# Appendix A Notice of Preparation

# Appendices

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**NOTICE O RE ARATION NO**
**C A D R**

**T** Los Angeles County Antelope Valley Areawide General Plan Update

**I** The County of Los Angeles will be the Lead Agency and will prepare an environmental impact report for the comprehensive update of the Los Angeles County Antelope Valley Areawide General Plan, which is part of the Los Angeles County General Plan. The project area is the unincorporated area of the Antelope Valley in Los Angeles County. The Plan will protect important ecological and agricultural resources and preserve rural character in the Antelope Valley communities, while accommodating new housing and employment opportunities in appropriate, clearly defined, specific areas of the Antelope Valley. The project will replace portions of the existing Antelope Valley Areawide General Plan adopted in 1986.

## 1. EN IRON ENTA SETTIN

### 1.1

Los Angeles County encompasses approximately 4,083 square miles. The County has 75 miles of coastline along the Pacific coast. It is bordered to the east by Orange County and San Bernardino County, to the north by Kern County, and to the west by Ventura County. The County also includes two offshore islands, Santa Catalina Island and San Clemente Island. The unincorporated areas account for approximately 65 percent of the total land area of the County.

The unincorporated areas in the northern portion of the County are covered by large amounts of sparsely populated land and include the Angeles National Forest, part of the Los Padres National Forest, and the Mojave Desert. The unincorporated areas in the southern portion of the County consist of 58 noncontiguous land areas, which are often referred to as the County's unincorporated urban islands. The County's governmental structure comprises five Supervisorial Districts with the Los Angeles County Board of Supervisors as the governing body responsible for making all legislative land use decisions for the unincorporated areas.

The Antelope Valley Planning Area is located in the northern part of Los Angeles County, stretching from the Ventura County, Kern County, and San Bernardino County border lines and the Angeles National Forest (inclusive). It excludes the Cities of Lancaster and Palmdale. This area covers approximately 1,800 square miles and includes over two dozen communities. The area lies completely within the Fifth Supervisorial District of the Los Angeles County Board of Supervisors. An interactive map of the Antelope Valley and the rest of Los Angeles County is available online at http://planning.lacounty.gov/gisnet3.

### 1.2 A A A

The adopted Antelope Valley Areawide General Plan, which is a component of and works in conjunction with the current General Plan, was adopted by the Los Angeles County Board of Supervisors on December 4, 1986. The proposed Area Plan replaces relevant portions of the previous Antelope Valley Areawide General Plan.

## 2. RO ECT DESCRI TION

The proposed project is a comprehensive update of the Antelope Valley Area Plan. The project includes goals, policies, implementing programs and ordinances.

The project covers the unincorporated areas of the Antelope Valley in Los Angeles County and identifies 1) Rural Preserve Areas, where residential densities will be reduced in order to protect important ecological and agricultural resources as well as minimize development in very high hazard areas; 2) Rural Town Areas, where

maximum residential densities and minimum lot sizes will be established to preserve rural character; 3) Rural Town Centers, where urban commercial uses will be discouraged but rural commercial uses will be incentivized; and 4) Economic Opportunity Areas, where plans for major infrastructure development are underway that may create the need for more detailed planning activities for these areas in the future. The Area Plan anticipates that future planning may be needed in these areas to determine any appropriate land use and zoning changes needed when these infrastructure projects are completed.

These policies protect important ecological and agricultural resources and preserve rural character, while accommodating new housing and employment opportunities in appropriate areas of the Antelope Valley. The project will replace relevant portions of the adopted Antelope Valley Areawide General Plan.

**2.1 D A A**

The proposed project ("Area Plan") will replace the existing Antelope Valley Areawide General Plan. As a component of the Los Angeles County General Plan, the Area Plan refines the countywide goals and policies in the General Plan by addressing specific issues relevant to the Antelope Valley, such as community maintenance and appearance, preservation of rural character, open space, and agricultural lands, and provides more specific guidance on elements already found in the General Plan. All issues not covered in the Area Plan are addressed by the General Plan. The draft Area Plan replaces all elements and portions of the Land Use Policy Map of the Antelope Valley Areawide General Plan. The draft Area Plan is organized into chapters, including the following:

- The Introduction chapter presents the draft Area Plan's purpose and values, the geographic area, and the communities' vision statement;
- The Land Use Element chapter discusses how the communities' vision translates into a development pattern through the concept of land use;
- The Mobility Element chapter describes the multimodal approach to moving around the Antelope Valley;
- The Economic Development Element chapter discusses the ways that economic activities can be promoted in the Antelope Valley in a sustainable and ecologically sensitive manner;
- The Conservation and Open Space Element chapter describes conservation efforts to address potential threats to natural resources;
- The Public Safety, Services, & Facilities Element chapter provides measures to ensure services are in place to maintain the safety and welfare of residents. The element chapters contain goals and policies specific to each chapter's respective topic but all work jointly to comprehensively implement the overall vision; and
- The Community-Specific Land Use Concepts chapter highlights each established town and describes its land use form in more detail.

The draft Area Plan is the result of a highly inclusive and extensive community participation program launched in the fall of 2007. Through many years of community meetings, residents and other stakeholders worked alongside planners to develop a shared vision of the future, identify community issues, draft proposals for the future, and prioritize their recommendations. This vision of the Antelope Valley's future serves as a touchstone through the planning process, and it is reflected in the land use map, goals, and policies that comprise the draft Area Plan. Collectively, these environments preserve the rural character of the region, conserve environmental resources, and protect residents from potential hazards while allowing for additional growth and development. Maps of the proposed land use designations are attached (Attachment A) and are available online at http://planning.lacounty.gov/tnc. Table 1 (Draft Antelope Valley Area Plan) provides a description of the land uses designations proposed in the Land Use Plan and their resulting population and number of jobs at projected build-out.

Table 1: Draft Antelope Valley Area Plan

| | A | D | | A | |
|---|---|---|---|---|---|
| CR - Rural Commercial | 1,793 | 0 | 0 | 19,508,183 | 38,376 |
| MU-R - Rural Commercial / Mixed Use | 693 | 1,386 | 5,337 | 3,773,743 | 7,385 |
| H2 - Residential 2 | 4,562 | 7,299 | 28,101 | 0 | 300 |
| H5 - Residential 5 | 6,687 | 26,748 | 102,978 | 0 | 0 |
| H9 - Residential 9 | 453 | 3,264 | 11,752 | 0 | 0 |
| H18 - Residential 18 | 121 | 1,737 | 6,253 | 0 | 0 |
| H30 - Residential 30 | 84 | 2,013 | 5,615 | 0 | 0 |
| IH - Heavy Industrial | 1,980 | 0 | 0 | 16,060,113 | 14,575 |
| IL - Light Industrial | 4,173 | 0 | 0 | 90,884,331 | 69,590 |
| OS-BLM - Bureau of Land Management | 9,002 | 0 | 0 | 0 | 0 |
| OS-C - Conservation | 19,670 | 0 | 0 | 0 | 0 |
| ML - Military Land | 41,779 | 0 | 0 | 0 | 0 |
| OS-NF - Open Space National Forest | 499,734 | 0 | 0 | 0 | 50 |
| OS-PR - Parks and Recreation | 19,315 | 0 | 0 | 0 | 346 |
| W - Water | 11,038 | 0 | 0 | 0 | 0 |
| P - Public and Semi-Public | 19,870 | 0 | 0 | 0 | 3,175 |
| RL1 - Rural Land 1 | 10,242 | 10,242 | 39,431 | 0 | 2 |
| RL2 - Rural Land 2 | 30,833 | 15,417 | 59,354 | 0 | 400 |
| RL5 - Rural Land 5 | 36,329 | 7,266 | 27,973 | 0 | 0 |
| RL10 - Rural Land 10 | 204,000 | 20,400 | 78,540 | 0 | 100 |
| RL20 - Rural Land 20 | 208,187 | 10,409 | 40,076 | 0 | 50 |
| **T** | **1 13 544** | **1 1** | **4 5 41** | **13 22 3** | **134 351** |

Notes:
1. Historically, jurisdiction-wide build-out levels do not achieve the maximum allowable density/intensity on every parcel and are, on average, lower than allowed by the Area Plan. Accordingly, the build-out projections in this Area Plan do not assume build-out at the maximum density or intensity and instead are adjusted downward to account for variations in build-out intensity.
2. Acres are given as adjusted gross acreages, which do not include the right-of-way for roadways, flood control facilities, or railroads.
3. Projections of population by residential designation are based on a persons-per-household factor that varies by housing type. Additionally, the projections of jobs by designation are based on an employment generation factor that varies by employment category, or actual number of jobs.

The following describes the major land use policies in the draft Area Plan, which are supported by goals, policies, programs and strategic changes to the land use policy maps:

**R S** The draft Area Plan includes a Rural Preservation Strategy addressing issues of Valley-wide significance in a manner that builds upon the communities' vision statement and is based on three types of environments–rural town center areas, rural town areas, and rural preserve areas–that serve different purposes.

- **R** are the focal points of rural communities, accessible by a range of transportation options to reduce vehicle trips, serving the daily needs of residents, and providing local employment opportunities. These areas will be designated for commercial and/or industrial use as they

are in the adopted Area Plan, but some of these areas will also allow a mix of commercial and residential uses.

- **R** provide a transition between rural town center areas and rural preserve areas. They are occupied by a mix of residential and light agricultural uses. The majority of new residential development should be directed to these areas, provided that such development is consistent with the existing community character and allows for light agricultural, equestrian, and animal-keeping uses where appropriate. Accordingly, allowable residential densities in these areas will generally be equal to, or greater than, allowable residential densities in the adopted Area Plan. These areas will provide transportation linkages to rural town center areas and other nearby destination points.
- **R** are the portions of the unincorporated Antelope Valley, which are largely undeveloped and are generally not served by existing infrastructure and public facilities. Many of these areas contain Special Management Areas, such as Significant Ecological Areas, Agricultural Resource Areas, and Seismic Hazard Zones. Therefore, residential development in these areas should be limited to single-family homes at very low densities. Accordingly, allowable residential densities in these areas will generally be far less than allowable residential densities in the adopted Area Plan. These areas are less likely to benefit from increased property tax revenues and developer fees, which may make it difficult to fund additional infrastructure, such as major roadways, water lines, and sewer lines. The Rural Preservation Strategy acknowledges this by directing additional infrastructure to rural town center areas and rural town areas, where the placement of additional infrastructure will be more cost-effective and will generally have fewer effects on the environment. Residents of these areas must be willing to forego additional infrastructure in order to live in a very remote rural environment and to enjoy the benefits offered by such an environment.

For more information on the Rural Preservation Strategy and its three types of environments please see Preliminary Draft Antelope Valley Area Plan Chapter 1: *Introduction* and Chapter 2: *Land Use Element*.

**E O A EOA** The draft Area Plan also identifies three Economic Opportunity Areas ("EOAs"). These are areas where plans for major infrastructure projects are underway that would create conditions for development vastly different than currently existing on the ground. Because of ongoing plans by Los Angeles County Metropolitan Transportation Authority (Metro) and State Department of Transportation (Caltrans) to build the High Desert Corridor Project in the eastern Antelope Valley, and the Northwest 138 Corridor Improvement Project in the western Antelope Valley, the draft Area Plan identifies three EOAs: the East EOA, encompassing the communities of Lake Los Angeles, Sun Village, Littlerock, Pearblossom, Llano and Crystalaire; the Central EOA, located along Avenue D, just north of Fox Field Airport and west of the CA-14 Freeway, and the West EOA, located along Highway 138 east and west of the California Aqueduct and including portions of Neenach. The draft Area Plan includes an implementation program to prepare community plans to implement each of these EOAs in order to further analyze the effects of planned infrastructure projects in these areas, and recommend land use and zoning changes and revised policies as necessary.

Other components of the Antelope Valley Area Plan Update include, but are not limited to, update to the special management areas, such as agricultural resource areas, significant ecological areas, hillside management areas and the like; amendments to existing County ordinances and/or adoption of new County ordinances as necessary to implement the update Antelope Valley Area Plan; and rezoning as necessary to implement and/or maintain consistency with the updated Antelope Valley Area Plan.

## 3. RO A E EN IRON ENTA E ECTS

### E I

The County has determined that a Program EIR will be prepared for the proposed Antelope Valley Area Plan Update. Section 15168 of the CEQA Guidelines states that a Program EIR may be prepared on a series of

actions that can be characterized as one large project and are related either: 1) geographically; 2) as logical parts in the chain of contemplated actions; 3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or 4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways. The Program EIR will be prepared in accordance with the requirements of CEQA Statutes and Guidelines, as amended. Pursuant to Section 15146 of the CEQA Guidelines the degree of specificity in the Program EIR will correspond to the degree of specificity involved in the proposed Antelope Valley Area Plan Update. The EIR will focus on the primary effects that can be expected to follow from adoption of the Antelope Valley Area Plan Update and will not be as detailed as an EIR on the specific development or construction projects that may follow. Based on the County's preliminary analysis of the project, the following environmental issues will be examined in the Program EIR:

| | | |
|---|---|---|
| ☒ Aesthetics | ☒ Agricultural and Forest Resources | ☒ Air Quality |
| ☒ Biological Resources | ☒ Economic/Jobs | ☒ Geology / Soils |
| ☒ Greenhouse Gas Emissions | ☒ Hazards & Hazardous Materials | ☒ Hydrology / Water Quality |
| ☒ Land Use / Planning | ☒ Mineral Resources | ☒ Noise |
| ☒ Population / Housing | ☒ Public Services | ☒ Recreation |
| ☒ Transportation / Traffic | ☒ Utilities / Service Systems | ☒ Mandatory Findings of Significance |

The Draft EIR will address the short- and long-term effects of the Los Angeles County Antelope Valley Area Plan Update on the environment. Mitigation measures will be proposed for those impacts that are determined to be significant. A mitigation monitoring program will also be developed as required by Section 15150 of the CEQA Guidelines.

**RE IE ERIOD** This NOP will be available for review from **12 2 14** to **11 2 14** on the Department of Regional Planning (Department) website at http://planning.lacounty.gov/tnc/ceqa. Hardcopies will be available at the Department's main office and field office locations listed at the following link: http://planning.lacounty.gov/locations; all County libraries in the Santa Clarita and Antelope Valleys, namely the Action Agua Dulce Library located at 33792 Crown Valley Road, Acton, CA 93510; the Quartz Hill Library located at 42018 N. 50th St. West, Quartz Hill, CA 93536; the Lancaster Regional Library located at 601 West Lancaster Boulevard, Lancaster CA 93534; the Littlerock Library located at 35119 80th Street East, Littlerock, CA 93543; the Lake Los Angeles Library located at 16921 E. Ave. O, # A Palmdale, CA 93591; the Castaic Library located at 27971 Sloan Canyon Road, Castaic, CA 91384; the Stevenson Ranch Library located at Dr. Richard H. Rioux Memorial Park, 26233 W. Faulkner Drive, Stevenson Ranch, CA 91381 as well as the Palmdale City Library located at 700 East Palmdale Boulevard, Palmdale, CA 93550.

The Department is seeking input from both agencies and members of the public on the scope and content of the environmental information and analysis to be contained in the EIR. Due to the time limits mandated by State law, written comments must be sent via mail, e-mail, or fax no later than 5:00 PM on **11 2 14**. Please send your comments at the earliest possible date to:

Carl Nadela, AICP
Regional Planner
Los Angeles County
Department of Regional Planning
320 W. Temple Street, Room 1356
Los Angeles, CA 90012
Email: tnc@planning.lacounty.gov
Fax: (213) 974-6476

**IC SCO IN EETIN S** Pursuant to the California Public Resources Code Section 21803.9, Los Angeles County will conduct one public scoping meeting in the Antelope Valley and one in downtown Los Angeles. This meeting will provide a public forum for information dissemination and dialogue regarding the components of the proposed project, the overall process, and the draft EIR. While staff will summarize the issues raised at these meetings, anyone wishing to make formal comments on the NOP must do so in writing. The public scoping meeting will be held at the dates, times and locations listed below:

**D 2 2 14 T**
**T 3 5**
**A T A C R**
**4221 S**
**CA 3534**

**D 2 14**
**T 1 12**
**R C R**
**R 15 32 T S .**
**A CA 12**

The July 7, 2014 scoping meeting will also be streamed live at the following link: http://streaming.planning.lacounty.gov/meeting. Afterward, the recorded presentation and meeting will also be posted at the following link: http://planning.lacounty.gov/tnc/ceqa.

# Appendix B NOP Comments

# Appendices

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# Blue Ribbon Committee

**Committee Members**
Harvey Holloway, Co- Chairman
James D. Vose, Co-Chairman
Wayne Argo
Karen Bryan
Kimberly Mavers
Forrest McElroy
Greg Medeiros
Vance Pomeroy
Regina Rossall
Johnny Zamrzla

**Elected Officials**
Senator
Steve Knight

Assemblyman
Steve Fox

**Associations**
BIA - Building Industry Association
Los Angeles Ventura Chapter

Greater Antelope Valley Association of REALTORS®

LA County Farm Bureau

July 11, 2014

RECEIVED
JUL 15 2014
BY:

Carl Nadela
Regional Planner
Los Angeles County
Department of Regional Planning
320 West Temple Street, Room 1356
Los Angeles, CA 90012

RE: Issues for Inclusion in the AVAP Environmental Impact Report

Dear Mr. Nadela:

The Blue Ribbon Committee (BRC) requesting the issues contained in this letter be included in the scope of the Environmental Impact Report (EIR) for the Antelope Valley Areawide General Plan Update (AVAP).

**Economic Opportunity Areas:**
Identified within the AVAP are three Economic Opportunity Areas (EOAs) centered around major transit corridors that "would bring tremendous opportunities for growth and economic development in the vicinity of these projects". These EOAs would bring stable economic growth for the future generations of the Antelope Valley.
In the AVAP, DRP staff has indicated that further studies and a more detailed planning effort will need to be done for each EOA by way of a Community Plan. The EIR will be inaccurate if some future Community Plan is postulated now with changes to the currently projected AVAP analysis and data. Any discussion of a future Community Plan to re-visit the EOA's must be only part of a Project Alternative and not part of the Project.

The EOA's are an important concrete part of the AVAP and must not have an open-ended reviewing/studying component; They need to be addressed directly in the EIR as the activity nodes that they are. The AVAP EIR must accurately address any impacts associated with the allotted residential units and projected commercial acreage that will bring jobs/housing to those areas. We ask that the EIR include the EOA's in its analysis as is and that Community Plans not be a part of the AVAP. Future land owners will still have to submit a project level EIR for any development plans they want the County to approve and the EOA concept is already sufficient for programmatic determinations at the AVAP EIR level. This will ensure Los Angeles County's ability to review proposed development within these EOAs in more detailed without adding the unnecessary Community Plan that will alter the EIR currently being drafted. Additionally, the EIR must address how the EOA's balance environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

**Community Standards Districts:**
The EIR of the AVAP will analyze impacts associated with land use changes and zoning changes proposed by the County. The Land Use portion proposes to down-zone much of the land within currently adopted and proposed Community Standards Districts. The AVAP EIR should address these changes and provide research-based substantiation for those

42402 10th Street West, Suite F, Lancaster, California 93534

changes. The activities that have led to the existing and the proposed Community Standards Districts have been vetted by the various communities and any changes via the AVAP to the underlying densities and land use designations have the potential for substantial alterations to housing, population and other human activity-related environmental activities. No environmental analysis will be considered complete unless the existing district land use patterns are included in all project alternatives, including the No Project Alternative.

**Use of all the most recent information and studies:**
The AVAP is shaping the Antelope Valley for future generations. The EIR must include with its analysis current and proposed transit projects, including NW 138, High Speed Rail and High Desert Corridor. And population growth associated with Southern California Association of Governments RTP/SCS projections. With these projections included in the AVAP EIR, it will give a unified planning effort that will allow the community's future housing and jobs to be pro-active and bring economic growth to that region.

