to Hwy 160. Commerce Circle between Hwy 160 and Slobe Ave.	Upsize approximately 3,600 linear feet of exiting sewer pipe in Edgewater Rd. and construct 480 linear feet of new parallel sewer main in Commerce Circle. Repair work to increase capacity of the existing system where infiltration during rain events gets into the collection system from damaged infrastructure.	$3,916,000

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Lavender Heights Water Infrastructure Expansion	J and K Streets between 20th and 23rd Streets	Extend water infrastructure (12" pipe) from 23rd Street west in K Street to 21st Street and extend connections to Jazz Alley at both 22nd and 21st Streets.	$1,083,000
Sump 111 Improvements	515 Riverine Way	Increase the total capacity of Sump 111 from 92,300 gallons per minute (gpm) to 128,900 gpm. Replace the bowl assembly of Pump No. 1, 2 and 3. Upgrade electrical system 480-volt to 4160-volt power. Install a large trash capture device upstream of Sump 111.	$7,000,000
Sewer Long Range Plan Updates	Citywide	The City shall review and update Sewer Long Range Plans as needed to accommodate the land use and development pattern of the 2040 General Plan, prioritizing long range plans for the sewer basins where significant new growth is projected.	TBD
Stormwater Master Planning	Citywide	The City shall implement a stormwater master plan program to do the following: ▪ Identify facilities needed to prevent 10-year event street flooding and 100-year event structure flooding; ▪ Ensure that public facilities and infrastructure are designed pursuant to approved basin master plans; ▪ Ensure that adequate land area and any other elements are provided for facilities subject to incremental sizing (e.g., detention basins and pump stations); and ▪ Incorporate the use of "green infrastructure," Low Impact Development (LID) techniques, stormwater treatment controls, and, if applicable, trash capture devices.	TBD
Pioneer Reservoir (Combined System)	Front Street	Major roof repairs. As of May 2020, project on hold pending more research.	$12M; sewer fees
3rd Relief Sewer (combined system)	Downtown Railyards at I St. to T St.	Construct a 42-inch relief sewer, or size TBD based on demand. As of May 2020, under construction.	Developer funded
Curtis Park Storage	Feasibility Study to determine location for storage	Construct underground combined sewer storage facility (approx. 325,000 cu. ft.) FY16. As of May 2020, project on hold to evaluate other potential storage locations.	$12,000,000
McKinley Village Regional Storage	TBD through feasibility study	Feasibility study being performed to identify best locations for approximately 1,000,000 cu ft of underground combined sewer storage. As of May 2020, project is in construction.	$50M

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
McClatchy Park Sewer Storage	37th Street from 9th Ave. to McClatchy Park	Replace 1300 linear feet of existing 24" pipe with 48" pipe to create 100,000 cubic feet of storage. Potential Investment Strategy Project.	$3,257,000
Cast Iron Replacement:	downtown and midtown areas	Replacing cast iron distribution mains	$350,000,000
FLORIN - Florin Pump Redundancy (Phase 1)	6880 Power Inn Rd.	Provide additional pump for redundancy in system	$4,200,000
SCADA Program	various water facility locations	Water program costs for upgrading SCADA at water facilities, out yr costs would reduce if SRF Funding is approved for this project.	$20,983,060
SRWTP Water Expansion & New Transmision (Alt 2)	101 Bercut Dr.	Expansion work on Sacramento River WTP	$47,634,000
SRWTP Water Expansion & New Transmision (Alt 3)	101 Bercut Dr.	Expansion work on Sacramento River WTP	$52,658,000
SRWTP Water Expansion & New Transmission (Impact Fees)	101 Bercut Dr.	Expansion work on Sacramento River WTP	$21,500,000
Freeport Bl transmission Main Replacement	Freeport Blvd between City College to Light Rail	Transmission main replacement from Freeport Blvd at City College to Light Rail	$5,500,000
Wells (R & R) - GW MP/ Voluntary Agreement	Water facilities	Well replacements	$32,000,000
Fire Department Projects			
Fire Station 14	North B Street between 14th and Ahern	Relocate fire station from North C St. and construct a new station. Currently in construction phase (as of May 2020), progress underground is complete, waiting on pilling test.	TBD
Fire Station 4 Relocation	Alhambra corridor between 29th and Alhambra and E and T Streets	Tier 1 Project- Relocate fire station from Granada Way and construct a new station. Built in 1936 as an unreinforced masonry building, station is operationally and functionally obsolete.	TBD
Fire Station Delta Shores	TBD near Delta Shores project in South Sacramento	Tier 1 Project - Construct a new fire station.	TBD

City of Sacramento 2040 General Plan Subsequent Projects

Name	Location	Description	Budget/Funding
Fire Station Railyards	TBD within Railyards Specific Plan area	Tier 1 Project - Construct a new fire station, this station would need to be a larger station housing 4-5 companies and a Battalion HQ, 16-21 personnel. Possibly a DOC site for the department.	TBD
Fire Station 10	66th St.	Tier 1 Project - Demolish existing fire station and construct a new station. Station is functionally obsolete housing three companies in a two-company station built in 1964. Company will need to relocate to facilitate process.	TBD
Fire Station 60	TBD * Folsom Blvd north of light rail tracks, Aspen project could affect placement	Tier 2 Project - Relocate fire station from Julliard Dr. and construct a new station. If possible, acquire land in the Raley's parking lot or the flea market property on Folsom Blvd just east of Julliard.	TBD
Fire Station 3 / Greenbriar	South of Airport & north of I-5, Elkhorn & Hwy 99	Tier 2 Project - Relocate Fire Station from W. Elkhorn Blvd. and construct a new station, closer to Sacramento International airport with quick available access to I-5.	TBD
Fire Station R Street	R street North of 19th	Tier 2 Project - Construct a new fire station.	TBD
Fire Station 57	East Parkway *looking for larger lot	Tier 2 Project - Demolish existing fire station and construct a new fire station.	TBD
Fire Station 18	TBD	Tier 3 Project - Relocate fire station from North Market Blvd and construct a new station.	TBD
Fire Administration, Training & Logistics Centers	TBD	Tier 3 Project - Construct a fire administration, training & logistics center. Possible reuse opportunity of Sutter's Landing site.	TBD
Fire Station Shasta	Shasta & Bruceville roads	Tier 3 Project - Construct a new fire station.	TBD
Fire Station Patio & Northgate	Corner of Patio and Northgate	Tier 3 Project - Construct a new fire station.	TBD
Fire Department Strategic Plan	Citywide	The City shall prepare a Standards of Coverage Plan to assess options for locating facilities to most efficiently provide service within the Sacramento Fire Department's (SFD's) jurisdiction.	TBD

Source: List of subsequent projects provided by departments of the City of Sacramento, 2023.
Note: TBD = To Be Determined.