**Rural town centers/Rural Town Areas vs. Rural preservation areas:**
The AVAP has created hard-line boundaries for existing activity nodes without providing any substantiation for their existence. While a "town center" concept can help focus a balance between housing and jobs, the manner does not provide for the diversity of housing and population that is always found in rural areas of the country and in the existing land use patterns of the Antelope Valley. The areas identified as Rural Town Centers and Rural Town Areas need to include softer edges that allow for reasonable opportunities for the addition of a more diverse set of housing and commercial activities. The other area identified is the Economic Opportunity Areas whose creation is the provision of new locations for reasonable growth within the rural milieu of the valley. However, the down-zoning of the rural preservation areas, which include all remaining unincorporated areas, has the potential to create substantial environmental impacts across the Antelope Valley. The AVAP EIR must address those potential impacts, including, but not limited to, agriculture, biota, geology, hydrology, land use planning, mineral resources, population and housing, delivery of public services, recreation and transportation. The AVAP Project postulates a near vacancy of a substantial amount of the valley. At least one of the Project Alternatives must address a more open, organic (rather than proscribed) maturity of the those open portions of the valley so a more diverse pattern of development closer to the existing pattern may continue. In addition, the rural preservation concept may not be consistent with the adopted or proposed with Community Standards Districts. The EIR should include an alternative with the Community Standards Districts zoning. Additionally, the EIR must address the balance of development patterns and development diversity with environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

**Health Concerns:**
The RL-10 and RL-20 will allow one unit per 10 or 20 acres. While the AVAP is trying to create larger lots outside of the rural town centers, this could have a negative effect on both air quality and health impacts. Many lower density lots are graded and cleared of vegetation to allow the full use of the property. This can cause a significant increase in wind and borne dust. Particles with diameters of 10 micrometers or less are referred to as Particulate Matter 10 or PM 10 and those with diameters of 2.5 micrometers or less are PM 2.5. With the windy conditions in Antelope Valley, PM 10 and PM 2.5 are a common worry. The AVAP EIR should address how such low density zones will affect the inherent health problems associated with Valley Fever or other airborne viruses that are directly related to large vacant lots with no or little vegetation or development to break up prevailing winds. Additionally, the EIR must address environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

**Land Use Proscription by Pre-defined Constraint:**
The land use patterns, densities and designations shown in the AVAP as proposed for the Project were developed under what has been described as a Hazard, Environmental and Resource Constraints Model (ECM) created by the county. The ECM is described as "a tool to inform stakeholders of potential site constraints and regulations" (General Plan Appendix C, Public Review Draft, 1/2014).
However, the "tool to inform" about regulation has become the regulation itself.
The ECM is purported to 'front-load' all the underlying environmental hazards, issues, constraining factors and resources (or lack thereof) that could affect the ability of a particular site to be developed with improvements. However, the model's concept as presented does not provide any quantitative analysis or qualitative set of findings or determinations as to how the constraints identified translate into the development designations and densities imposed let alone the three 'classes' identified in the appendix.
After a thorough analysis of the ECM itself and the underlying data and assumptions, the EIR should address 'how', 'why' and 'with what data' the links between the ECM and the AVAP land use designations were arrived at. This substantiation is critical to all the land use, population, housing and environmental justice analysis throughout the EIR and will also inform many portions of the other areas of review and analysis.

**School District and Education Issues:**
The AVAP EIR must address the potential impacts on the several school districts in the valley (Eastside, Wilsona, Keppel, Gorman, Westside, Acton-Agua Dulce, Antelope Valley Union High School and Antelope Valley College). Each of these sovereign jurisdictions regularly reviews its demographic and growth parameters. The AVAP EIR must address how the activities of the plan effect those plans and policies and, in so far as is possible, provide how there is a conflict or consistency between the AVAP and the work of each district including but not limited to the areas of land use planning (over which the district hold certain levels of sovereignty), population and housing, delivery of public services, recreation and transportation. Additionally, the EIR must address environmental justice concerns for the existing and potential future school and residential populations and constituencies that will rely on this valley to provide habitation, sustenance and education. Consideration must also be given to the long term impact that any change in land use has on the delivery of educational services. Decreasing rural density has a profound impact on delivery of instruction, length and cost of transportation, limitations on services to students, loss of revenue to school districts and thus reductions in staff. These may be unintended consequences of the proposed EIR.

Please feel free to contact us with any questions you may have, or clarifications you may need. We appreciate the opportunity to request these additional analyses which we believe will produce a better plan for the Antelope Valley.

Sincerely,

Harvey Holloway
Co-Chair

James Vose
Co-Chair

Cc: Supervisor Antonovich
Edel Viscera
Norm Hickling

Southern California
Los Angeles and Ventura
Counties Chapter

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July 11, 2014

Mr. Carl Nadela
Regional Planner
Los Angeles County
Department of Regional Planning
320 West Temple Street, Room 1356
Los Angeles, CA 90012

RE: AVAP Environmental Impact Report Scoping Comments

Dear Mr Nadela:

The Los Angeles-Ventura Chapter of the Building Industry Association of Southern California, Inc. (BIA) is the voice of residential building and development in Los Angeles and Ventura counties. We represent the thousands of men and women and their member companies who design, plan, build, and remodel homes, condominiums and apartments throughout our region.

As an association of industry professionals, technicians and skilled craftsmen we have deep knowledge and expertise in residential building and development. As such, we support safe, healthy, sustainable and quality rental and ownership housing, and measures that assure an adequate supply and range of housing types, sizes and costs that support a variety of lifestyle choices.

The Association has participated since 2011 on the Blue Ribbon Committee in the Antelope Valley, reviewing the progress of the Antelope Valley Areawide Plan of the County General Plan. We have provided input into the drafting of the Plan and support aspects of the revised Plan, and continue to have concerns in others. We respectfully request the information below be included in the AVAP EIR study.

**Significant Ecological Areas:**
The Antelope Valley Areawide Plan has included the proposed SEA Ordinance with an expansion of 150,000 acres in the Antelope Valley. This expansion brings the SEA area in the Antelope Valley to over 290,000 acres of SEA designated property in its Land Use Plan. This ordinance has not been approved by the Regional Planning Commission and is still being vetted through public comment. The AVAP EIR should

only analyze adopted ordinances and its EIR should not study a proposed draft ordinance, unless it is considered as a Project Alternative and not as the Project.

The SEA analysis, should include detailed scientific, research-based justification for the extent of the proposed designation areas including, but not limited to primary research on the potential impacts on agriculture, biota, geology, hydrology, land use planning, mineral resources, population and housing, delivery of public services, recreation and transportation. Especially because of the extent of the potential degradation of population, housing and other human activity-related environmental activities, justification of the boundaries and the incumbent regulation of that land needs a substantial basis to give the lead agency an opportunity to weigh the impacts. Additionally, the EIR must address the balance of the SEA's to environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

**Economic Opportunity Areas:**
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The EIR of the AVAP will analyze impacts associated with land use changes and zoning changes proposed by the County. The Land Use portion proposes to down-zone much of the land within currently adopted and proposed Community Standards Districts. The AVAP EIR should address these changes and provide research-based substantiation for those changes. The activities that have led to the existing and the proposed Community Standards Districts have been vetted by the various communities and any changes via the AVAP to the underlying densities and land use designations have the potential for substantial alterations to housing, population and other human activity-related environmental activities. No environmental analysis will be considered complete unless the existing community district land use patterns are included in all project alternatives, including the No Project Alternative.

**Use of all the most recent information and studies:**
The AVAP is shaping the Antelope Valley for future generations. The EIR must include with its analysis current and proposed transit projects, including NW 138, High Speed Rail and High Desert Corridor. And population growth associated with Southern California Association of Governments RTP/SCS projections. With these projections included in the AVAP EIR, it will give a unified planning effort that will allow the community's future housing and jobs to be pro-active and bring economic growth to that region.

**Rural Town Centers/Rural Town Areas vs. Rural Preservation Areas:**
The AVAP has created hard-line boundaries for existing activity nodes without providing any substantiation for their existence. While a "town center" concept can help focus a balance between housing and jobs, the manner does not provide for the diversity of housing and population that is always found in rural areas of the country and in the existing land use patterns of the Antelope Valley. The areas identified as Rural Town Centers and Rural Town Areas need to include softer edges that allow for reasonable opportunities for the addition of a more diverse set of housing and commercial activities. The other area identified is the Economic Opportunity Areas whose creation is the provision of new locations for reasonable growth within the rural milieu of the valley. However, the down-zoning of the rural preservation areas, which include all remaining unincorporated areas, has the potential to create substantial environmental impacts across the Antelope Valley. The AVAP EIR must address those potential impacts, including, but not limited to, agriculture, biota, geology, hydrology, land use planning, mineral resources, population and housing, delivery of public services, recreation and transportation. The AVAP Project postulates a near vacancy of a substantial amount of the valley. At least one of the Project Alternatives must address a more open, organic (rather than proscribed) maturity of the open portions of the valley so a more diverse pattern of development closer to the existing pattern may continue. In addition, the rural preservation concept may not be consistent with the adopted or proposed with Community Standards Districts. The EIR should include an alternative with the Community Standards Districts zoning. Additionally, the EIR must address the balance of development patterns

and development diversity with environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

**Land Use Proscription by Pre-defined Constraint:**
The land use patterns, densities and designations shown in the AVAP as proposed for the Project were developed under what has been described as a Hazard, Environmental and Resource Constraints Model (ECM) created by the county. The ECM is described as "a tool to inform stakeholders of potential site constraints and regulations" (General Plan Appendix C, Public Review Draft, 1/2014). However, the "tool to inform" about regulation has become the regulation itself. The ECM is purported to 'front-load' all the underlying environmental hazards, issues, constraining factors and resources (or lack thereof) that could affect the ability of a particular site to be developed with improvements. However, the model's concept as presented does not provide any quantitative analysis or qualitative set of findings or determinations as to how the constraints identified translate into the development designations and densities imposed let alone the three 'classes' identified in the appendix.

After a thorough analysis of the ECM itself and the underlying data and assumptions, the EIR should address 'how', 'why' and 'with what data' the links between the ECM and the AVAP land use designations were arrived at. This substantiation is critical to all the land use, population, housing and environmental justice analysis throughout the EIR and will also inform many portions of the other areas of review and analysis.

In summary, we request the above issues be studied as a part of the AVAP EIR process. The CEQA EIR process is designed to provide a sound understanding of the impacts of a project and in this instance the impacts of the new Antelope Valley Areawide Plan. The final EIR will provide alternatives for consideration by the community and the Board of Supervisors. We look forward to reviewing the final Project and its proposed Alternatives, as we seek a Plan that gives the Antelope Valley community an adequate supply and range of housing types, and a jobs-to-housing ratio that allows residents to enjoy economic prosperity close to home.

Sincerely,

Tim Piasky
CEO

State of California – Natural Resources Agency
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BY:

July 16, 2014

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**Subject: Comments on the Notice of Preparation of a Programmatic Environmental Impact Report for the Los Angeles County Antelope Valley Areawide General Plan Update, Los Angeles County**

Dear Mr. Nadela:

The California Department of Fish and Wildlife (Department) has reviewed the above-referenced Notice of Preparation (NOP) for the comprehensive update of the Los Angeles County Antelope Valley Areawide General Plan Programmatic Environmental Impact Report (DPEIR) (project), which is part of the Los Angeles County General Plan.

The following statements and comments have been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the project (California Environmental Quality Act, [CEQA] Guidelines § 15386) and pursuant to our authority as a Responsible Agency under CEQA Guidelines section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (Fish and Game Code § 2050 *et seq.*) and Fish and Game Code section 1600 *et seq.*

The County of Los Angeles (County) will be the Lead Agency for the project which is part of the Los Angeles County General Plan. The project includes goals, policies, implementing programs and ordinances that will be implemented to protect important ecological and agricultural resources and preserve the rural character in the Antelope Valley communities, while accommodating subsequent projects that will facilitate new housing and employment opportunities in appropriate, clearly defined, specific areas of the Antelope Valley. The project will replace portions of the existing Antelope Valley Areawide General Plan adopted in 1986.

The 1,800 square mile project planning area (planning area) is in the unincorporated area of the Antelope Valley in Los Angeles County and includes over two dozen communities. The planning area is located in the northern part of Los Angeles County, stretching from the Ventura County, Kern County, and San Bernardino County border lines and the Angeles National Forest (inclusive). It excludes the Cities of Lancaster and Palmdale.

The Department offers the following comments and recommendations to assist the County in avoiding or minimizing potential project impacts on biological resources:

**Specific Comments**

1. Sensitive Biological Resources. The NOP describes the project site as including the unincorporated portions of Los Angeles County within the Antelope Valley (West Mohave

resources that are dependent on these resources. Project should be required to set aside a portion of the project's water resources for fish and wildlife purposes.

2. Best Management Practices. The Department recommends that the project address measures to protect biological resources when considering solar and wind development approvals in the Antelope Valley. On a regional level, and as part of the State's commitment to SB 32, the Department is working with stakeholders (including local governments, environmental groups, and renewable energy developers) and other State and federal agencies to complete the DRECP). The purpose of the DRECP is to facilitate permit streamlining of renewable energy projects while providing a large-scale conservation strategy for the biological resources of the Planning Area, which includes the Mojave and Sonoran deserts of California. The portion of the Antelope Valley within the County is within the boundary of the DRECP planning area. The Department encourages the County to utilize current resources on the DRECP website (see website at www.**drecp**.org) drafted by the Renewable Energy Action Team (REAT). The REAT's founding members include the California Energy Commission, the Bureau of Land Management, the US Fish and Wildlife Service and the Department. The REAT developed the *Best Management Practices and Guidance Manual* ("BMP Guidance Manual", located on the website) to provide guidance to project proponents, which includes detailed measures to avoid, minimize, and mitigate impacts to sensitive species known to occur within the Planning Area. The Department recommends the County utilize the BMP Guidance Manual in its efforts to address impacts to biological resources from wind and solar projects.

3. Program EIR and Tiering. The NOP describes that the County has determined that a DPEIR will be prepared for the proposed project. The DPEIR will focus on the primary effects that can be expected to follow from adoption of the project and will not be as detailed as an EIR on the specific development or construction projects that may follow.

   The Department recognizes that there are several advantages to a DPEIR, such as subsequent project activities within the scope of the PEIR would not require preparation of an additional environmental document (CEQA Guidelines, § 15168). Based on the large scale and scope of the project and anticipated preparation of a program EIR, the Department anticipates that additional environmental documents will need to be prepared and tiered from the EIR for certain subsequent project activities (CEQA Guidelines, §§ 15152 & 15162).

   Establishing a procedure in the DPEIR for determining if subsequent project activities are within the scope of the EIR, or require an additional environmental document, will be critical to ensuring adequate analysis of project activity effects on biological resources. CEQA Guidelines section 15168 states: *[w]here the subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.* Such a procedure and checklist, which could be used as a model, was recently developed for infill projects and can be found in CEQA Guidelines section 15183.3, which includes the requirement for the lead agency to file a Notice of Determination for each subsequent project activity.

   The checklist should be accompanied by enough relevant information and reasonable inferences from this information to support each conclusion concerning biological resources.

lead to direct or indirect impacts off site. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

c) Sensitive Wildlife Species. An inventory of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect. Species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines, § 15380). This should include sensitive fish, wildlife, reptile, and amphibian species. Seasonal variations in use of the project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service.

d) California Natural Diversity Database. A current inventory of the biological resources associated with each habitat type on site and within the area of potential effect. The Department's California Natural Diversity Data Base in Sacramento should be contacted at www.wildlife.ca.gov/biogeodata/ to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code. The Department recommends a 9 quad search around the project vicinity to identify potential sensitive species within the Project area.

6. Impact analysis. To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the DEIR.

a) Impacts to Streams and Riparian Habitat. The Department has responsibility for streams and riparian habitats. It is the policy of the Department to strongly discourage disturbance to wetlands or conversion of wetlands to uplands. All wetlands and watercourses, whether intermittent episodic or perennial, should be retained and provided with substantial setbacks which preserve the riparian and aquatic values and maintain their value to on-site and off-site wildlife populations.

i) Lake and Streambed Alteration Agreement. The Department also has regulatory authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream, or use material from a streambed. For any such activities, the project applicant (or "entity") must provide written notification to the Department pursuant to section 1600 et seq. of the Fish and Game Code. Based on this notification and other information, the Department determines whether a Lake and Streambed Alteration Agreement (LSA) with the applicant is required prior to conducting the proposed activities. The Department's issuance of a LSA for a project that is subject to CEQA will require CEQA compliance actions by the Department as a Responsible Agency. The Department as a Responsible Agency under CEQA may consider the local jurisdiction's (lead agency) Environmental Impact Report for the project. To minimize additional requirements by the Department pursuant to section 1600 *et seq.* and/or under CEQA, the document

impacts. The Department considers these communities as threatened habitats having both regional and local significance.

b) Restoration and Protection of Land for Sensitive Species. The DEIR should include mitigation measures for adverse Project -related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

c) Long Term Management of Protected Lands. For proposed preservation and/or restoration, the DEIR should include measures to perpetually protect the targeted habitat values from direct and indirect negative impacts. The objective should be to offset the Plan-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include, but are not limited to, restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion.

d) Nesting Birds. The Department recommends that measures be taken to avoid impacts to nesting birds during the implementation of the Project. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Title 50, § 10.13, Code of Federal Regulations). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). Proposed activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of the avian breeding season which generally runs from February 1- September 1 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, the Department recommends surveys by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). Project personnel, including all contractors working on site, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

e) Habitat Restoration Plans. Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant revegetation techniques. Each plan should include, at a minimum: (a) the location of the mitigation site; (b) the plant species to be used, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of

CENTER *for* BIOLOGICAL DIVERSITY

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7/11/2014

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**RE: Comments on Notice of Preparation for the Los Angeles County Antelope Valley Areawide General Plan Update – June 12, 2014**

Mr. Carl Nadela,

These comments are submitted on behalf of the Center for Biological Diversity (Center) regarding the Notice of Preparation for the Los Angeles County Antelope Valley Areawide General Plan Update dated June 12, 2014. At the Center for Biological Diversity, we believe that welfare of human beings is deeply linked to nature – to the existence in our world of vast diversity of wild animals and plants. Because diversity has intrinsic value, and because its loss impoverishes society, we work to secure a future for all species, great and small, hovering on the brink of extinction. We do so through science, law and creative media, with a focus on protecting lands, waters and climate that species need to survive. We want those that come after us to inherit a world where the wild is still alive. Many of our 775,000 staff, members and on-line activists in California and throughout the United States, live in, know and enjoy the biological diversity and world class landscape of northern Los Angeles County, including the Antelope Valley area.

Los Angeles County is a globally unique county which spans incredible topographic diversity – from the Pacific Ocean to Mount San Antonio (Mt. Baldy) at 10,068 feet and back down to the Mojave Desert. Because of the topographic diversity often coupled with significant development, many rare, threatened and endangered species occur within the County. While much of the coastal basin has been developed, the mountainous areas and desert areas remain ecologically intact and home to numerous rare species. The proposed Antelope Valley Areawide General Plan Update (AVAP) is a key document where the County has an opportunity to craft a plan that will indeed protect and sustain our world class natural heritage.

## I. Inappropriate and Conflicting Land Use/Zoning Proposals

It appears that the AVAP includes the yet-to-be proposed Centennial project located in the western part of the Antelope Valley. The proposed land use designations of H5 – high density residential 5 (0-5 du / net ac), RL1 - Rural Land 1 (1 du/ gross ac) and IL – Light

Industrial is in complete conflict with the surrounding land use designations of OS-C – Open Space Conservation, and RL 20, 10 and 2 – Rural Land 20 (1 du/20 gross ac), Rural Land 10 (1 du/10 gross ac) and Rural Land 2 (1 du/2 gross ac) respectively. In addition, the RL1 and IL and most all of the H5 are located in a Significant Ecological Area (SEA). While we recognize that some development of private lands are allowed in SEAs, certainly high density and industrial land use designations are inappropriate in SEAs. Interestingly and appropriately, **none** of the other SEA areas in the AVAP proposal have the extensive high development land use proposed within the boundary of the SEA. West of this area the document proposes CR – Commercial Rural designations in areas again that are proposed SEAs and surrounded by OS-C – Open Space Conservation, RL 20 - Rural Land 20 (1 du/20 gross ac) and OS-PR – Open Space Parks and Recreation. We urge the County to remove the H5, RL1, CR and IL designations and conform them to land use designations that are compatible with the SEA designation. The County need not create land use conflicts by layering incompatible land use designations in the same area.

To confuse matters further, the zoning maps show the yet-to-be-proposed Centennial project area as A-2-10, which is not clearly defined in the legend other than A-2 is heavy agriculture. At the current time, the land use appears to be primarily grazing, not crops. The zoning map also proposes MPD-PD - Manufacturing Industrial Planned Development (legend does not indicate what the –PD stands for), CR-U – Commercial Rural and CPD-DP - Commercial Planned Development (legend does not indicate what the –PD stands for here either) and is surrounded by O-S – Open Space and A-2 – Heavy agriculture. Again, the majority of the area is also within the boundaries of the SEA. To date, there have not been public proposals for commercial or industrial developments in this area that is highly significant for biological resources which need to be maintained as part of Los Angeles County's natural heritage. We urge the County to remove the MPD, CR-U and CPD designations and conform them to land use designations that are compatible with the SEA designation. The County need not create land use conflicts by layering incompatible land use designations in the same area.

Regarding the Rural Preservation Strategy map, the Rural Preserve Areas are defined as "largely undeveloped and generally not served by existing infrastructure and public facilities. Many of these areas contain environmental resources, such as Significant Ecological Areas, Scenic Resource Areas, and Agricultural Resource Areas" (Land Use Element at pg. 5). Virtually the whole of the yet-to-be-proposed Centennial project area and Gorman area are identified as Rural Preserve Areas. Proposing land use categories of HR5, RL1, CR and IL in these areas clearly undermines preserving rural areas and, as mentioned above, sets up conflicting designations. We urge the County to maintain the Rural Preserve Area designation and place more appropriate zoning and land use designations on these areas.

Additionally the Rural Preservation Strategy Map legend does not include all designations on the map. For example, cross hatching occurs in different areas of the map. If the cross-hatching represents Economic Opportunity Areas, this is clearly misplaced because a significant portion of the lands in the cross-hatched areas are identified as Rural Preserve Areas, which seems to conflict with Economic Opportunity Areas (EOAs). The NOP describes the EOAs as "areas where plans for major infrastructure projects are underway that would create conditions for development vastly different than currently existing on the ground." (NOP at pg

4). While we are aware of the highway projects, the County should not be encouraging sprawl development in remote areas of the County by altering land use and zoning in the AVAP (which basically covers all of the north Los Angeles County).

**II. "Smart" Development**

While the Center's focus is protecting rare and common species and their habitats, one key aspect to achieve habitat protection and ensure ecological sustainability is to avoid sprawl development. The County needs to concentrates growth in compact walkable urban centers and avoid sprawl. It also needs to plan compact, transit-oriented, walkable, bicycle-friendly land use, near existing development. Planning Economic Opportunity Areas and Rural Town Areas in far-flung regions of the County where little County infrastructure including emergency services is in place, and will be expensive to maintain is an anathema to smart planning.

**III. Public Outreach**

While the Introduction touts "highly inclusive and extensive community participation program", the Center did not become aware of this effort until mid-June of 2014, and only then through local contacts. We have worked with County planning staff on different projects in the past and specific to this project put in email and phone messages to the County Planning which remain unanswered. We have great interest in the County's planning and development activities and ask again to be put on the interested public list for projects. We also specifically ask to be put on the interested parties' list for the AVAP as it moves forward through the CEQA process.

**IV. Conclusion**

We urge the County to adopt land use, zoning and planning that encourages sustainable development while protecting our incredible diversity and natural heritage in Los Angeles County for future generations.

Respectfully submitted,

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ENDANGERED HABITATS LEAGUE
DEDICATED TO ECOSYSTEM PROTECTION AND SUSTAINABLE LAND USE

July 7, 2014

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**RE: Notice of Preparation for Los Angeles County Antelope Valley Areawide General Plan Update (AVAP)**

Dear Mr. Nadela:

The Endangered Habitats League (EHL) appreciates the opportunity to comment on this project. For your reference, EHL is Southern California's only regional conservation group.

EHL first wishes to voice its strong support for the expanded Significant Ecological Areas (SEAs) that are proposed[1]. These are a foundation for the future of the County and are the repository of the citizens' natural heritage.

"Smart growth" planning reduces the land consumed for development, reduces GHG emissions, and protects natural resources while accommodating population and job growth. We therefore support a framework of Town Centers and Rural Preserve Areas. Contingent upon location, Economic Opportunity Areas (EOAs) also make sense. Our comments focus on how to implement these goals.

Due to a long history of large lot parcelization in the Antelope Valley, achieving the town and preserve framework will be challenging. Even where lands are rezoned to 1 unit per 20 acres, this will be insufficient to protect the biological values of the most important preserve areas, that is, the Significant Ecological Areas (SEAs). Such densities, on top of existing parcelization, create habitat fragmentation and edge effects incompatible with maintaining existing biological values. (See enclosure, documenting adverse impacts beginning roughly at 1:40.) In addition, the EOAs as proposed will cause significant growth induction along highway infrastructure, which would obviate the goal of community separation via rural preserves.

We therefore request that the Antelope Valley Update and its EIR contain four measures to address the adverse impacts of development and to achieve the goal of

[1] When determining the compatibility of the proposed AVAP with an affected SEA, it would make sense to consider the unique and exceptional circumstance of the Tejon Ranch Land-Use and Conservation Agreement, which in effect clusters development on a larger scale, albeit with some of the resulting ecological benefit occurring on the other side of a jurisdictional boundary.

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preserves. Where possible, these should be included in the AVAP as feasible *mitigation measures* for the reduction of biological and other impacts, allowing subsequent, expeditious tiering by future development during CEQA review.

**Reduced densities in environmentally constrained land**

As you consider the framework for land use, we urge that land use designations—and the densities therein—fully reflect infrastructure, public safety, and environmental constraints. It costs the taxpayer to provide services, utilities, roads, and police and fire protection to more distant locations. Often, such areas have high wildlife values, including but not limited to Significant Ecological Areas (SEAs). These same areas typically have high fire hazard. Reducing density automatically puts less life and property at risk of fire and, during a fire event, ensures that limited fire-fighting resources are spent stopping the fire's spread rather than defending dispersed home sites that should not have been built in the first place.

Therefore, outside of urban centers and EOAs, densities should be Rural, preferably at the RL40 category but at RL20 or RL10 where existing patterns of parcelization preclude the lowest density category[2]. *Within SEAs, it is particularly vital to retain the RL40 densities that were changed in the most recent draft map to RL20.* But in any case, RL40 within SEAs and other habitat areas must be analyzed in the DEIR as part of an Environmentally Superior alternative. Estate and ranchette designations (H2, R1, R2, and R5) rarely support agricultural uses and are the epitome of inefficient, auto and GHG-intensive, and land-consumptive land use. Such categories should only be used when existing parcelization has already converted an area to "rural sprawl."

By down-planning estate densities to rural categories, the County of San Diego found billions of dollars in taxpayer savings[3] and will avoid putting life and property at risk of wildfire. Los Angeles County should follow suit, and focus growth at higher densities in appropriate locations.

**Transfer of development rights (TDR)**

In order to protect the natural resource value of SEAs, Los Angeles County needs an effective strategy in addition to traditional acquisition and to the mechanisms (e.g., set asides, mitigation) in the SEA Ordinance. This is particularly the case in the Antelope Valley, where scattered estate and ranchette subdivision is the norm, rather than large development projects that can more effectively concentrate density and preserve open space through site design.

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[2] The unique circumstance of the Tejon Ranch Land-Use and Conservation Agreement may justify an exception to an RL designation because the Agreement effectively concentrates urban development on a small portion of its holdings, facilitating conservation over vast areas.

[3] The San Diego County General Plan Update EIR found savings of $1.6 billion in road construction costs alone, irrespective of ongoing maintenance. Also see <http://www.sdcounty.ca.gov/pds/docs/bos_may03_report.pdf> at page 21, Public Costs, for comparison of municipal *vs* unincorporated service costs.

TDR is a proven mechanism to preserve open space and one that creates positive outcomes for property owners who sell development rights and those who acquire them. It gives economic value to the open space that the public desires. TDR may be of the classic variety[4] or streamlined as a fee program. The latter would require payment of an open space fee as a condition of obtaining density and would allow the agency receiving the fees to effectively prioritize conservation properties. TDR should always use the post-Update, rezoned density as baseline for sending areas and should require participation by receiving sites not only to increase density above a baseline (bonus density) but also to attain plan density (at least beyond the lower end of the density range). Coordination with nearby cities would be ideal.

Because it shifts growth from more remote and habitat-rich lands to locations closer to jobs and services, TDR could be incorporated into the EIR as mitigation for impacts to biological resources, traffic, GHG, aesthetics, etc. We recommend retaining an experienced consultant to explore options and fashion a program.

**Site design**

In order to implement biologically sound site design during the land use process, the AVAP should "decouple" lot size from density. This allows development to be consolidated on smaller lots in the last sensitive portion of the site. To maintain community character in non-urban locations, a minimum lot size of ½-acre should be set, as it has in many rural San Diego communities.

Such consolidation of development should be *mandatory* at the Rural designations of RL5 - RL40, and should be used in the EIR as a key *mitigation measure* for biological, public safety, agricultural, and other impacts. The land set aside through such a subdivision could serve habitat or agricultural purposes but could not be developed in the future. An "off the shelf" model that provides standards, guidelines, and allowable uses (including agriculture) in the resulting open space is San Diego County's Conservation Subdivision Program[5].

**Growth policies**

Economic Opportunity Areas (EOAs) that concentrate jobs and housing and provide improvements in services and transportation and water and sewerage infrastructure are growth inducing. As a mitigation measure, it is thus essential that the AVAP include protections against the sprawl that would otherwise follow such development, particularly along highway corridors. The most worrisome case is Highway 138. EHL recommends an urban growth boundary around EOAs or at a minimum a land use policy that prohibits extension of urban services between the proposed West and Central EOAs absent another comprehensive update of the AVAP.

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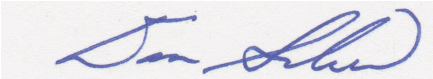
[4] For example, see the City of Livermore's program at <http://www.cityoflivermore.net/civicax/filebank/documents/3051/>.
[5] See <http://www.sdcounty.ca.gov/pds/advance/conservationsubdivision.html>.

EHL looks forward to continuing to work with the County of Los Angeles on a successful Update.

Yours truly,



Dan Silver
Executive Director

Enclosure: Conservation Biology Institute, *Analysis of General Plan-2020 San Diego County*, December 2005

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July 11, 2014

Mr. Carl Nadela, AICP
Regional Planner
Los Angeles County
Department of Regional Planning
320 W. Temple Street, Room 1356
Los Angeles, CA 90012

Subject: **Comments on the Scope and Content of the Environmental Information and Analysis in the Antelope Valley Area-Wide General Plan (Plan)**

Dear Carl:

The Los Angeles County Farm Bureau appreciates the opportunity to comment on the subject Plan. We will be pleased to work with you and the Department of Regional Planning to improve the Plan by providing data, identification of technical experts to help in the preparation of an improved Plan, etc.

## GENERAL SUMMARY

Although the Area Plan proposes to help the environment, a closer examination of the Area Plan suggests that many environmental factors in the Plan's preparation were not considered, and the net effect on the environment by the Area Plan is negative. The Area Plan proposes to devalue significant areas of land and considerably reduce the property tax revenue stream into the County of Los Angeles.

## SPECIFIC COMMENTS

### Not Considering Some of the Most Important Issues

#### Summary

Any plan is not credible and practically useless if the significant issues are not acknowledged and analyzed. One severe problem that has been overlooked is the effect of the Antelope Valley Groundwater Adjudication on the Plan. In addition, the natural, historical pattern of build-out (or lack thereof) of the rural areas of the Antelope Valley over the last many

decades is also not identified and the effect of this natural phenomenon on the Plan is not considered.

**Discussion**

As a result of the adjudication, parcels with no pumping history most likely will not receive any affordable water. Small pumpers and shareholders and customers of mutual water companies will only have enough water for indoor use. Farmers will be cut back over 50%. Estimates have been given that roughly 30,000 acres of previously irrigated and disturbed land will no longer be irrigated. The consequence is that the supply of water will be very minimal and the cost will be unaffordable. This means that the unincorporated area of the Valley is automatically doomed to be rural without the Area Plan. In fact, the threat of the adjudication is so real that some rural communities, such as those served by mutual water companies, do not believe they can sustain their existing rural lifestyle.

**Need for Additional Analysis**

The adjudication is nearing an end and the rights of the various parties are becoming defined. The effect of the Adjudication on the Antelope Valley community needs to be clearly discussed and the impacts inserted into any planning activities that include the Antelope Valley.

The natural and historical pattern of development (or lack of development) of the rural areas of Antelope Valley also needs to be identified and considered in any planning activities that include the Antelope Valley.

## Agricultural Resources

**Summary**

Based on the behavior of Los Angeles County Waterworks District No. 40 in the Antelope Valley Groundwater Adjudication and the Department of Regional Planning in their Area Plan, many believe these agencies are working together to destroy agriculture in the Antelope Valley. These two County agencies appear to be giving the farmer a "double whammy" to drive him or her out of the Valley.

**Discussion**

Rights under the adjudication are becoming defined. The Court wants to examine the proposed settlement at a Court date of August 4, 2014. It appears that farmers and growers will be cut back to less than 50% of their historical groundwater pumping. Most cannot exist with these small amounts of water. Replacement water will be too expensive for agriculture.

In addition, the Area Plan decimates the value of property in the unincorporated area of the Valley because of the limitation on dwelling units per acre. For example, hardly any market exists for parcels restricted to 1 dwelling unit per 10, 20 or 40 acres. Many farmers have worked their entire lives with the expectation of selling their property to a developer to have enough

financial resources to retire, pay "death taxes," pay off debts, etc. To remove this opportunity which folks have planned for and enjoyed in perpetuity is unjust.

In addition, banks and other financial institutions consider the net worth of farmers, ranchers and other property owners when making loans. To eliminate the value of their land will make obtaining operating loans for farmers extremely difficult if not impossible. The Area Plan will significantly devalue all property in the unincorporated areas of Los Angeles County thereby putting a sudden financial hit on these property owners.

**Need for Additional Analysis**

Please examine the Area Plan in light of the foregoing concerns. Quantify the impacts on the agricultural industry and include these impacts in the Plan

## Compact Development

**Summary**

Although the concept of Compact Development may be environmentally helpful in some scenarios, difficulty is encountered in believing this concept is applicable under the Antelope Valley conditions.

**Discussion**

The proposed Area Plan promotes the concept of Compact Development as an environmental benefit without considering the drawbacks and problems.

Proponents of compact development argue that rebuilding American urban areas to higher densities is vital for reducing greenhouse gas emissions because less vehicle miles are travelled. Compact development policies represent a huge intrusion on private property rights, personal freedom, and mobility. Some planners raise the possibility that compact city policies could increase emissions by increasing roadway congestion. Costs associated with this policy include reduced worker productivity, less affordable housing, increased traffic congestion, higher taxes or reduced services and higher consumer costs.

Given the variety of jobs and the number of jobs in the San Fernando Valley and greater Los Angeles area, the likelihood that such a policy would ever be effective is remote. Consider that this policy assumes that global warming exists, that human activity leads to global warming, and that compact development is environmentally helpful. Each assumption is very controversial. Therefore, for these assumptions to exist together demonstrates a low probability of success.

The time necessary to implement such a policy to be effective seems enormous.

**Need for Additional Analysis**

Please examine the concept Compact Development, not in a general sense, but directly applicable to Antelope Valley. The basis behind Compact Development rests on three issues that

are controversial: Global warming exists, global warming is significantly exacerbated by human activities, and that compact development is useful under the Antelope Valley conditions. Provide a thorough scientific analysis, based on peer-reviewed literature citations and opinions of nationally-recognized experts. Traffic modeling, with several variations, would be helpful to estimate the effect of compact development in this community.

## Overlays

### Summary

Large parcels such as those specified as RL 10, RL 20, and RL 40 represent significant environmental and health problems in arid and windy Antelope Valley and should be avoided.

### Discussion

The overlays, e.g. RL 10, RL 20, RL 40, etc. propose to limit development to 1 dwelling unit per 10 acres, 1 dwelling unit per 20 acres, etc. History in the Antelope Valley has shown that when a party purchases parcels of this size, they immediately clear the property of native vegetation to improve appearances or level the property. Also, since irrigating a parcel of this size is expensive considering water and labor, parcels of this size are rarely adequately maintained. Since these properties have been disturbed, the potential for blowing dust and sand from the surface of these properties in the windy Antelope Valley is enormous and certain.

In contrast to relatively large parcels with 1 dwelling unit, parcels with many dwelling units are not subject to the scouring produced by the wind as a large parcel with only 1 unit. Many dwelling units per parcel tend to break up the flow pattern of the wind, that is, the "boundary layer," and do not allow the scouring action of the wind upon the exposed soil to the extent of only 1 unit on a large parcel.

Inherent health problems associated with Valley Fever, PM 10, PM 3.5, etc. are very real concerns. Valley Fever, for example, is a disease caused by a fungus found in the soil. The fungal spores are released when soil is disturbed, such as during scouring, then breathed into the lungs of those who become infected. They can devastate the body, causing skin ulcers, abscesses, bone lesions, swollen joints with severe pain, heart inflammation, urinary tract problems, and meningitis, which can lead to death. In some cases, the infection may manifest itself repeatedly or permanently over the life of the host.

Particles with diameters of 10 micrometers or less are referred to as Particulate Matter 10 or PM 10 and those with diameters of 2.5 micrometers or less are PM 2.5. With the windy conditions in Antelope Valley, PM 10 and PM 2.5 are a common worry. The World Health Organization designates particulates as a Group 1 carcinogen. Particulates are the deadliest form of air pollution due to the ability to penetrate deep into lungs and blood streams, causing permanent DNA mutation, heart attacks, and premature death. For instance, PM 10 can penetrate into the deepest parts of the lungs. PM 2.5 tend to penetrate into the gas exchange regions of the lung and very small particles may pass through the lungs to affect other organs. It

has been found that small particulate matter can cause similar brain damage as that found in Alzheimer patients.

**Need for Additional Analysis**

Many environmental and health issues of the RL 10, RL 20 and RL 40 overlays have been identified. Others may occur. Please provide a comprehensive list of environmental and health problems resulting from imposition of these overlays. Include mitigation measures if possible and identify problems which cannot be significantly mitigated. Provide a thorough scientific analysis, based on peer-reviewed literature and opinions of nationally-recognized experts. Specialties represented by desert ecologists and health professionals would be appropriate.

## Significant Ecological Area (SEA)

**Summary**

Folks are concerned that the Significant Ecological Areas were arbitrarily designated without sufficient scientific analysis and justification.

**Discussion**

The identification of SEA areas is very troublesome because it is a method of devaluing large amounts of land that people have depended on for appreciation for many decades. The proposed SEA is not well documented and supported by science. Therefore, this approach can cause more harm than good. Existing farm land, especially that which has been disturbed for decades, should be excluded from these areas.

**Need for Additional Analysis**

Provide a thorough scientific analysis, based on peer-reviewed literature citations and opinions of nationally-recognized experts.

## Air Quality

**Summary**

The Area Plan uses the concept of Compact Development with reduced vehicle miles to provide an environmental benefit. However, with a closer examination of the impact of the overlays, etc., the Area Plan may not only provide a negative environmental impact and health threats, but make the planned rural centers difficult to inhabit.

**Discussion**

Reducing vehicle miles may reduce greenhouse gas emissions under the proper environment. As discussed above, reducing greenhouse gas emissions by implementing the

concept of compact development is speculative under the conditions of Antelope Valley. The literature indicates that alfalfa has an enormous capacity to sequester carbon in the soil as well as the plant itself. Unlike most crops, alfalfa does not release oxides of nitrogen and methane into the atmosphere. Yet, the Area Plan focuses on a speculative plan for reducing greenhouse emissions and ignores proven approaches.

As discussed in the "Overlays" section above, the Area Plan increases the annoyance and health problems associated with windblown dust and sand. Also, the effects of the adjudication do the same. As a result of the adjudication, parcels with no pumping history most likely will not receive any affordable water. Small pumpers and shareholders and customers of mutual water companies will only have enough water for indoor use. Farmers will be cut back over 50%. Estimates have been given that roughly 30,000 acres of previously irrigated and disturbed land will no longer be irrigated. Many have said that the Adjudication together with the Area Plan will turn the Antelope Valley into a "dust bowl." This means that existing rural communities may not be desirable to concentrate future development because of the annoyance of dust and the threat of health problems.

**Need for Additional Analysis**

These concerns need to be quantified and shared with the Supervisors and public.

## Economic Impacts

**Summary**

The proposed Area Plan will devalue large amounts of land in the Antelope Valley. As mentioned above, no market exists, or has ever existed, for large amounts of land restricted to 1 dwelling unit per 10, 20, or 40 acres. The effect of imposing SEAs will exacerbate the problem of devaluation. The reduction in the property tax revenue stream will also be significant

**Discussion**

In addition to significantly devaluing farmers' and other landowner property for questionable environmental gains, the County of Los Angeles should expect the Area Plan to reduce the property tax revenue considerably. I have heard estimates of a reduction of $50 million per year, which assuming 5 to 6 % as the value of money, amounts to a present worth over twenty years or more of approximately $1/2 billion. Additional costs of the health effects associated with the overlays discussed above should be considered.

**Need for Additional Analysis**

The Department of Regional Planning should quantify these property value and property tax income stream reductions for the Supervisors and landowners of Antelope Valley to review.

## Environmental Solution to Consider

**Summary**

The Area Plan aims to maintain a rural lifestyle with some environmental benefits. Many have expressed concerns and an alternate solution is discussed here for consideration. This approach is essentially "time-tested" and deserves some review and analysis.

**Discussion**

Historical evidence over many decades has shown the natural development of the rural areas of the Antelope Valley to be extremely slow. Therefore, significant dispersed suburban development is expected to be naturally prohibited. The results of the current groundwater adjudication driven by Los Angeles County Waterworks 40 will assure that this slow process of dispersed urban development will become even slower or non-existent because affordable water most likely will not be available to rural properties.

This approach to sustaining the rural identity of the unincorporated areas will not be based on unfounded theoretical assumptions but will be based on historical activity plus the obvious lack of affordable water in the future.

**Need for Additional Analysis**

Please analyze this approach as something that may be modified and improved by considering all the elements and perhaps modifying some to attain an improved solution.

Carl, the Los Angeles County Farm Bureau will be pleased to work together with other community groups and the Department of Regional Planning to prepare an improved Plan that provides certain, measurable benefits.

Yours truly,

Gene

Eugene B. Nebeker, Ph.D., P.E.
President

cc: Supervisor Antonovich
Edel Viscera, Planning Deputy
Norm Hickling, Senior Deputy

Greater Antelope Valley Association of REALTORS®

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July 10, 2014

RECEIVED
JUL 15 2014
BY:

Carl Nadela
Regional Planner
Los Angeles County
Department of Regional Planning
320 West Temple Street, Room 1356
Los Angeles, CA 90012

RE: Content and scope of the environmental information and analysis to be contained in the EIR for the Los Angeles County Antelope Valley Areawide General Plan Update

Dear Mr. Nadela:

The Greater Antelope Valley Association of REALTORS® is a local membership organization representing more than 1,500 Realtor® and affiliate members who conduct business in the Antelope Valley. One of the primary charters of real estate professionals is the protection of private property rights. This is the basis for our request that the following be included in the content and scope of the environmental information and analysis to be contained in the EIR for the Los Angeles County Antelope Valley Areawide General Plan Update (AVAP).

**Regarding the Proposed Significant Ecological Areas (SEA's):**
The Antelope Valley Areawide Plan has included the proposed SEA Ordinance and a significant expansion of over 150,000 acres of SEA designated property in its Land Use Plan. This overlay will bring the total number of acres encumbered by the SEA to over 290,000 acres in the Antelope Valley. This ordinance has not been approved by the Regional Planning Commission and is still being vetted through public comment. The AVAP should only analyze adopted ordinances and its EIR should not have to study un-adopted ordinance. With the November deadline given by the BOS, the AVAP EIR should not exhaust DRP's consultant's time with the examination of ordinance that may not even be adopted in the future.

Therefore, we ask that the AVAP EIR include an analysis of the approved SEA ordinance only. The proposed expansion should be studied only in the Project Alternatives and not the Project as proposed. In that analysis, include detailed scientific, research-based justification for the extent of the proposed designation areas including, but not limited to primary research on the potential impacts on agriculture, biota, geology, hydrology, land use planning, mineral resources, population and housing, delivery of public services, recreation and transportation. Especially because of the extent of the potential degradation of population, housing and other human activity-related environmental activities, justification of the boundaries and the incumbent regulation of that land need a substantial basis to give the lead agency an opportunity to weigh the impacts. Additionally, the EIR must address the balance of the SEA's to environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance, therefore the analysis should address the economic impact on individual properties.

**Regarding the Rural Preservation Strategy:**
Please provide as an alternative study in the EIR for the AVAP the inclusion of land densities as presented in all currently approved CSD's and use those densities, which have been previously adopted by the county. Also, include in this alternative an extrapolation of those densities throughout the planning area as an alternate to the reduced

densities found in the rural preservation strategy. For example if the minimum lot size in an adopted CSD is 2.5 acres, then the study should use that density in the rural preserve area surrounding that community. If the minimum lot size is 5 acres, that is the density which should be used in studying the land use impacts in the rural preserve area surrounding that community.

**Regarding Agricultural Resources:**
The EIR should include a study which excludes current or previous agricultural lands from the rural preserve designation. Land which is currently, or has previously been used for agricultural uses and which is located outside of rural town centers should not be considered as "rural preserve" and subject to the extremely low densities which are associated with this designation. If this land is not removed from the "rural preserve" designation and its attendant low densities, farmers and ranchers may suffer extreme economic impacts. Their property values will be greatly reduced which will result in a dramatic limitation in the amount of money they can borrow against their land for continuing agricultural uses. The first five words in the preamble to the REALTORS® Code of Ethics are "Under all is the land," we believe this to be true and are concerned that if the perceived value of the land is stripped away by this plan due to extremely low densities for future development the farmer/rancher will likely not be able to afford financing to continue their current use of the land, or their current way of life thus defeating the stated goal of preserving agricultural resources. Potential devaluation of farmland and the consequences of doing so should be specifically studied.

**Regarding the Economic Opportunity Areas (EOA's):**
Please provide as an alternative study in the EIR for the AVAP a study which assumes the EOA's will be adopted as shown, without further action such as development of community plans prior to adoption of the EOA. Future land owners will still be required to submit a project level EIR for any development plans they want the County to approve. This will ensure Los Angeles County's ability to review proposed development within these EOAs in more detail without adding the unnecessary provision of creating a new Community Plan that will alter the EIR currently being drafted, or trigger the need for an amendment to the General Plan.

**Regarding Economic Impacts:**
The proposed AVAP focuses the majority of growth within specific areas, where most of the housing and local economic activity is currently located, in an effort to help strengthen a localized jobs housing balance. The extensive downzoning of all rural preserve areas outside of the rural town centers are extremely limiting to any future development. The EIR for the AVAP should include an analysis of the impacts of this plan to current property owners as they will not be able to use their land as freely as they could when they purchased it, or in the way in which they may under the guidelines of the current AVAP.

**Regarding Economy/Property Values/ Public Services and Infrastructure:**
The EIR should include an alternative economic study of potentially lower property tax revenue being generated for the county based on the value of properties which, due to the plan may be encumbered with a lower density or any other impediment to development, including but not limited to SEA's, HMA's, Hazards Constraints, and the extremely low densities associated with the Rural Preservation Strategy. It is believed that properties which are overly burdened with overlays will lose much of their future value to property owners, thereby reducing the taxable value. As any potential loss of property tax revenue will affect the ability of the County to continue to provide services and infrastructure maintenance, the potential decrease of property value and thereby property tax generation should be studied and quantified for the decision makers.

**Regarding Schools:**
The AVAP EIR must address the potential impacts on the several school districts in the valley (Eastside, Wilsona, Keppel, Gorman, Westside, Acton-Agua Dulce, Antelope Valley Union High School and Antelope Valley College). Each of these sovereign jurisdictions regularly reviews its demographic and growth parameters. The AVAP EIR must address how the activities of the plan effect those plans and policies and, in so far as is possible, provide how there is a conflict or consistency between the AVAP and the work of each district including but not limited to the areas of land use planning (over which the district hold certain levels of sovereignty), population and housing, delivery of public services, recreation and transportation. Additionally,

the EIR must address environmental justice concerns for the existing and potential future school and residential populations and constituencies that will rely on this valley to provide habitation, sustenance and education. Consideration must also be given to the long term impact that any change in land use has on the delivery of educational services. Decreasing rural density has a profound impact on delivery of instruction, length and cost of transportation, limitations on services to students, loss of revenue to school districts and thus reductions in staff. These may be unintended consequences of the proposed EIR.

**Use of the most recent information and studies:**
The AVAP is shaping the Antelope Valley for future generations. The EIR must include with its analysis current and proposed transit projects, including NW 138, High Speed Rail and High Desert Corridor. And population growth associated with Southern California Association of Governments RTP/SCS projections. With these projections included in the AVAP EIR, it will give a unified regional planning effort that will allow the community's future housing and jobs to be pro-active and bring economic growth to that region.

**Land Use Proscription by Pre-defined Constraint:**
The land use patterns, densities and designations shown in the AVAP as proposed for the Project were developed under what has been described as a Hazard, Environmental and Resource Constraints Model (ECM) created by the county. The ECM is described as "a tool to inform stakeholders of potential site constraints and regulations" (General Plan Appendix C, Public Review Draft, 1/2014). However, the "tool to inform" about regulation has become the regulation itself.

The ECM is purported to 'front-load' all the underlying environmental hazards, issues, constraining factors and resources (or lack thereof) that could affect the ability of a particular site to be developed with improvements. However, the model's concept as presented does not provide any quantitative analysis or qualitative set of findings or determinations as to how the constraints identified translate into the development designations and densities imposed let alone the three 'classes' identified in the appendix.

After a thorough analysis of the ECM itself and the underlying data and assumptions, the EIR should address 'how', 'why' and 'with what data' the links between the ECM and the AVAP land use designations were arrived at. This substantiation is critical to all the land use, population, housing and environmental justice analysis throughout the EIR and will also inform many portions of the other areas of review and analysis.

We look forward to reviewing the analyses of the impact this plan will have on our local environment. It is our sincere hope that these analyses will lead to a good balance and appropriate land uses for the Antelope Valley.

Respectfully,

Rob Talbot, President

Cc: Supervisor Michael D. Antonovich
Senator Steve Knight
Assemblyman Steve Fox

Los Angeles
World Airports

TM

July 11, 2014

Carl Nadela, AICP
Regional Planner
Los Angeles County
Department of Regional Planning
320 W Temple Street Room 1354
Los Angeles, CA 90012

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Jackie Goldberg
Beatrice C. Hsu
Matthew M. Johnson
Dr. Cynthia A. Telles

Gina Marie Lindsey
Executive Director

Dear Mr. Nadela,

Thank you for the opportunity to comment on the Los Angeles County Antelope Valley Areawide General Plan Update. The Los Angeles World Airports (LAWA) is a proprietary department of the City of Los Angeles that owns and operates the Los Angeles International Airport, LA/Ontario International Airport, Van Nuys Airport, and Palmdale Regional Airport (PMD). LAWA owns over 17,000 acres of land within the Antelope Valley Areawide General Plan and would to preserve the future possibility to develop a regional airport. As a major property owner LAWA has a keen interest in the outcome of the Plan Update.

We are writing this letter to submit comments about the future zoning so that we can help facilitate the interim use of the property, such as renewable energy use and the possibility of a future airport down the line. Specifically, we would like to recommend that the County create a more uniform zone for the LAWA owned Palmdale properties that would be consistent with the M-2.5 zone because it would allow for heavy-industrial (airport) uses that occur in nearby airports, and is appropriate to low-intensity industrial and agricultural zones found here.

Among other uses, LAWA maintains existing leases on the property for light industrial and for agricultural uses. LAWA also believes that there is an opportunity to pursue potential renewable energy uses as interim projects. The airport M-2.5 zone could also be appropriate for the lots across LAWA property so that it creates sufficient flexibility and the range of land uses continues to include heavy renewable energy interim uses, agriculture and future airport facilities. LAWA recognizes that area west of the Little Rock Wash may be constrained by biological and environmental constraints.

As indicated in our letter on June 2, 2014, LAWA acknowledges and supports the County DRP's goal to bring consistency and predictability to the

development of renewable energy facilities. Revisions of the draft ordinance should consider M-2.5 zones for ministerial review or site plan review for energy projects, consistent with the policy decision made for M-1.5 and M-2 zones. It is important to note the M-2.5 zone is a heavy-industrial (airport) use zone that occurs only surrounding airports and does not appear to pose the residential-adjacency issues found in low-intensity industrial and agricultural zones. If the goal of the ordinance is to promote renewable energy operations while protecting residential uses from adjacency impacts, encouraging such uses where the impacts do not occur is a logical policy tool.

Where special permits are required, applicants should be given the flexibility to apply for a Master Permit across large amounts of property with implementation on individual parcels over time. Water use should be analyzed in reference to existing and alternative uses. For example, water demand for a concentrated solar thermal plant may be substantial in some scenarios but is actually lower than existing alfalfa growing operations or like agricultural uses.

Finally, LAWA would like to work with County staff to understand how the Significant Environmental Area (SEA) Ordinance area can be crafted in a way that can accommodated roadway constructions issues that may arise should there ever be the full build out of the airport.

Thank you for allowing us to comment on this environmental document. For your reference, we have attached our previous letters on these related subjects here for your reference (see attached).

It has always been LAWA's sincere pleasure to work the County DRP team on important planning initiatives impacting the Antelope Valley. If we can provide any further information or support, please do not hesitate to contact us at (424) 646-5186.

Sincerely,

Mariana Valdivia
FOR

Lisa Trifiletti
Director of Environmental & Land Use Planning
Los Angeles World Airports

Attachments:
Letter to Thuy Hua dated June 4, 2014
Letter to Chair Valadez dated February 26, 2014
Letter to Connie Chung, AICP dated October 4, 2014

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June 4, 2014

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Dr. Cynthia A. Telles

Gina Marie Lindsey
Executive Director

Thuy Hua
Los Angeles County
Department of Regional Planning
320 W. Temple Street, 13th Floor
Los Angeles, CA 90012

Dear Ms. Hua,

Los Angeles World Airports (LAWA) has great appreciation for the various meetings and the mutual cooperation we have had with Department of Regional Planning staff over the past several of years. We are writing this letter to reaffirm our comments and positions in regards to the County of Los Angeles proposed Renewable Energy Ordinance. These commentaries reiterate those made to staff and we remain confident that we can collectively find solutions that address all our concerns. As a proprietary department (LAWA), of the City of Los Angeles that owns and operates Los Angeles International Airport, LA/Ontario International Airport, Van Nuys Airport, and has future plans to develop Palmdale Regional Airport (PMD). LAWA acknowledges and supports the County's goal to bring consistency and predictability to the development of renewable energy facilities.

LAWA's main concern with the draft Renewable Energy Ordinance in its current form (i.e., second draft of proposed ordinance) is that, according to Table 22.52.1620-A, Utility-Scale Ground-Mounted Renewable Energy facilities would be prohibited in areas zoned A-1 Light Agriculture. LAWA feels strongly that renewable energy development is a very worthy and compatible use within such agricultural areas, and the draft ordinance offers no basis for why it should be prohibited. Should the County have concerns about potential land and development compatibility issues associated with such renewable energy development in areas zoned A-1, such issues, if any, could be better evaluated, addressed, and likely resolved if subject to a Conditional Use Permit (CUP) requirement. An outright prohibition of this type of renewable energy facility in A-1 areas does not serve the County or the environment, especially in a day an age when a true need for access to clean alternative/renewable energy exists.

Additionally, the final ordinance should consider M-2.5 zones for ministerial review or site plan review for renewable Utility-Scale Ground-Mounted Renewable Energy projects. The M-2.5 zone is a heavy-industrial (airport) use zone that occurs only surrounding airports and does not appear to pose the residential-adjacency issues found in low-intensity industrial and agricultural zones. If the goal of the ordinance is to promote renewable energy operations while protecting residential uses from adjacency impacts, encouraging such uses where the impacts do not occur is a logical policy tool. For long range plans PMD could serve as a future regional airport; however, for the short term, LAWA is evaluating for renewable energy use, in the interim, and other economically productive limited-time uses on the property. This zone – M-2.5 - creates a synergetic land use for the property, its intended function, and the ability to use it for clean, renewable energy.

It has always been LAWA's sincere pleasure to work the County DRP team on important planning initiatives impacting the Antelope Valley such as the Renewable Energy Ordinance. If you have any questions or comments regarding these declarations or if LAWA can provide any information that will be beneficial to your planning efforts, please do not hesitate to contact us at (424) 646-5186.

Thank you,

Lisa Trifiletti
Director of Environmental & Land Use Planning
Regional Planning & Environmental Assessment

Los Angeles
World Airports

TM

February 26, 2014

Esther Valadez, Chair
Regional Planning Commission
Los Angeles County
Department of Regional Planning
320 W. Temple Street, Room 1356
Los Angeles, CA 90012

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Jackie Goldberg
Beatrice C. Hau
Matthew M. Johnson
Dr. Cynthia A. Telles

Gina Marie Lindsey
Executive Director

Dear Chair Valadez,

Los Angeles World Airports (LAWA) is thankful for the meetings and cooperative relationship we have had with Department of Regional Planning staff. We are glad to offer the following comments in regards to the County of Los Angeles proposed General Plan Update, the Antelope Valley Plan Area Update, the Renewable Energy Ordinance, and the Significant Environmental Area Ordinance (SEA). These comments reiterate those made to staff and we remain confident that we can collectively find solutions that address all our concerns. LAWA is a proprietary department of the City of Los Angeles that owns and operates Los Angeles International Airport, LA/Ontario International Airport, Van Nuys Airport, and has future plans to develop Palmdale Regional Airport (PMD).

## General Plan Update

LAWA remains agnostic in terms of the changes proposed outside its properties. Consistent with regional planning documents and stakeholder consensus LAWA has consistently pursued the long-term development of PMD. LAWA will continue to pursue this vision but must caution that potential downzoning, enlargement of SEAs, and other land use restrictions presently contemplated by County DRP may have an indirect effect of reduction in demand for a future airport in the Antelope Valley.

Major infrastructure improvements to increase access to the Palmdale Airport, such as the Caltrans/Metro High Desert Corridor are also essential to airport development and should be reflected in the General Plan. It is important to state that the current jobs and population statistics do not justify profitable commercial air service and the fact that under any scenario LAWA will maintain a need for interim uses that will provide economic benefit from LAWA's Palmdale land holdings. LAWA believes the General Plan and Area plan can work together to facilitate both interim and long-term uses at PMD.

## Antelope Valley Area Plan Update

The Antelope Valley Area Plan's current and proposed zoning is inconsistent across LAWA's Palmdale property. As you know, LAWA has long range plans to use the entire property for a future regional airport and short term interim plans for renewable energy use and other economically productive interim uses. LAWA also maintains existing leases on the

property for light industrial and agricultural uses. Inconsistent zoning may lead to frequent entitlement requests which are costly and time-consuming to process, both for County DRP and for LAWA. Specifically, Agricultural zoning on certain lots within the LAWA owned property is inconsistent with potential renewable energy interim uses and more importantly with future airport uses. The airport M-2.5 zone could potentially be an appropriate zone for all lots across the LAWA property if the range of land uses included heavy agriculture, light and heavy industrial, renewable energy and future airport facilities.

## Renewable Energy Ordinance

LAWA acknowledges and supports the County's goal to bring consistency and predictability to the development of renewable energy facilities. Revisions of the draft ordinance should consider M-2.5 zones for ministerial review or site plan review for energy projects, consistent with the policy decision made for M-1.5 and M-2 zones.

It is important to note the M-2.5 zone is a heavy-industrial (airport) use zone that occurs only surrounding airports and does not appear to pose the residential-adjacency issues found in low-intensity industrial and agricultural zones. If the goal of the ordinance is to promote renewable energy operations while protecting residential uses from adjacency impacts, encouraging such uses where the impacts do not occur is a logical policy tool.

Where special permits are required, applicants should be given the flexibility to apply for a Master Permit across large amounts of property with implementation on individual parcels over time. Water use should be analyzed in reference to existing and alternative uses. For example, water demand for a concentrated solar thermal plant may be substantial in some scenarios but is actually lower than existing alfalfa growing operations or like agricultural uses.

## Significant Environmental Area (SEA) Ordinance

LAWA acknowledges that resource management and habitat preservation is subject to a constantly evolving regulatory landscape. In addition to complying with the County's SEA Ordinance, potential development of PMD is subject to habitat regulations from the regional water quality control board, the State Department of Fish and Game, the United States Fish and Wildlife Service as well as multiple responsible and trustee agencies that all participate in the CEQA and NEPA process. LAWA's ability to develop PMD and create economic activity is dependent not only on the constraints of the SEA Ordinance but also the ability (or inability) of the SEA process to align with instructions and regulations from the resource agencies.

LAWA supports the defined timelines and responsibilities in the draft ordinance. Based upon our initial reading of the ordinance, the proposed entitlement process will provide greater certainty and timely outcomes than the current oftentimes-unruly SEA review process. LAWA's concerns with the proposed ordinance pertain primarily to the proposed mapped area boundaries themselves, as well as the ability to develop essential roadways and infrastructure through SEA areas.

Road construction, particularly for roads and facilities anticipated in the General Plan, through the SEA will also be necessary for the full build-out of a commercial airport. Construction of such essential infrastructure should be given deference and expediting in the SEA review process. Two for one habitat set-aside provisions may not be appropriate for public works projects, particularly as road construction will still result in large contiguous parcels and provisions for wildlife undercrossing or tunnels may be incorporated into roadway design.

Los Angeles
World Airports

TM

October 4, 2013

Connie Chung, AICP
Supervising Regional Planner
Los Angeles County
Department of Regional Planning
320 W. Temple Street, Room 1356
Los Angeles, CA 90012

**LAX**
**LA/Ontario**
**Van Nuys**
**City of Los Angeles**
Eric Garcetti
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**Board of Airport Commissioners**
Sean O. Burton
President
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Vice President
Gabriel L. Eshaghian
Jackie Goldberg
Beatrice C. Hsu
Matthew M. Johnson
Dr. Cynthia A. Telles
Gina Marie Lindsey
Executive Director

Dear Ms. Chung,

Los Angeles World Airports (LAWA) is pleased to offer the following comments in regards to the County of Los Angeles Department of Regional Planning's (County DRP) proposed General Plan Update, the Antelope Valley Plan Area Update, the Renewable Energy Ordinance, and the Significant Environmental Area Ordinance. LAWA is a proprietary department of the City of Los Angeles that owns and operates Los Angeles International Airport, LA/Ontario International Airport, Van Nuys Airport, and has future plans to develop Palmdale Regional Airport (PMD).

## General Plan Update

In order to provide a guiding and effective planning document, the County DRP should provide a defined vision for PMD in the General Plan Update. This should include but is not limited to the development of projected facility requirements and capacity, economic growth and future demographics that will either facilitate or hinder airport development. Consistent with regional planning documents and consensus LAWA has consistently pursued the long-term development of PMD. LAWA will continue to pursue this vision but must caution that potential downzoning, enlargement of SEAs, and other land use restrictions presently contemplated by County DRP may have an indirect effect of reduction in demand for a future airport.

Major infrastructure improvements to increase access to the Palmdale Airport, such as the Caltrans/Metro High Desert Corridor should also be reflected in the General Plan. It is important to state that the current jobs and population statistics do not justify profitable commercial air service and the fact that under any scenario LAWA will maintain a need for interim uses that will provide economic benefit from LAWA's Palmdale land holdings. LAWA believes the General Plan and Area plan can work together to facilitate both interim and long-term uses at PMD.

## Antelope Valley Area Plan Update

The County DRP Antelope Valley Area Plan Update's current and proposed zoning is inconsistent across LAWA's Palmdale property. As you know, LAWA has long range plans to

use the entire property for a future regional airport and short term interim plans for a renewable energy use. LAWA also maintains existing leases on the property for light industrial and agricultural uses. Inconsistent zoning may lead to frequent entitlement requests which are costly and time-consuming to process, both for County DRP and for LAWA. Specifically, Agricultural zoning on certain lots within the LAWA owned property is inconsistent with potential renewable energy interim uses and more importantly with future airport uses. The airport M-2.5 zone could potentially be an appropriate zone for lots across the LAWA property if the range of land uses included heavy agriculture, renewable energy and future airport facilities. Areas west of the Little Rock Wash are priorities for consistent zoning as properties east of the wash contain biological and access constraints.

## Renewable Energy Ordinance

LAWA acknowledges and supports the County DRP's goal to bring consistency and predictability to the development of renewable energy facilities. Revisions of the draft ordinance should consider M-2.5 zones for ministerial review or site plan review for energy projects, consistent with the policy decision made for M-1.5 and M-2 zones.

It is important to note the M-2.5 zone is a heavy-industrial (airport) use zone that occurs only surrounding airports and does not appear to pose the residential-adjacency issues found in low-intensity industrial and agricultural zones. If the goal of the ordinance is to promote renewable energy operations while protecting residential uses from adjacency impacts, encouraging such uses where the impacts do not occur is a logical policy tool.

Where special permits are required, applicants should be given the flexibility to apply for a Master Permit across large amounts of property with implementation on individual parcels over time. Water use should be analyzed in reference to existing and alternative uses. For example, water demand for a concentrated solar thermal plant may be substantial in some scenarios but is actually lower than existing alfalfa growing operations or like agricultural uses.

## Significant Environmental Area (SEA) Ordinance

LAWA acknowledges that resource management and habitat preservation is subject to a constantly evolving regulatory landscape. In addition to complying with the County's SEA Ordinance, potential development of PMD is subject to habitat regulations from the regional water quality control board, the State Department of Fish and Game, the United States Fish and Wildlife Service as well as multiple responsible and trustee agencies that all participate in the CEQA and NEPA process. LAWA's ability to develop PMD and create economic activity is dependent not only on the constraints of the SEA Ordinance but also the ability (or inability) of the SEA process to align with instructions and regulations from the resource agencies.

LAWA supports the defined timelines and responsibilities in the draft ordinance. Based upon our initial reading of the ordinance, the proposed entitlement process will provide greater certainty and timely outcomes than the current oftentimes-unruly SEA review process. LAWA's concerns with the proposed ordinance pertain primarily to the proposed mapped area boundaries themselves, as well as the ability to develop essential roadways and infrastructure through SEA areas.

Road construction, particularly for roads and facilities anticipated in the General Plan, through the SEA will also be necessary for the full build-out of a commercial airport. Construction of such essential infrastructure should be given deference and expediting in the SEA review

process. Two for one habitat set-aside provisions may not be appropriate for public works projects, particularly as road construction will still result in large contiguous parcels and provisions for wildlife undercrossing or tunnels may be incorporated into roadway design.

It is unclear how the SEA ordinance relates to master plans or projects that involve multiple entitlements at an early programmatic stage. It is essential to LAWA that once a project is cleared, the entitlement should not lapse or change during the long range 25+ year development timeframe for an airport.

In regards to the proposed SEA map itself LAWA anticipates that the areas within our land holdings east of the Little Rock Wash (the wash) will be protected habitat areas in the eventual full development of PMD as a commercial airport. Any SEA designation west of the wash will have impacts on that future airport feasibility. LAWA will continue to review and comment on the technical details of the proposed maps and habitat types in the coming months.

Where areas are set-aside as mitigation or permanent open-space, a Conservancy or other mechanism must be established to transfer liability and maintenance for the parcel.

**Conclusions**

It has been LAWA's sincere pleasure to work the County DRP team on these important planning initiatives impacting the Antelope Valley. It is our hope that your multiple plan updates will reflect a unified zoning and land use scheme for the Palmdale Regional Airport that allows for seamless future airport development as well as economically beneficial interim uses. If you have any questions regarding these comments or if LAWA can provide any information that will be beneficial to your planning efforts, please do not hesitate to contact us at (424) 646-7690.

Thank you,

Christopher Koontz
Chief of Airport Planning I
Regional Planning & Environmental Assessment

**Ana Verde Hills Town Council**
412 West Lake Drive ● Palmdale, CA 93551

Mr. Carl Nadela, Regional Planner
Los Angeles County Department of Regional Planning
320 West Temple Street, Room 1356
Los Angeles, CA 90012

RE: Topics for Consideration in the AVAP Environmental Impact Report

Dear Mr. Nadela:

The Ana Verde Town Council is responding to the Notice of Preparation for the Antelope Valley Areawide General Plan Update (AVAP) Environmental Impact Report. We are requesting the issues contained in this letter be included in the scope of the EIR. The issues discussed are important to the residents of Ana Verde Hills specifically and the Antelope Valley community in general.

**Significant Ecological Areas:**
The Antelope Valley Areawide Plan has included the proposed SEA Ordinance with an expansion of 150,000 acres in the Antelope Valley. This expansion brings the SEA area in the Antelope Valley to over 290,000 acres of SEA designated property in its Land Use Plan. This ordinance has not been approved by the Regional Planning Commission and is still being vetted through public comment. The AVAP EIR should only analyze adopted ordinances and its EIR should not study a proposed draft ordinance, unless it is considered as a Project Alternative and not as the Project.

The SEA analysis, should include detailed scientific, research-based justification for the extent of the proposed designation areas including, but not limited to primary research on the potential impacts on agriculture, biota, geology, hydrology, land use planning, mineral resources, population and housing, delivery of public services, recreation and transportation. Especially because of the extent of the potential degradation of population, housing and other human activity-related environmental activities, justification of the boundaries and the incumbent regulation of that land needs a substantial basis to give the lead agency an opportunity to weigh the impacts. Additionally, the EIR must address the balance of the SEA's to environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

**Economic Opportunity Areas:**
Identified within the AVAP are three Economic Opportunity Areas (EOAs) centered around major transit corridors that "would bring tremendous opportunities for growth and economic development in the vicinity of these projects". These EOAs would bring stable economic growth for the future generations of the Antelope Valley.
In the AVAP, DRP staff has indicated that further studies and a more detailed planning effort will need to be done for each EOA by way of a Community Plan. The EIR will be inaccurate if some future Community Plan is postulated now with changes to the currently projected AVAP analysis and data. Any discussion of a future Community Plan to re-visit the EOA's must be only part of a Project Alternative and not part of the Project.

The EOA's are an important concrete part of the AVAP and must not have an open-ended reviewing/studying component; They need to be addressed directly in the EIR as the activity nodes that they are. The AVAP EIR must accurately address any impacts associated with the allotted residential units and projected commercial acreage that will bring jobs/housing to those areas. We ask that the EIR include the EOA's in its analysis as is and that Community Plans not be a part of the AVAP. Future land owners will still have to submit a project level EIR for any development plans they want the County to approve and the EOA concept is already sufficient for programmatic determinations at the AVAP EIR level. This will ensure Los Angeles County's ability to review proposed development within these EOAs in more detailed without adding the unnecessary Community Plan that will alter the EIR currently being drafted. Additionally, the EIR must address how the EOA's balance environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

**Community Standards Districts:**
The EIR of the AVAP will analyze impacts associated with land use changes and zoning changes proposed by the County. The Land Use portion proposes to down-zone much of the land within currently adopted and proposed Community Standards Districts. The AVAP EIR should address these changes and provide research-based substantiation for those changes. The activities that have led to the existing and the proposed Community Standards Districts have been vetted by the various communities and any changes via the AVAP to the underlying densities and land use designations have the potential for substantial alterations to housing, population and other human activity-related environmental activities. No environmental analysis will be considered complete unless the existing district land use patterns are included in all project alternatives, including the No Project Alternative.

**Use of all the most recent information and studies:**
The AVAP is shaping the Antelope Valley for future generations. The EIR must include with its analysis current and proposed transit projects, including NW 138, High Speed Rail and High Desert Corridor. And population growth associated with Southern California Association of Governments RTP/SCS projections. With these projections included in the AVAP EIR, it will give a unified planning effort that will allow the community's future housing and jobs to be pro-active and bring economic growth to that region.

**Rural town centers/Rural Town Areas vs. Rural preservation areas:**
The AVAP has created hard-line boundaries for existing activity nodes without providing any substantiation for their existence. While a "town center" concept can help focus a balance between housing and jobs, the manner does not provide for the diversity of housing and population that is always found in rural areas of the country and in the existing land use patterns of the Antelope Valley. The areas identified as Rural Town Centers and Rural Town Areas need to include softer edges that allow for reasonable opportunities for the addition of a more diverse set of housing and commercial activities. The other area identified is the Economic Opportunity Areas whose creation is the provision of new locations for reasonable growth within the rural milieu of the valley. However, the down-zoning of the rural preservation areas, which include all remaining unincorporated areas, has the potential to create substantial environmental impacts across the Antelope Valley. The AVAP EIR must address those potential impacts, including, but not limited to, agriculture, biota, geology, hydrology, land use planning, mineral resources, population and housing, delivery of public services, recreation and transportation. The AVAP Project postulates a near vacancy of a substantial amount of the valley. At least one of the Project Alternatives must address a more open, organic (rather than proscribed) maturity of the those

open portions of the valley so a more diverse pattern of development closer to the existing pattern may continue. In addition, the rural preservation concept may not be consistent with the adopted or proposed with Community Standards Districts. The EIR should include an alternative with the Community Standards Districts zoning. Additionally, the EIR must address the balance of development patterns and development diversity with environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

**School District and Education Issues:**
The AVAP EIR must address the potential impacts on the several school districts in the valley ( Eastside, Wilsona, Keppel, Gorman, Westside, Acton-Agua Dulce, Antelope Valley Union High School and Antelope Valley College). Each of these sovereign jurisdictions regularly reviews its demographic and growth parameters. The AVAP EIR must address how the activities of the plan effect those plans and policies and, in so far as is possible, provide how there is a conflict or consistency between the AVAP and the work of each district including but not limited to the areas of land use planning (over which the district hold certain levels of sovereignty), population and housing, delivery of public services, recreation and transportation. Additionally, the EIR must address environmental justice concerns for the existing and potential future school and residential populations and constituencies that will rely on this valley to provide both habitation, sustenance and education. Consideration must also be given to the long term impact that any change in land use has on the delivery of educational services. Decreasing rural density has a profound impact on delivery of instruction, length and cost of transportation, limitations on services to students, loss of revenue to school districts and thus reductions in staff. These may be unintended consequences of the proposed EIR.

The Ana Verde Town Council would welcome a presentation by the Department of Regional Planning on the updated Antelope Valley Areawide Plan. Please contact Forrest McElroy at 805-338-4358 to schedule a time for a presentation. We look forward to hearing from you soon.

Respectfully,

Forrest McElroy, Director
For: Patty Rardon, President

Cc: Ana Verde Town Council

SOUTHERN CALIFORNIA

**ASSOCIATION of GOVERNMENTS**

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July 1, 2014

Mr. Carl Nadela, AICP
Regional Planner
Los Angeles County Department of Regional Planning
320 West Temple Street, Room 1356
Los Angeles, California 90012
Telephone: (213) 974-6411
E-mail: tnc@planning.lacounty.gov

**RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Los Angeles County Antelope Valley Areawide General Plan Update [SCAG NO. IGR8079]**

Dear Mr. Nadela:

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Los Angeles County Antelope Valley Areawide General Plan Update ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including its Sustainable Communities Strategy (SCS) component pursuant to SB 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans.[1] Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of the regional goals and policies in the RTP/SCS.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Los Angeles County Antelope Valley Areawide General Plan Update. The proposed project would be a comprehensive update to the existing Antelope Valley Areawide General Plan, which was adopted by the Los Angeles County Board of Supervisors on December 4, 1986. The proposed project would refine the countywide goals and policies in the General Plan by addressing specific issues relevant to the Antelope Valley.

**When available, please send environmental documentation to SCAG's *office in Los Angeles or by email to sunl@scag.ca.gov* providing, at a minimum, the full public comment period for review.** If you have any questions regarding the attached comments, please contact Lijin Sun at (213) 236-1882 or sunl@scag.ca.gov. Thank you.

Sincerely,

Jonathan Nadler,
Manager, Compliance and Performance Assessment

[1] SB 375 amends CEQA to add Chapter 4.2 Implementation of the Sustainable Communities Strategy, which allows for certain CEQA streamlining for projects consistent with the RTP/SCS. Lead agencies (including local jurisdictions) maintain the discretion and will be solely responsible for determining "consistency" of any future project with the SCS. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a finding of consistency under SB 375 for purposes of CEQA streamlining.

The Regional Council consists of 86 elected officials representing 191 cities, six counties, six County Transportation Commissions, one representative from the Transportation Corridor Agencies, one Tribal Government representative and one representative for the Air Districts within Southern California.

2014.05.05 printed on recycled paper

**COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LOS ANGELES COUNTY ANTELOPE VALLEY AREAWIDE GENERAL PLAN UPDATE [SCAG NO. IGR8079]**

## CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS.

### 2012 RTP/SCS Goals

The SCAG Regional Council adopted the 2012 RTP/SCS in April 2012. The 2012 RTP/SCS links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations (see http://rtpscs.scag.ca.gov). The goals included in the 2012 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2012 RTP/SCS are the following:

| SCAG 2012 RTP/SCS GOALS | |
|---|---|
| RTP/SCS G1: | *Align the plan investments and policies with improving regional economic development and competitiveness* |
| RTP/SCS G2: | *Maximize mobility and accessibility for all people and goods in the region* |
| RTP/SCS G3: | *Ensure travel safety and reliability for all people and goods in the region* |
| RTP/SCS G4: | *Preserve and ensure a sustainable regional transportation system* |
| RTP/SCS G5: | *Maximize the productivity of our transportation system* |
| RTP/SCS G6: | *Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)* |
| RTP/SCS G7: | *Actively encourage and create incentives for energy efficiency, where possible* |
| RTP/SCS G8: | *Encourage land use and growth patterns that facilitate transit and non-motorized transportation* |
| RTP/SCS G9: | *Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies* |

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the policy and supportive analysis in a table format. Suggested format is as follows:

| SCAG 2012 RTP/SCS Goals | | |
|---|---|---|
| | **Goal** | **Analysis** |
| RTP/SCS G1: | *Align the plan investments and policies with improving regional economic development and competitiveness.* | *Consistent: Statement as to why*<br>*Not-Consistent: Statement as to why*<br>*or*<br>*Not Applicable: Statement as to why*<br>*DEIR page number reference* |
| RTP/SCS G2: | *Maximize mobility and accessibility for all people and goods in the region.* | *Consistent: Statement as to why*<br>*Not-Consistent: Statement as to why*<br>*or*<br>*Not Applicable: Statement as to why*<br>*DEIR page number reference* |
| etc. | | etc. |

**RTP/SCS Strategies**

To achieve the goals of the 2012 RTP/SCS, a wide range of strategies are included in SCS Chapter (starting on page 152) of the RTP/SCS focusing on four key areas: 1) Land Use Actions and Strategies; 2) Transportation Network Actions and Strategies; 3) Transportation Demand Management (TDM) Actions and Strategies and; 4) Transportation System Management (TSM) Actions and Strategies. If applicable to the proposed project, please refer to these strategies as guidance for considering the proposed project within the context of regional goals and policies. To access a listing of the strategies, please visit http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf (Tables 4.3 – 4.7, beginning on page 152).

**Regional Growth Forecasts**

The Draft Environmental Impact Report for the proposed project should reflect the most recently adopted SCAG forecasts. To review the most recently adopted SCAG forecasts, please visit http://scag.ca.gov/Documents/2012AdoptedGrowthForecastPDF.pdf, which consists of the 2020 and 2035 RTP/SCS population, household and employment forecasts. The forecasts for the region and applicable jurisdictions are below.

| | **Adopted SCAG Region Wide Forecasts** | | **Adopted Unincorporated County of Los Angeles Forecasts** | | **Adopted County of Los Angeles Forecasts** | |
|---|---|---|---|---|---|---|
| **Forecast** | **Year 2020** | **Year 2035** | **Year 2020** | **Year 2035** | **Year 2020** | **Year 2035** |
| Population | 19,663,000 | 22,091,000 | 1,159,100 | 1,399,500 | 10,404,000 | 11,353,000 |
| Households | 6,458,000 | 7,325,000 | 336,100 | 405,500 | 3,513,000 | 3,852,000 |
| Employment | 8,414,000 | 9,441,000 | 266,100 | 318,100 | 4,558,000 | 4,827,000 |

**MITIGATION**

*SCAG staff* recommends that you review the SCAG 2012 RTP/SCS Final Program EIR Mitigation Measures for guidance, as appropriate. See Chapter 6 (beginning on page 143) at: http://rtpscs.scag.ca.gov/Documents/peir/2012/final/Final2012PEIR.pdf

As referenced in Chapter 6, a comprehensive list of example mitigation measures that may be considered as appropriate is included in Appendix G: *Examples of Measures that Could Reduce Impacts from Planning, Development and Transportation Projects.* Appendix G can be accessed at: http://rtpscs.scag.ca.gov/Documents/peir/2012/final/2012fPEIR_AppendixG_ExampleMeasures.pdf

**From:** Virginia Stout
**To:** Carl Nadela
**Cc:** Jay Lee
**Subject:** NOP-A V Area Wide Plan
**Date:** Saturday, June 28, 2014 1:19:05 PM

---

Dear Mr. Nadela:

The Antelope Acres Town Council request the following changes in the DEIR for the Antelope Valley Area Wide Plan :

1. Removal of the EOA designation for the areas between Ave B to the north; Ave J to the south; 60th Street West to the east ; and 110th St. to the west. We wish a return to the previous designation as an agricultural opportunity area. The majority of this area is within Antelope Acres Town borders, and it appears that the EOA designation may make it easier for Lancaster to annex this area if enough people feel Lancaster will allow them to develop easier than the County.

2. Delete rural commercial and mixed use zones fromthe above named area, except in the identified Town Center.

3. Remove Energy Ordance areas from within the borders of Antelope Acres. We already have more than our share of industrial solar, making it difficult to plan for an agricultural opportunity residential town for the future with so much of our land in industrial dead zones.

4. Please add the following streets to a designation of proposed scenic highways: 90th St. West from Ave J to Ave. A ; Ave I to Lancaster Road to Highway 138/Ave. D; Ave D/ Highway 138 from 60th St. West to the 5 Freeway.

5. Change the terms "degraded" and "disturbed farmland" to "second growth desert", which more accurately reflects the condition of the land. Like second growth forests, the desert is always in the process of reclaiming itself. The results are stunning displays of blue, orange, brilliant yellow wildflowers that carpet the whole west end of the AV in Spring with the slightest of rain; the kit foxes, badgers, rabbits, roadrunners, quail, fairy shrimp, hawks and eagles and those birds that migrate through the AV; and the various native bushes and willows, such as the rabbitbrush that turns the desert brilliant yellow in Fall.

6. Why was RL 40 changed to RL 20??

7. Are the temporary solar industrial jobs counted in the jobs build out numbers??

These are some of our concerns. Thank for your time.

Sincerely,

Ginger Stout
Antelope Acres Town Council Vice President
9136 W. Avw F4
Antelope Acres, CA 93536

Three Points-Liebre Mountain Town Council
P.O. Box 76
Lake Hughes, CA 93532
3pointsliebremountain@gmail.com

11 July 2014

SENT VIA EMAIL

Mr. Carl Nadela, AICP
Regional Planner
Los Angeles County Department of Regional Planning
320 West Temple Street, Room 1354
Los Angeles, CA 90012
Email: tnc@planning.lacounty.gov

Dear Mr. Nadela,

Subject: Notice Of Preparation, Antelope Valley Areawide Plan

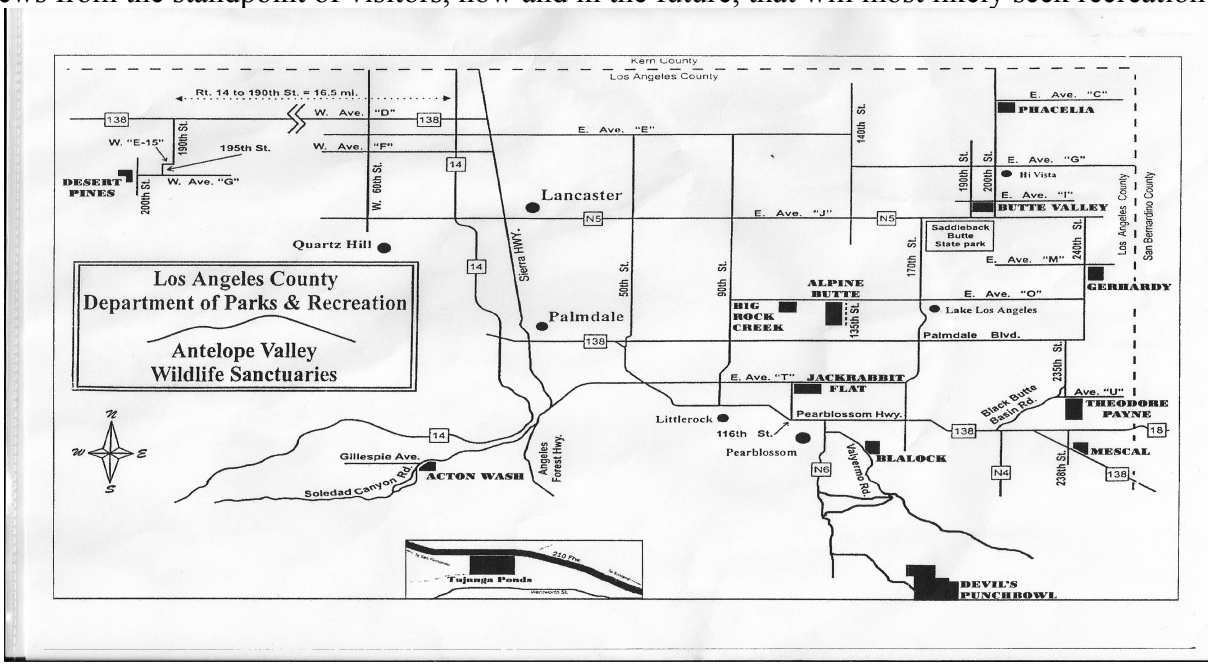
We are writing in response to the Notice of Preparation (NOP) for the Antelope Valley Areawide Plan (AVAP). Members of our town council and several residents attended the numerous Town & Country Outreach meetings that began in 2007. We felt the meetings were useful, and believed that our desires for the future development of our community and other rural town council areas were sufficiently addressed through the outreach and additions to the AVAP, but now question recent input from special interests who have no particular inclination to rural preservation touted by Regional Planning, the AVAP, their insertions to AVAP, and the NOP.

We understand that economic development is important to the future of the Antelope Valley and its residents. However, our mission, as a council, has not changed; we formed through response to an unpopular local project that has adversely affected the community, and we continue our efforts to maintain our rural atmosphere and protect our area from ill-conceived development. What is so obvious to us—is that the Western Antelope Valley and its important offering of rural lifestyle and agricultural areas, visual and recreational resource areas, and crucial wildlife areas, must be protected. Please see the list below regarding our concerns and comments that we believe require attention in the Environmental Impact Review document.

## Aesthetics

Please discuss visual effects of transportation, commercial, industrial, and "economic opportunity areas" along the western portion of Highway 138 and surrounding roadways, listed in the Los Angeles County's Recreation Plan 1965, and the Scenic Highway Element 1974. Previously

mentioned current planning documents identify an extensive network of scenic roadways in the north county; proposed documents do not detail those roadways or scenic areas. With the very real possibility of increased encroachment in scenic areas from areas of increased density of proposed development (including renewable energy), we are concerned with maintaining our views from the standpoint of visitors, now and in the future, that will most likely seek recreation




and solitude in our area due to proximity to the greater Los Angeles Area. Higher fuel costs may dictate areas of local interest will support increasing numbers of visitors seeking respite in our rural areas possessing great natural beauty, adding to the economic vitality of our region through tourism. Identify potential impacts to loss of viewshed and related tourism to wildflower fields, Ripley Desert Woodland, California Poppy Reserve, Desert Pines Wildlife Sanctuary, and others listed on the map above. Consider, too, the Historic Ridge Route, listed on the National Register of Historic Places, and Angeles Forest scenic viewpoints.

Dark night skies will most likely be affected by substantial development areas and RE installations, solar fields, wind turbines, and the like. Discuss all potential development impacts to dark night skies.

## Agriculture and Forest

The AVAP claims to preserve agricultural lands, yet continues to support the placement of utility-scale renewable energy on so-called "disturbed" agricultural land (ag land). How will this affect the potential of ag land to provide food sources in the future? Please explore the effects of utility-scale renewable energy (RE) development build-out on A-2 Heavy Agriculture, and A-1 Light Agriculture zoned parcels. Explain impacts that arise from conversion of farmland to non-agricultural use, as proposed by promoting utility-scale RE and commercial/industrial uses in

agricultural areas. Thousands of acres of proposed RE projects will have tremendous effect on neighboring rural residents, rural communities, and natural areas; explain impacts of this objective.

Increased housing densities recommended by land use policies directing all future growth to rural communities and rural town areas, and those along the San Andreas Significant Ecological Area that border the Angeles National Forest must be assessed for their effects on residents whose land adjoins or is near Forest Areas. Most of these lands are extremely high fire hazard areas, earthquake fault hazard areas, watershed areas, as well as wildlife habitat. Increased fire danger to Forest areas adjacent to industrial and high density housing will occur, i.e., expansion of urban-wildland interface and correlative increase in human induced ignitions and increased use in general. Also, evaluate scenic viewpoints and and Scenic Byways from Forest lands that will be impacted by proposed land uses and development.

How will changed land use, air quality, traffic, and added recreational use affect the Angeles and Los Padres Forests, and including Fish Canyon, Salt Creek, and Frazier-Sespe Wilderness Areas proposed by the new Southern California Forest Management Plan?

## Air Quality/Greenhouse Gas Emissions

Air quality issues have been ongoing in the Antelope Valley. Particulates are often above acceptable levels, and westerly winds drive pollutants and dust into and around the Antelope Valley. Residents here have been subjected to air pollution from hazardous waste fuels burned by the National Cement Company. Bakersfield and the Central Valley have some of the worst air in the country, and air pollution drifts into the Northern Antelope Valley. Addition of approximately one hundred thousand people, at Centennial's build-out, will encourage commuting and other traffic, and along with industrial and commercial development, will add pollution. Added traffic in the Interstate 5/ Highway138 zone could load the Tejon Pass and Northwest Antelope Valley with pollution that will affect sensitive receptors.

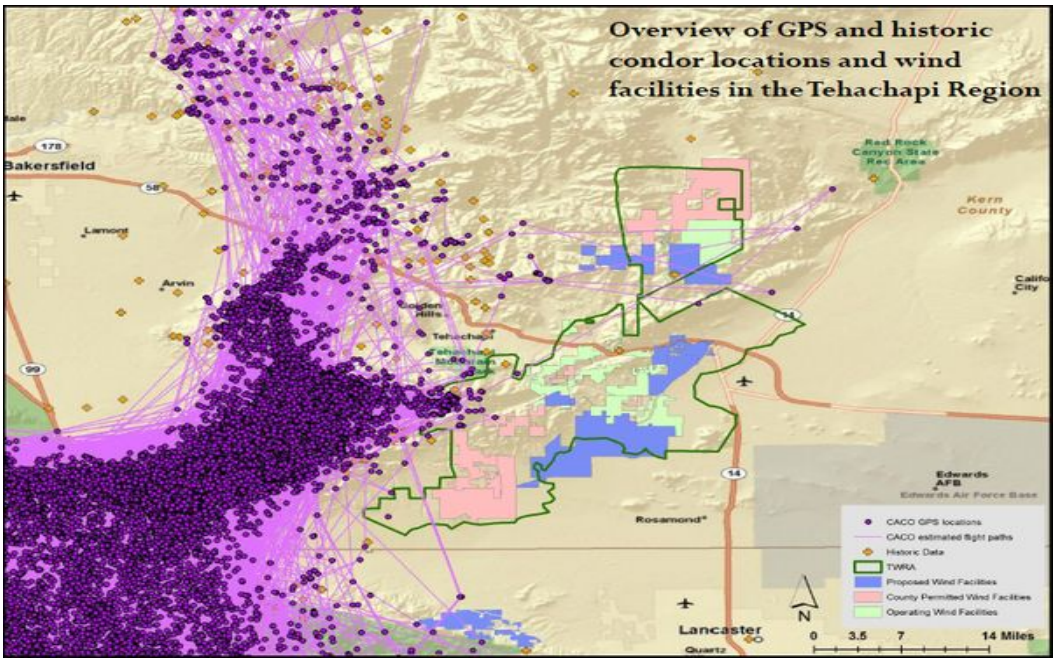
Recent studies have revealed that arid environments have value in their ability to sequester greenhouse gases. Those landscapes may well sequester even more greenhouse gases as the amount of carbon dioxide in our atmosphere increases. Address the use of desert environments for utility-scale solar and urban-suburban sprawl, and the loss of this ability to convert $CO_2$..

Please explain how greenhouse gases, automobile pollutants, energy generation, industrial uses, particulate matter (which carries Coccidioidomycosis—Valley Fever) will affect air quality in the North County, while viewed through the lens of projected build-out.

## Biological Resources

Examine effects of land use and zoning changes to the Western Antelope Valley, which the Audubon Society identifies as a globally Important Bird Area. Explore the effects of thousands of acres of utility-scale renewable energy development; commercial, industrial, and housing

development on migratory passerines, raptors, and waterfowl that frequent the Antelope Valley. Consider the effects of Centennial's development, as California Condor territory, near Critical Condor Habitat.

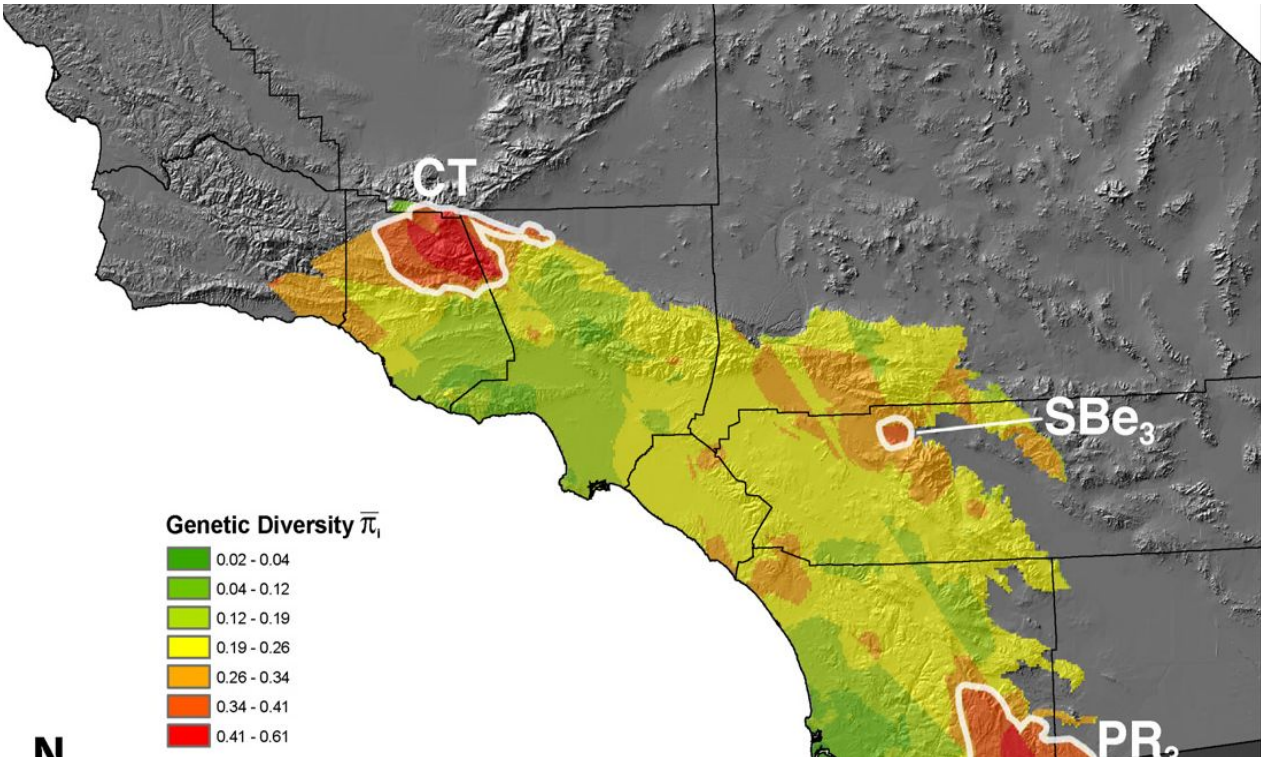



Detail impacts of high density and industrial development in the proposed Centennial area, to the San Andreas Significant Ecological Area (SEA) 21, encompassing this development along with the proposed "economic opportunity zone" in the North Western Antelope Valley. How does the land use map for this area comport with low density development in SEAs? The designation of this area as an SEA recognizes its importance as a major wildlife corridor that connects the San Gabriel, Sierra Pelona, Central and Northwestern Transverse Ranges, and Tehachapi Mountains. The United States Geological Survey recognizes this area as a biological "evolutionary hotspot"--crucial to biodiversity; so, explain how development here will affect this important aspect of the environment.

This corridor, and mountain/valley floor areas may also be considered "transitional habitat," crucial to species ability and opportunity to move up and down elevations in order to adjust to changes in temperature, as possible climate change takes place and warming (from local development) encroaches on valley environments. So, far no EIR document has specifically discussed the urban heat island effect of large-scale solar development or wind towers, or addition of other development and how they may heat our desert valleys, and make the need to preserve these areas more urgent. Describe urban heat island effect of development as a result of the AVAP and Land Use Map changes.

Utility-scale solar development is considered by California Department of Fish and Wildlife as complete loss of habitat for sensitive species in the Antelope Valley. Address impacts of thousands of acres of of this type of development.

"Are hotspots of evolutionary potential adequately protected in southern California?," USGS, April 2008.




Economic/Jobs

We have reservations about the targeting of rural areas for industrial development. Please explain the consistency of AVAP rural preservation and the promotion of utility-scale RE, other energy production, and industrial uses incongruous with rural communities. The "Economic Opportunity Areas," especially the Western Antelope Valley zone, which is situated in the previously mentioned wildlife corridor, the SEA 21, and where there is essentially no development in the area now. What would be the effects on local businesses in Gorman and Lebec? If one considers those areas as economic opportunity or commercial development zones, why have they not become more developed to date? These areas are not serviced by any mass transit, the proposed High Speed Rail will not travel through the West Valley; please tell us how more individual commuters on our roads and highways will affect local residents. Typically, no suburban area in Southern California has been able to rely completely on local employment opportunities, encouraging reliance on automobile commuting, in turn, causing increased traffic on local roads and highways.

The Eastern Highway 138 road widening effort has not produced an economic boon to the Eastern Antelope Valley; describe how the new industrial zones would benefit local residents, when current commercial zones along the highway have fallen into decay, and the additional commercial and industrial development directed to the proposed High Desert Corridor will likely spell further demise. How does this plan affect current local business?

## Hazards

Special Hazards Management dictates low density housing in fire, earthquake, and flood zone areas. Many rural communities, suburban and municipal development occur along the San Andreas Rift Zone. Our community has requested large lot size minimums to not only preserve rural living and environmental quality here, but we understand high density development puts increased numbers of residents at risk during hazardous events. What are impacts to residents in areas of high density housing (Centennial) planned for the Western Antelope Valley, at the intersection of the Garlock, San Andreas, and Big Pine Faults?

Explain impacts from increased fire danger, due to increased proposed development, in light of the fact that services usually lag behind need.

There is no countywide comprehensive flood control plan. How will increased development of housing, industrial, utility-scale RE, areas affect flood zones and adjacent properties that currently do not experience flooding issues requiring flood control plans.

## Hydrology/Water

Explain how adequate water supply will be available to support increased housing, commercial, and industrial uses in light of the current water adjudication, historic overdraft of the Antelope Valley Groundwater Basin, and additional pumping by water purveyors during periodic and predictable drought. Detail effects of potential pumping that will accommodate proposed growth and Economic Opportunity Areas and dropping water levels on local existing residential wells. Additional pumping may dry up seeps, springs and vernal pools, thereby affecting local wildlife and natural environments. How does the AVAP protect water quality for humans and wildlife? How will the AVAP assure these water resources continue to exist and allow major projected growth in rural areas? There are finite supplies of water in the county and the state with increasing competition for those supplies. How does the AVAP envision adequate water supply and at what cost to existing water users?

## Noise

Please consider the effects of increased traffic and diesel truck transport, highway expansion, and industrial development in light of EOAs, and insertion of industrial and commercial areas in rural towns and areas. Also, individual renewable energy systems, utility-scale RE installations create increased noise levels; how will they affect unincorporated county residents?

## Land Use

Please explain how first indicating that land use policy will "direct[s] new investment to areas with existing services and facilities and away from areas with natural hazards and environmental resources" with the insertion of Economic Opportunity Areas (EOA) and high density housing and industrial development in the proposed Centennial area, where no services or infrastructure exist at the present. The same can be said of Neenach and its proposed EOA. This is leapfrog development

of the worst kind. The area at the crux of Interstate 5 and Highway138, with water resources at Quail Lake, a major wildlife corridor, and essentially no development of any kind does not align with policies that promote transit oriented areas or infill development with existing infrastructure and public services.

Directing a majority of growth to unincorporated areas, rural town centers, and rural town areas is antithetical to the original intent of protecting rural communities like ours from development we do not want and has diminished our efforts to the Town & Country outreach program. Discuss the effects of directing a majority of Antelope Valley growth to outlying areas. Would this create even more commuter traffic and transit issues in rural areas? Winter closures due to inclement weather often close the major Interstate 5, and drivers looking for a way around closures converge on rural roads unfriendly to unknowing travelers. How will increased population, more industrial development, and the Highway138-High Desert Corridor creating massive truck traffic from the proposed "inland port" transportation hub affect rural residents? How does this comport with AVAP Policy that suggests land use patterns should reduce the total amount of potential development requiring vehicle trips in the unincorporated Antelope Valley, to decrease greenhouse gas emissions?

How would a majority of new residential development located between rural town centers and rural preserve areas provide appropriate buffering, infrastructure, and services in areas in which there are fewer services, currently. Strangely, the policy description states, "These areas will provide transportation linkages to rural town center areas and other nearby destination points, as directed in the policies of the Mobility Element." Ironically, development increases the need for public services and infrastructure that the AVAP says rural residents must choose to live without in order to preserve their lifestyle. How does this work?

There are issues with allowing the Centennial project to request land use and zoning changes to circumvent their specific plan submitted to Regional Planning. If RP was inclined to approve the specific plan, why would Tejon Ranch-Centennial approach land use mapping via the overall planning process? The public is denied a comprehensive environmental review of the total build-out area. If the land use and zoning desires of the Centennial area are approved, then a "piecemeal" approach of phased building would ensue. Cumulative effects would be considered on a first-come basis, with successive individual projects carrying incrementally more burden of significant impacts, allowing initial projects the benefit of "no cumulative impacts." Is this a violation of California Environmental Quality Act, since the specific plan existed and was in process prior to request for land use mapping changes? Residents, here, were promised an EIR at least two years ago that was never released. The map of the area conflicts with the premise of rural preservation; low density, scattered rural development in outlying, unpopulated areas, SEAs, Special Hazard Areas, Forest, recreation, and conservation resources, and areas with little infrastructure and public services. Please explain how this is congruent with surrounding land use, and how this project's intense development intentions will avoid concomitant sprawl and adverse effects to nearby local communities.

We appreciate the opportunity to comment, and look forward to participating in the environmental review process as it relates to the AVAP. As you see, we have many questions regarding the plan, its effects, its consistency with purported preservation of rural communities, and the value of our input as it pertains to Regional Planning documents that will certainly affect our area of the unincorporated Los Angeles County.

Sincerely,

Susan Zahnter
Vice President

TriCounty Watchdogs
15616 Mil Potrero, Box 6413
PineMountainClub, CA93222

July 9, 2014

SENT VIA EMAIL

Mr. Carl Nadela, AICP
Regional Planner
Los Angeles County Department of Regional Planning
320 West Temple Street, Room 1354
Los Angeles, CA90012
Email: tnc@planning.lacounty.gov

Dear Mr. Nadela:

Subject: Notice Of Preparation, AntelopeValleyAreawide Plan

We write in response to the Notice of Preparation (NOP) for the Antelope Valley Areawide Plan (AVAP), having attended the recent outreach meeting in Lancaster. The TriCounty Watchdogs are an environmental organization whose mission is to protect natural and cultural resources, and promote ecotourism and responsible growth in the Frazier Mountain Communities area near the GrapevinePass that connects the San JoaquinValley and northern California to Southern California. We are your neighbors.

We know that development provides economic opportunities for businesses to expand, new ventures to form, and provide employment for nearby residents to earn a paycheck to spend in the community. These opportunities are offered by the prospect of a new city like Centennial.

We insist, however, that the Centennial project prepare an Environmental Impact Review to illustrate how it will be a responsible neighbor to important rural and agricultural areas.

1. Aesthetics

We understand that work has previously been done to designate portions of Highway 138 as a scenic highway, thus limiting commercial and housing use. In addition, please review these plans and discuss the idea of a view corridor as well. It is our understanding that the land across Highway 138 nearest the proposed Centennial is light industrial, meaning office buildings. We would like to see that light industrial use sited on Tejon land itself, and not in current or proposed Significant Ecological Areas.

Please discuss visual effects of transportation, commercial, industrial, and “economic opportunity areas” along the western portion of Highway 138 and surrounding roadways, listed in the Los Angeles County's Recreation Plan 1965, and the Scenic Highway Element 1974.

We are concerned that areas designated along I-5 as CR (Commercial Rural) will become the "fast food alleys" that already blight the Frazier Mountain offramp area.We would like more information on the Economic Opportunity Area sited near Gorman, in particular its impact on current businesses in Gorman and the surrounding area.

Please identify potential impacts to loss of viewshed which brings visitors to wildflower fields, Ripley Desert Woodland, California Poppy Reserve, Desert Pines Wildlife Sanctuary, and others listed on the map.Consider, too, the impact of Centennial City looming over the Historic Ridge Route.

We would like to see discussed as well the impact of intensive development , RE installations, solar fields, wind turbines, and the like on dark skies and the tourism it brings to the Mt Pinos areas.

Similarly, we are concerned how the plan mitigates the impact on significant ecological areas in the RL1 area south of the Economic Opportunity zone and west of Centennial and north of Quail Lake.

2. Air Quality

The TriCounty Watchdogs would like to see discussed the following issues in relation to air quality.

Agriculture Buffer Zones to protect air quality: As there is a need for safe buffer zones from major goods corridors, there is also a need to protect people from the air pollution of aerial spraying of pesticides in agricultural areas. We ask you todiscuss an AntelopeValley quarter mile buffer zone to include all sensitive sites listed.

Goods Movement Corridors: Please discuss ensuring a major roadway buffer zone of at least 500 feet when constructing homes, schools, hospitals, nursing homes etc. that will maintain vulnerable populations (young, elderly and those with compromised health.) Particulate matter in the air near highly trafficked roads damages the health of all who live, work and play near them. This damage is severe in the case of children, ill people, and those with compromised immune systems.

We ask you to discuss the planting of trees or block walls near major roadways to reduce emission exposures to already existing sensitive sites as stated above. Antelope Valley already suffers from poor air quality.

Stronger air quality standards should be established for communities bordering highways and large renewable energy projects. TCW asks that an Ultra-Fine Particle air quality analysis be performed by The Antelope Valley Air District as a baseline for future monitoring. In addition, we ask that you discuss siting air pollution monitors along I-5, proposed economic opportunity areas, and commercial and industrial development areas, monitoring for diesel particulates. Ultra-fine particulate matter should be included in what government and health agencies report.

If air pollution levels exceed health based thresholds, nearby homes, businesses and schools should be notified.

3. Biological Resources

The areas radiating out from the intersection of Hwy 138 and I-5 represent the merging of five major biological regions. This crux is the center of more distinct biological regions (or biomes) than in any other location in California. Maintenance of interconnection between these natural regions is paramount so that gene flow can continue to proceed among all groups of organisms found naturally in the regions. With serious climate changes imminent, unhampered gene flow becomes all the more important as species need to move in order to survive.

These natural regions as defined and delineated by Allan Schoenherr in A Natural History of California, University of California Press, 1992, include: 1) The Sierra Nevada Mountains represented at its southern end by the Tehachapi Mountains (which end westward at I-5 in the grapevine area, and southward within Tejon ranch north of Hwy 38), 2) the Mojave Desert which ends at a pointed wedge from the Mojave/Lancaster area to I-5 at Hwy 138, 3) The Transverse Mountains coming westward from San Bernardino Mtns through San Gabriel Mountains, and heading on out through Ventura and Santa Barbara Mtns into the Channel Islands (the area of I-5 between Hwy 138 and Hwy 14 passes through this range), 4) the Coast Range, which comes south from the Eureka/Redding line to San Luis Obispo/Santa Barbara border, then east to include Mt Pinos - Frazier Mtn - San EmidgioMtn-Tecuya Ridge and stop at I-5, and 5) the San Joaquin Valley ending at the base of the Grapevine grade on I-5.

In 2002, a workshop was held in Frazier Park to address bioregion interconnectivity issues indicated above. We include as Appendix 1 an abbreviated sample of some of the remarks made by experts at this workshop concerning the need for bioconnectivity in this region.

Consider the impact of Centennial's development on California Condor territory. Elaborate for us how high density population and industrial development in this area will affect the San Andreas Significant Ecological Area (SEA21) as well as the proposed "economic opportunity zone" which, because of its nature and its location, is so vague as to be alarming.

Utility-scale solar development presages a total loss of habitat to sensitive species. This is a major concern for TCW.

3. Cultural Resources

These lands were used by Native American peoples for centuries, and we expect thorough preservation of all artifactsand burial sites. These cultural resources must be taken into consideration during the preparation of the EIR.

4. Geology/Soils

**Ileene Anderson, California Native Plant Society – *Linkages from a Plant Perspective***

**This is taken from 2003 remarks**

Ileene Anderson, now with Center for Biodiversity made the following statements:

§ There are many ways in which linkages favor long-term plant persistence
§ Linkages are essential for pollination; wind and water transfer pollen between populations for some species, but wildlife movement is needed for pollination of many plants; linkages reduce effects of fragmentation; recent studies have shown benefits of corridors for plants, particularly through insect pollination
§ Dispersal of seeds, other plant materials, and spores is also a linkage issue, accomplished by wind, water, erosion of unstable soils, and critters (including insects) that cache seeds, ingest them, and otherwise move them around
§ Rare plant studies show that substrate-specific species live in naturally fragmented landscapes; linkages between such sites are important for seed dispersal and pollination
§ Disturbance regimes (fire, flood): if vegetation is wiped out and propagates destroyed, linkages are essential to allow return of native plant material to site
§ Geologic timescale: plants move around over time; connectivity is important for long-term persistence of vegetation communities; plants need linkages to move around as they have historically to disperse across the landscape in response to global changes; must consider elevational and latitudinal linkages
§ Study area includes Transverse Ranges, Great Valley, Tehachapi Mountains, and Southern Sierra Nevada Mountains, and is a meeting area for multiple ecoregions / ecotones leading to great botanical diversity; plant species of Carrizo Plains were evolutionarily connected to western deserts (consider long-term geologic timescales)
§ CNPS manual of California vegetation identifies plant communities at lower levels as series, alliances, or associations; overlapping habitats result in hundreds of such series in the linkage planning area (and many have not yet been identified due to limited access); some Pleistocene relicts include great basin sagebrush and blackbrush scrub, which need connectivity to remain viable into the future
§ Photographs shown: great basin sagebrush, California juniper association (threatened by increasing human activity and fire occurrence), San Gabriel Mountains, desert scrub, Joshua tree woodland (not adapted to fire - causes type conversion to desert scrub)
§ In the southern Sierra Nevada Mountains, hydrology and soils dictate naturally occurring fragments of mountain meadows in pinyon forest; alluvial processes provide opportunity for movement of plant propagules
§ Botanically exciting area with localized populations of possible undescribed species (such as new onion found on pebble-based soils with no exotic weed competition); substrate-specific rare plants present
§ Linkages encourage plant movement, but may also allow spread of exotic weeds; corridors with disturbed habitats may allow invasive plants to exploit resources
§ Some plant communities require fire for persistence (such as chaparral); desert plants not adapted to fire, and may type convert to support invasive species
§ In San Gabriel Mountains and Great Valley, nitrogen deposition from poor air quality may effect vegetation by supporting exotic species over native vegetation

In addition, conversions of farmland to thousands of acres of renewable energy projects have

already had, and will continue to have, huge impacts on surrounding residents and communities. Please discuss the objective in light of these disturbances on local areas.

5. Greenhouse Gas Emissions

Please discuss the cumulative impact that increased traffic servicing the population of the proposed Centennial project will have. Please provide responsible estimates of the impact of another one hundred thousand residents driving to far-off employment when air quality is already compromised.

6. Hazards and Hazardous Materials

Please discuss a heavy industry buffer zone surrounding the cement plant, in addition to proposed land use changes designating light industrial uses in the Western Antelope Valley.

Heavy industries, such as the cement plant, are a suspected source of air pollution and there must be sensible buffer zones in place to protect residents who may live, work, or go to school near these sources of toxic pollution. Rubber tires are burned at the cement plant as fuel. What becomes of that toxic smoke and particulate matter released into the air?

7. Natural Resources: Water

Our fragile and finite supply of water is the most critical subject of all. If the drought and global warming continue, Los Angeles will have to desalinate the ocean to supply any substantial development for many years to come.

Many communities on the edge of the plan area are losing their water sources. They are having to buy and transport water from other water municipalities. Big businesses are water-banking public water sources for the future to sell to the highest bidder. Agencies are already in litigation on the control of the state aquifer water supply. What over-burdened agencies are going to oversee this complex transfer of water, and what enforcement teeth will they have to ensure a fair and affordable supply?

Please discuss the water quality issue if water is being transported from different and far off sources. What agency will regulate these transfers? Communities which have contracted for a supply from a developer or other sources are reaching the end of those contracts. Similarly, new developments are signing, or attempting to sign, contracts to build new communities. What happens when those contracts reach an end and communities discover they have to come up with new—and very expensive—water supplies? Again, we stress our awareness that water is finite.

In particular, we would like Tejon Ranch Company to detail how scarce water will be guaranteed to hundreds of thousands of *future* residents. This is a matter for an Environmental Impact Report and the reason for our insistence that this critical matter not be subsumed in this AVAP.

Please also discuss water allocation resources and how long-ago state contracts have allocated those supplies. It is time to push for a review of the current distribution of water and plan for the emerging and future competitions for water to supply agriculture, development, industrial uses.

Please discuss how the current drought affects those allocations. Use responsible estimates to project how a continuing drought might affect the competition for this scarce resource.

Wells have gone dry in Lockwood Valley, in Gorman, and in many places in the Central Valley. The entire community of Lake of the Woods is importing water. Lebec has had trouble with its water supply, and the Frazier Park Estates development in Lebec foundered because the developer could not find water to support his plans. We question also whether water is adequate to supply the new businesses that will be built in the Commercial Rural sections along Interstate-5.

Centennial will alter our communities forever. We are unconvinced there is water to service this new leapfrog development in perpetuity. Water can be deviated or purchased, but there is a finite supply. If it is taken to supply a very much for-profit enterprise, it is taken from somewhere else. Fine new homes and roads can be built, but will grass be growing up in the living rooms when the taps run dry?

8. Population/Housing

Please explain how Centennial City, built in a rural and agricultural area, will benefit current residents in surrounding communities. Regional governments approve projects thinking they are “providing jobs” in what they seem to consider "empty land". The current residents are not crying for this empty land to be improved. Real estate and development folks will prosper. Please discuss how current residents will prosper from these huge alterations in our communities and way of life.

9. Public Services

We know from living here what a thin carpet of public services Kern, Ventura, and Los Angeles County lay over the land at present. Please discuss how counties which are already strapped for cash will provide adequate schools, hospitals, police, and fire services for an enormous future development.

10. Transportation/Traffic

The TriCounty Watchdogs’ (TCW) work focuses on the mountain communities, a string of villages that lead away from Interstate-5twenty miles upward into the transverse range that defines the southern end of the San Joaquin Valley. This area overlaps Kern, Ventura, and Los Angeles Counties.

These communities are in the vicinity of the I-5 Highway, which connects the Central Valley of California with southern California. Approximately 70,000[1] vehicles, of which an estimated

[1]California Dept. of Transportation, 2010 AADT, Los Angeles/Kern Co. Line (Line 637).

18,000 are large trucks with diesel-fuel engines, travel through a narrow mountain pass, through the communities of Gorman and Lebec, California per day.

Residents attending public meetings have voiced concerns about the visible dirty air that drifts up a narrow canyon connecting the San Joaquin valley floor to the Frazier mountain communities. Due to the topography of the area, air pollution collects in the narrow canyon. Air quality is further compromised by the heavy truck traffic that passes through the communities on I-5. Residents are concerned about the incomplete data on ozone suggesting that their children's asthma and severe allergies may be attributed to air pollution.

Residents of the proposed Centennial project must commute to far off workplaces. There are no big box stores for shoppers nearer than Santa Clarita.

Residents of our communities are well aware of the frequent closures of I-5 to traffic in the winter. These disruptions tie up the continuous river of cars and trucks for hours and for miles in each direction, and pour traffic onto less accommodating rural roads in our communities. Traffic density can only increase. Adding lanes goes only so far. Please discuss how the infrastructure will accommodate this increased traffic burden and deal with the complexities of winter weather.

11. Utilities/Service Systems

There is a viewpoint on Gorman Post Road which shows where the nexus of the Garlock and San Andrea Fault collide. An important natural gas facility is located here and the electricity grid marches across the valley. The I-5 runs right next to the Aqueduct. We are told that the prospect of a regional disaster knocking out electricity, water, gas and transportation could happen any day. Please discuss how the plan will provide emergency services for an extended period of time.

We join with other small communities across the I-5 in foreseeing the long shadow of approaching sprawl, drains on our water supply, a worsening of air quality, threats to our cultural and historical heritage, and our economic opportunities being centralized around the leapfrog building of the city of Centennial.

We understand that Tejon Ranch has been working with LACo. Planning to have their development plans integrated into the Antelope Valley Areawide Plan Land Use Policy Map, thus circumventing the Specific Plan they originally submitted to LA Co. years ago. We want to see an EIR released for the Centennial Project. Please move forward to see the Centennial project detached from the plan and an EIR submitted for community study.

Sincerely,

Mar Preston
Vice-President
TriCounty Watchdogs

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http://traffic-counts.dot.ca.gov/

Please confirm that this communication as well as attachment was received July 11, 2014 as county offices are closed.

AVAP Appendix 1

I am including an abbreviated sample of some of the remarks made by experts at this workshop concerning the need for bioconnectivity in this region.

The process of determining future development/protection for the western end of Antelope Valley through which Hwy 138 runs, and particularly in the immediate area of the proposed Cenntenial City is crucial. The EIR for the General Plan should deal with this very carefully and thoroughly.

**S C**
**S 3 2 2 R**

Below are a few of the topics covered by knowledgeable speakers.

**R R C S** ***Welcome and Opening Remarks***

Mr. Rayburn has been Chief of the Natural Resources Division at California State Parks since 1986.
Some of his points made at the Workshop include the following:

- ☼♋♎♌◆❒■ participates in acquisition planning for State Parks, Wildlife Conservation Board, and California Department of Fish & Game; South Coast Missing Linkages Project is crucial to this (most important acquisition planning effort going on in the state)
- Many biological reports discuss habitat fragmentation and conversion, and the need to establish linkages to maintain biodiversity, but recommendations are lacking in how to overcome obstacles and actually plan for connectivity
- For major land managing agencies in California (including the military), land acquiring agencies, and nonprofit organizations, fragmentation is a difficult issue to address
- Most linkages involve lands connecting areas that have already been preserved due to on-site habitat values; there is less enthusiasm to protect connective habitats as they may seem less desirable based on habitat characteristics
- Connections necessary to protect previous investments in preserved areas
- Acquisition planning is limited throughout the state; usually driven by opportunity purchases, lacking thorough assessment; this project will establish locations of important habitat linkages based on biological needs of focal species and practical design, not just according to cost and opportunity
- Next round of workshops will involve land planners and agents for conservation design
- California State Parks' top acquisition program objective for natural resources is maintenance of landscape linkages, which will support quality of already protected lands; this timely effort will identify key areas for land purchases and conservation easements
- This project will also help agencies enforce laws to avoid subdivision and land conversion in priority connectivity areas to allow wildlife movement

**N A** ***Regional Overview of Linkage Planning Area***

Some of his points made at the Workshop are as follows:

- San Gabriel - Sierra Madre Mountains: this linkage is seriously threatened and needs swift action to maintain a connection; no continuous natural routes exist across SR-14 (100 to 300-foot filled slopes with no bridges); break is 4-7 miles wide between Angeles National Forest protected lands; two potential corridors for terrestrial wildlife discussed:
    - Route through Soledad, Bee, Spring (quiet underpass), Agua Dulce (busy underpass) and Tick Canyons; about ¼ mile wide at narrowest area; will be challenging for animals to move through corridor while avoiding developed areas
    - Ritter Ranch route crosses SR-14 at major highway interchange that will be difficult to span, with railroad tracks, access roads, parking areas, and trenches
- Eastern - Western Sierra Madre Mountains: crossing I-5 between Angeles and Los Padres National Forests is main concern; no bridged streams; filled slopes along I-5; only large vehicle underpass is on private property (Canton Canyon); second vehicle underpass is large box culvert (gravel dispenser); third possible option is bridge or over-pass at Cherry Canyon (lots of deer here); these routes connect to Piru Creek
- Sierra Madre - Tehachapi - Sierra Nevada Mountains: million-acre core habitat area
    - I-5, SR-138 and aqueduct are barriers in southern area; six small box culverts present; triangle of land at quiet, well-bridged highway interchange is undeveloped and prime candidate for connectivity between Angeles National Forest, Tehachapi foothills and Hungry Valley SVRA – also includes Gorman Creek riparian area; fenced aqueduct and overflow canal are serious barriers
    - SR-58 is movement barrier for terrestrial wildlife in central linkage area; 3 quiet vehicle underpasses present; 5-foot-high concrete divider down center of highway; heavy traffic; some bridges and one paved overpass exist near Tehachapi, where much natural habitat remains; BLM owns land located east of Tehachapi near three good underpasses (Cache Creek, Sand Creek Rd, railroad) and one overpass (Cameron Rd, where Pacific Crest National Scenic Trail crosses); potential corridor leads through windfarms

**I A C N S** ***Linkages from a Plant Perspective***

Ileene Anderson, now with Center for Biodiversity made the following statements:

- There are many ways in which linkages favor long-term plant persistence
- Linkages are essential for pollination; wind and water transfer pollen between populations for some species, but wildlife movement is needed for pollination of many plants; linkages reduce effects of fragmentation; recent studies have shown benefits of corridors for plants, particularly through insect pollination
- Dispersal of seeds, other plant materials, and spores is also a linkage issue, accomplished by wind, water, erosion of unstable soils, and critters (including insects) that cache seeds, ingest them, and otherwise move them around

- Rare plant studies show that substrate-specific species live in naturally fragmented landscapes; linkages between such sites are important for seed dispersal and pollination
- Disturbance regimes (fire, flood): if vegetation is wiped out and propagules destroyed, linkages are essential to allow return of native plant material to site
- Geologic timescale: plants move around over time; connectivity is important for long-term persistence of vegetation communities; plants need linkages to move around as they have historically to disperse across the landscape in response to global changes; must consider elevational and latitudinal linkages
- Study area includes Transverse Ranges, Great Valley, Tehachapi Mountains, and Southern Sierra Nevada Mountains, and is a meeting area for multiple ecoregions / ecotones leading to great botanical diversity; plant species of Carrizo Plains were evolutionarily connected to western deserts (consider long-term geologic timescales)
- CNPS manual of California vegetation identifies plant communities at lower levels as series, alliances, or associations; overlapping habitats result in hundreds of such series in the linkage planning area (and many have not yet been identified due to limited access); some Pleistocene relicts include great basin sagebrush and blackbrush scrub, which need connectivity to remain viable into the future
- Photographs shown: great basin sagebrush, California juniper association (threatened by increasing human activity and fire occurrence), San Gabriel Mountains, desert scrub, Joshua tree woodland (not adapted to fire - causes type conversion to desert scrub)
- In the southern Sierra Nevada Mountains, hydrology and soils dictate naturally occurring fragments of mountain meadows in pinyon forest; alluvial processes provide opportunity for movement of plant propagules
- Botanically exciting area with localized populations of possible undescribed species (such as new onion found on pebble-based soils with no exotic weed competition); substrate-specific rare plants present
- Linkages encourage plant movement, but may also allow spread of exotic weeds; corridors with disturbed habitats may allow invasive plants to exploit resources
- Some plant communities require fire for persistence (such as chaparral); desert plants not adapted to fire, and may type convert to support invasive species
- In San Gabriel Mountains and Great Valley, nitrogen deposition from poor air quality may effect vegetation by supporting exotic species over native vegetation

**VENTURA COUNTY WATERSHED PROTECTION DISTRICT**
PLANNING AND REGULATORY DIVISION
800 South Victoria Avenue, Ventura, California 93009
Sergio Vargas, Deputy Director – (805) 650-4077

# MEMORANDUM

DATE: July 3, 2014

TO: Laura Hocking, RMA/Planning Technician

FROM: Sergio Vargas, P.E., Permit Manager

SUBJECT: RMA 14-014, Los Angeles County Antelope Valley Areawide General Plan
Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR): Request for Comments

Pursuant to your request, this office has reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the Los Angeles County Antelope Valley Areawide General Plan.

## PROJECT DESCRIPTION

The County of Los Angeles is preparing an environmental impact report for the comprehensive update of the Los Angeles County Antelope Valley Areawide General Plan, which is part of the Los Angeles County General Plan. The project area is the unincorporated area of the Antelope Valley in Los Angeles County and is approximately 4,083 square miles. It is bordered to the west by Ventura County, to the east by the counties of Orange County and San Bernardino, and to the north by Kern County. The Plan proposes to protect environmental and agricultural resources and preserve the rural character of the Antelope Valley communities while accommodating new housing and employment opportunities in defined, specific areas of the Valley. The Plan will replace portions of the existing Antelope Valley Areawide General Plan that was adopted in 1986.

## WATERSHED PROTECTION DISTRICT PROJECT COMMENTS:

The Ventura County Watershed Protection District (District) would like the Los Angeles County Antelope Valley Areawide General Plan to acknowledge the importance of managing the flood hazard along the Santa Clara River on a collaborative inter-County (Los Angeles/ Ventura) basis so as to ensure that both Counties can mutually achieve their General Plan goals of protecting the health, safety, and welfare of their respective residential and business communities as well as protecting their natural environments. The District would like to suggest the following additional flood hazard policy for inclusion in Chapter 5: Public Safety, Services and Facilities, in the Los Angeles County Antelope Valley Areawide General Plan.

1. ***Chapter 5: Public Safety, Services and Facilities, Flood Hazards, Goal PS3 – Protection of the public through flood hazard planning and mitigation.***

   ***Policy PS 3.5:*** Require potential development in Flood Zones designated by the Federal Emergency Management Agency to achieve No Adverse Impact to downstream locations including the Santa Clara River which traverses westerly into Ventura County. Where applicable, work in collaboration with Ventura County so that both Counties can mutually achieve their respective goals of protecting the health, safety, and welfare of their respective residential and business communities as well as protecting their natural environments.

Thank you for the opportunity to comment on this document. Feel free to contact me for any further information or if you have further questions.

**END OF TEXT**

Carl Nadela, AICP
Regional Planner
Los Angeles County
Department of Regional Planning
320 W. Temple Street, Room 1356
Los Angeles, CA 90012
Email: tnc@planning.lacounty.gov

Subject: Scoping comments submitted in response to the Notice of Preparation of an Environmental Impact Report ("EIR") for the Antelope Valley Area Plan Issued June 12, 2014.

Dear Mr. Nadela;

Please accept these scoping comments submitted in response to the Notice of Preparation of an Environmental Impact Report ("EIR") issued by the Los Angeles County Department of Regional Planning pursuant to the proposed "Town and Country" plan (Antelope Valley "AV" Area Plan).

To ensure that the potentially significant adverse impacts of commercial, industrial, and non-residential uses in Acton are sufficiently mitigated in the AV Area Plan and attendant EIR, I recommend that the following specific development impacts be addressed in the environmental analysis of the Land Use and Planning Element:

- Density of commercial, industrial, and non-residential uses in rural areas
- Intensity of commercial, industrial, and non-residential uses in rural areas
- Traffic impacts in rural areas resulting from freeway- and highway- serving commercial, industrial, and non-residential land uses.

These impacts must be particularly addressed for the community of Acton because Acton is the only rural community in the Antelope Valley which is located at the confluence of a freeway and three major highways (namely the 14 Freeway, and Escondido, Sierra Highway, and Soledad). Acton is therefore subject to unique and significant pressures to develop high density, high intensity commercial businesses to serve the traveling public. No other rural community in the Antelope Valley (and probably the entire county) faces such pressures because no other rural community is so uniquely located. Therefore, the AV Plan and the attendant EIR must provide Acton with specific and particular protections and mitigation measures to preserve the Acton's rural profile in the decades to come.

This approach is consistent with Camp v. County of Mendocino (1981) 123 Cal.App.3d 334 which held that an adequate general plan must contain standards for building intensity. This was interpreted by Twain Harte Homeowners Association v. Tuolumne County (1982) 138 Cal.App.3d 664, which held that intensity should be established for each of the various

land use categories in the plan; general use captions such as "neighborhood commercial" and "service industrial" are insufficient measures of intensity by themselves; and, building intensity is not synonymous with population density. Intensity depends upon the local plan's context and may be based upon a combination of variables such as *height* and *size limitations*, and *use restrictions*. Over the past decade, California courts and the State Attorney General have issued a number of opinions regarding the requirements for an adequate land use element, and intensity standards established therein must address not only qualitative issues such as "permitted land uses", but also quantitative issues such as "concentration of use". Agencies often address the "intensity" standard by resorting to the concept of limiting the floor–to-area ("FAR") of a development. This approach is wholly inadequate for the community of Acton because it fails to address the "concentration of use" aspect of the "intensity" issue that is of primary concern to the community; namely traffic. The community of Acton has always supported neighborhood-serving commercial and industrial uses on parcels with these land use designations as long as the resulting traffic impacts do not required mitigation via traffic signalization (in fact, the existing Acton CSD does not specify a FAR and I believe it allows a 90% lot coverage for commercial developments). With this submittal, I am clearly articulating for the record that reliance on the establishment of a FAR for commercial and industrial developments in Acton is insufficient for the purpose of addressing and mitigating "intensity" and "concentration of use" impacts, and cannot therefore be solely relied upon by the AV General Plan or the attendant EIR to comply with Government Code Section 65302(a).

To ensure adequacy of the AV Plan land use element (as well as the attendant EIR), it must provide development construction and intensity parameters that are appropriate for Acton. The AV Plan (and its associated EIR) should, like the existing AV Plan, maintain an advertising sign height standard for Acton to discourage freeway-oriented pole signs which direct traffic off the freeway and into the community. Additionally, the AV Plan and attendant EIR must consider ***substantive*** commercial and industrial development mitigation measures that will demonstrably serve to preserve Acton's rural profile in a meaningful way and do more than just address paint color and "western appearance". The EIR must address (and the AV Plan must adopt) commercial and industrial development mitigations and restrictions on height, size, and use to ensure preservation of Acton's rural profile. For example:

- A maximum FAR of 0.20 or .25 shall be imposed
- Advertising signs shall have a maximum height of 7 feet (as the CSD now states) and a maximum surface area of 100 square feet.
- Commercial and industrial developments proposed within 1000 feet of a freeway or highway shall prepare a traffic study to establish potentially significant traffic impacts within the community resulting from such developments.
- Commercial and Industrial uses that have the potential to generate impacts to such an extent that they require urban-style mitigation measures (such as traffic

signalization, sewer development, streetlights, curbs, gutters, sidewalks, etc) shall not be permitted.

For several reasons, it is crucial that these mitigation measures be developed in the EIR and adopted by the AV Plan and ***not*** simply relegated to the zoning code and the Acton CSD. First and foremost, these types of constraints are required to ensure general plan adequacy and consistency with Government Code Section 65302(a). Second (and equally important) is the fact that the approval threshold for a zoning variance is shockingly low, thus relegating these protections (which are necessary for securing Acton's rural profile) to merely the zoning code is tantamount to ensuring they are sidestepped. The only way to secure Acton's rural profile is to firmly imbed these protections within the AV General Plan because no variance from general plan provisions are permitted by law.

I am concerned that none of these issues were addressed in the Draft EIR prepared for the County General Plan (issued June 2014). In fact, (according to Table 1-4) not one single Land Use and Planning Impact identified in the Draft was found to be significant or require any mitigation at all. I trust that this will not be echoed in the AV General Plan. The fact is, over the last 20 years, high density projects have been approved in Acton that are the antithesis of rural development and which would never have happened if this issue was properly and thoroughly addressed in the existing AV General Plan that was adopted in 1986. I hope to avoid these problems in the future by addressing them in both the new AV Plan and the EIR which supports it

Respectfully submitted;

/s/ Jacqueline Ayer

Jacqueline Ayer

Resident of Acton

31880 Aliso Cyn. Rd.
Acton, CA 93510
June 26, 2014

Carl Nadela, AICP
Regional Planner
Department of Regional Planning
320 W. Temple St., Rm 1356
Los Angeles, CA 90012

Dear Mr. Nadela,

I attended your scoping meeting today and I have several comments.

I was involved in the 1986 General Plan , Antelope Valley Plan , and your people lied to us then saying that if the land use acreage was changed in the future there would be hearings. The size under A-2-10 was later changed to A-2-2 ½ without any hearings.

People are confused because for the last 7 years this was called Town and Country – now it is the Antelope Valley Area Plan.

The land use was A-1, A-2, etc, and now you have CR, MU-R, H2, H5, ETC., AND RL1, RL2, R.5, RL10 & RL30, and you wonder why people are confused.?

I want to know who decided these changes should be made.

I have attended numerous meetings for the past 7 years and the plans and people in charge have changed. No wonder there is confusion!!!!!

How can I believe anything that is said now will be true 6 months from now!

Sincerely,

Ray F. Billet

Ray F. Billet

RECEIVED
JUN 30 2014
BY:

John Blalock
32810 165th Street East
Llano, CA 93544

July 11, 2014

Carl Nadela
Regional Planner
Los Angeles County
Department of Regional Planning
320 West Temple Street, Room 1356
Los Angeles, CA 90012

RE: Content and scope of the environmental information and analysis to be contained in the EIR for the Los Angeles County Antelope Valley Areawide General Plan Update

Dear Mr. Nadela:

Thank you for the presentation at the scoping meeting. I appreciate the work of Regional Planning in drafting and moving towards completion the AV Town and Country.

I am hopeful,and suggest,that the EIR address' some alternatives concerning issues related to water and its broadening of most of theSEA areas.

The SEAs appear to be larger in the plan than currently exists and in addition, thereis something new called Connectivity and Constriction Lines (C&C Lines).I understand this allows SEA expansion in any direction 1,500 feet. These "lines" and the description of their purpose are a further potential expansion to the current SEA boundaries. These lines are not necessarily in the middle of the SEA so it could result in a further dramatic increase of those boundaries. An alternative should be to include only the existing boundaries, without expansion, nor the C&C Lines.If it is determined that the expansion of an inclusion of the C&C Lines is a "taking" of the private property then an alternative should be reviewed as to extent that the "taking" will compensate private property owners. The alternative is to leave the SEA's the same as in 1986, (I think later amended in the 1990s) and then expand on a case by case basis with possible "in-kind" compensation to the private property owners for the addition taking and restrictions.The expansion without a study is contrary to the existing 1986 Plan. (See below)

It is not clear from the documentation whether water conservation programs and water banking is allowed in an SEA? This use within an SEA should be mentioned and supported by the plan, if not perhaps deemed compatible by right. It is critical for the Antelope Valley to have the ability to conserve its local water from runoff of the San Gabriel Mountains along withbanking by percolation of imported water. Imported water would generally be along the State aqueduct system but may be piped to other areas within or outside an SEA. There should be an alternative that includesthe necessity and promotion of these water conservation programs. In addition, the AV Groundwater Adjudication suit will be eventually besettled, and onecrucial element of a promising settlement is to include these types of water conservation and water banking programs to re-supply the groundwater. The AV Plan by itself should not interfere with this conservation but embrace it with acknowledgement of a compatible use in the SEAs. There are already other capable agencies that give adequate oversight to these programs without the added layer of the AV Land Use Plan.

The same will be true for the sand and gravel operations. The Antelope Valley may be the last area in Los Angeles County for the mining of sand and gravel operations. It represents a significant asset to LA

County.While it is clear that we need this aggregate resource for growth, it may not be as clear that these resources are needed for day to day maintenance of the great infrastructure in LA County. Again, acknowledging this important resource for our land use plan creates sense that water conservation and mining are recognized in the plan as a necessity of future trade-offs. Not addressing this in the plan or alternative is short sighted. I might add that LA County, in acknowledgement of water as a vital resource to the Antelope Valley is currently reviewing the reactivation of the cloud seeding programfor such water conservation practices. If not conserved and planned, any additional water gained through runoff runs off to the dry lake beds of Edwards AFB where the conditions do not allow for recharging the AV ground water basin.

The AV Plan needs to be in concert with the LA County General Plan but our unique area (or for that matter any Supervisorial area) will need to have area specific policies that may need to be exempt from those general plan policies and there should be a written acknowledgment of this potential in both plans and how to resolve it. The alternative is to mention that there will in fact be some inconsistencies between the two plans in the future and the initial guideline to resolve is to use the AV Plan, provided the specific AV Land Use policy is not in violation of rule, law or ordinance. I don't believe it is the intent of the general plan to purposely "trump" the specific wishes of the residents of the Antelope Valley and vice versa.

Thank you for the opportunity to comment.

John Blalock

FROM THE 1986 PLAN

A. Land Use Policy Map, 2.

***Page VI-11***

***#2. Interpreting the Land Use Policy Map (d)***

**Minor adjustments to the lines to more closely conform to the statements of intent***found in Paragraph 3 may be appropriate provided that the following conditions are found to exist:*

1.) *The basic relationship between land us types depicted by the Land Use Policy Map is maintained.*
2.) *The adjustment in boundaries does not result in major, unanticipated impacts on existing or planned service systems;*
3.) *The property is appropriate from a capability and suitability standpoint for the intended use;*
4.) *No significant adverse environmental, social or economic impacts are anticipated; and*
5.) *The boundary adjustment can be shown to further the goals and objectives of the AV Areawide General Plan and the other chapters and elements of the County of LA General Plan.*

***Page VI-17***

***#8.Significant Ecological Areas…***

***Future additions and deletions to identified SEA's may be appropriate based upon updated, more detailed biotic surveys.*** *It is the intent of the General Plan policy to preserve the Antelope Valley's significant ecological resources and habitat areas in as viable and natural condition as possible. Major factors influencing the realization of Plan objectives in this regard include the County's ability to accurately identify areas of significant resource value; the availability of financial and other resources necessary to support preservation, restoration and enhancement efforts; and* ***competing priorities between resource preservation and other critical public needs.***

*Recognizing the resource values at stake and the constraints imposed by competing priorities and objectives, the General Plan seeks to provide a process for reconciling specific conflicts between proposed land use and the preservation of identified SEAs. The Plan does not, however, suggest that this can be accomplished by applying single set of regulatory standards to all SEA'sNor does it infer that reasonable use of privately held lands within such areas shall be precluded without just compensation. Instead, the Plan recognizes that measuresnecessary to preserve and enhance SEAs will vary depending on the nature of resource values present and the degree of threat implied by potentially incompatible development. Within the context, the following general conditions and standards are provided to guide specific land use decisions.*

***Page VI-18***

***SEA Compatible Land Uses***

*Within Significant Ecological Areas the following activities are considered compatible by definition: regulated scientific study; passive recreation including wildlife observation and photograph, limited picniking, riding and hiking; overnight camping. In addition, the following uses may be compatible as determined by a detailed biotic survey and such conditions as may be necessary to ensure protection of identified ecological resources:*

a.) *Residential uses at densities compatible with the resource values present, and consistent with community character in terms of both overall density and magnitude as set forth in this plan*
b.) *Where provided for in this plan, commercial uses of minor nature serving olocal residents and visitors;*
c.) *Where no alternative site or alignment is reasonable, public and semi-public uses essential to the maintenance of public health, safety and welfare;*
d.) *Agriculture uses compatible with the resource values present;*
e.) *Where compatible with identified biotic resources, extractive uses including oil and gas recovery, and* ***rock, and gravel quarrying****; and*
***f.) Uses related to the conservation of water.***

# Antelope Valley Area Plan Update
## Scoping Meeting
## Comment Sheet

Please be as specific as possible regarding what you would like the EIR to analyze. Thank you.

1. Please include agricultural opportunity areas. They have been completely eliminated from the 'Plan'. It seems that Economic Opportunity Areas have replaced this.
2. Economic Opportunity Areas (EOA) should not be in any rural (zoned) area past 70th street west (Antelope Acres). ~~A rural~~
3. All ~~rural town areas and~~ rural town centers, with the exception of one or two, look exactly alike - they have the appearance of 'small - cookie-cutter' towns. Not good. Each place has it's distinct look, but will blend with every other town center to 'look rural', if build out is like the photos.
4. Solar generating facilities must be in Industrial areas because they are not economical, not rural, and not commercial and only support a few full-time, permanent jobs. (It is not agricultural, either.) They take up precious open-space & farmland.
5. Fox Field contributes to urban, industrial sprawl in a rural area, and creates light pollution! No more commercial area should be zoned (or overlayed) here.
6. Highway 138 (West end) should not be improved, other than for safety. (eg. 2-lanes, add pull-outs)

OPTIONAL

Name: Judith Fuentes
Address: 47458 92nd St. W.
Email Address: Antelope Acres, CA
Phone Number: 93536
661-723-1882

Thank you for your participation and comments.

We really appreciate it!!!

DRP Staff

To: Carl Nadela
candela@planning.lacounty.gov

General Plan EIR NOP Comments

From: Judith Fuentes
47458 92nd Street West
Antelope Acres, CA 93536

Date: July 10, 2014

The following eight comments are a clarification of the remarks I submitted at the Scoping Meeting on June 26, 2014

Please use this revised list along with several other new integrated observations.

*1. Agricultural Opportunity Areas must be included in the Plan. They have been completely eliminated. Economic Opportunity Areas are not the answer for a rural lifestyle and do not provide the chance for a non-urban education.*

*2. EOA should not be in rural zones past 70th Street West.*

*3. All rural town areas and rural town centers, with the exception of one or two, look exactly alike in the photo representations. Each place has its distinct look but will blend in with every other town center to "look rural" if build out is like the photos. Disneylandish.*

*4. Solar generating facilities must be in industrial areas. They are not economical, not rural, not commercial and only support a few full time, permanent jobs (that are not agricultural, either). They take up open space, farmlandand reduce the space available for rural residential living that Antelope Acres had planned on in developing their unique community.*

*5. Fox Field contributes to industrial sprawl in a rural area. Fox Field creates light pollution, more traffic and noise due to warehouse trucking business. No more commercial overlay or manufacturing should be designated in this area. There are abundant vacant buildings and locations in the interior, not outskirts, of cities of Lancaster and Palmdale to fulfill any commercial or manufacturing needs.*

*6. Highway 138 (west section) should not be improved other than for safety (two lanes, pull outs, slightly inclined shoulders).*

- *Put up more Speed Limit 55 mph signs, placed at closer intervals, and more Headlights On signs.*

- *Embed large, raised, yellow or white painted dots on the lanes so drivers stay on their side.*

- *Keep heavy trucking traffic from using 138 as a by-pass.*

- *Improve the State 5 Freeway so it is safer.*

- *Install more lanes on State 5 Freeway for LA commerce.*

- *Expansion of the NW corridor should not occur. It only encourages development, more traffic, noise, pollution, and it divides in half the rural communities of Antelope Acres, Fairmont and Neenach with any expansion of Avenue D (Highway 138).*

- *Expressways bring development with them. Development in the northwest AntelopeValley would produce undesirable urban sprawl.*

- *Additional lanes and connector ramps would lead to more traffic in a rural area.*

- *Additional traffic would produce more air pollution from diesel and gas fumes, along with increased respiratory and health problems.*

- It will disrupt wildlife movement across the valley.

- *Any 'improvements' for increasing mobility options create a region permanently ready to cater to a vehicle-dependent population.*

- *Rural property owners would be affected by improvements where a 200-foot width must encroach on their land.*

- *A goal of the MTA to ease truck traffic from north I-5 to Riverside area and beyond, and vice-versa for traffic from east to central or north California, is completely flawed.*

*Please note: Little, if any, of that traffic is generated in the Gorman-Grapevine area or the Victorville area. Since SR-58 (2004) is almost all freeway from Bakersfield to Kramer Junction, it seems a better and less expensive option to upgrade SR-58 and US-395 to the freeway from Kramer Junction to its intersection with I-5. Millions of dollars have already been spent to create a truck-friendly bypass in the Mojave area.*

*7. There are no buffer zones for rural areas. Land use in the Antelope Acres goes from commercial to sparsely inhabited. Economic Areas will be commercial centers.*

*8. I request specifically to not be in the EOA.*

9. The scope of the Plan takes in overwhelming consideration for build-out and growth, favoring the cities' pressure against anything rural around Antelope Acres. No further development, light manufacturing or commercial building should be planned. Please take it out. There is enough of this on the outskirts of Lancaster that infringes on the rural heritage of our area.

10 I strongly object to the zoning and land use adjacent to Fox Field. The section of land there should be left undeveloped and as a buffer zone upon leaving the cities. Manufacturing and industrial uses there will demolish open space and contribute to unsightly mechanized sprawl. What was once a small county airport is nowhidden among a rambling construction of trucking warehouses and business park enterprise zone.

11. The Economic Opportunity Area designated for Antelope Acres must be removed and it should be replaced to reflect an Agricultural Opportunity Area. The recently constructed over-sized market/gas station/meat market/sandwich shop competes with a tiny market, a small restaurant, and a feed/hardware store, which is enough enterprise for a non-urbanlocale. Truck storage and truck parking businesses are undesirable and incompatible.

12. Populations of rural unincorporated areas have as much right to be objective about where manufacturing belongs. Since a majority of workers would supposedly come from more densely occupied areas, cities should fill the vacant buildings and land within the city core, keeping a buffer on all sides for a transition to rural. This was the strategy a while ago. It was even an attraction point to west Los AngelesCounty.

13. Parks (other than those that currently exist) should not be considered a priority or a necessity for rural strategy. They are temporary destinations. Farmland, Agricultural Opportunity Areas, Equestrian Trails, and Open Spaces are what make final destinations rural.

14. Town centers are too structured, like a smaller downtown version of the city. When older structures are torn down and 'convenience' or brand-name chain storesget here, rural areas become another part of a city, an extension of businesses contributing to leapfrog development and sprawl.

15. One of the goals to promote filming in the AntelopeValley won't happen if, in the background, there are transmission lines, switching stations and miles of solar panels. Before additional massive solar generating projects on open space land are approved, an equivalent amount of energy provided by roof-top solar/electric systems should be worked into a system that alleges to be renewable.

16. The goal to promote recreation and tourism is for people to come to see the poppies and wildflowers. The promotion of solar panels puts this goal at odds because no one will be able to stop and walk out among the wildflowers that cover a great deal of the west Antelope Valley and Antelope Acres area. There will be no more.

17. There is light industry at 70th Street West, and no more are needed in an area where everyone is trying to live a rural lifestyle. Residents either live across the street from that location or within a few miles.

18. Although several scenic highways were proposed but never adopted in the previous general plan, there must be serious consideration to fulfill this mandate in the new Plan. Avenue I from 90th Street West through Lancaster Road all the way to Highway 138, (where the road ends) and 90th Street West from Avenue J to Avenue A must be considered as Scenic Highways.

19. Several years of effort went to document GPS information for Equestrian Trails. They are recorded with the Parks and Recreation. They must be included and documented in the Plan. This is to help encourage and promote the rural lifestyle by anticipating rural residential growth.

20. The Centennial Development must strongly figure into the Plan. The loss of open space, the amount of county resources to maintain an urban environment, the number of affordable houses proposed, and the impact of urban sprawl will result in diminishing the incentive of a rural lifestyle. The uniqueness of the WestAntelopeValley must not be ruined.

Thank you for your attention and taking my comments. Please contact me at 661-723-1882 if you have any questions, or at the above address.

Judith Fuentes

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July 11, 2014

RECEIVED
JUL 14 2014
BY:

Carl Nadela
Regional Planner
Los Angeles County
Department of Regional Planning
320 West Temple Street, Room 1356
Los Angeles, CA 90012

RE: Issues for Inclusion in the AVAP Environmental Impact Report

Dear Mr. Nadela:

As a lifetime resident of the Antelope Valley and a Commercial Real Estate Agent active in the sale of vacant land in our region, I request that my concerns expressed in this letter be included in the scope of the Environmental Impact Report (EIR) for the Antelope Valley Area General Plan Update (AVAP).

**Economic Opportunity Areas:**
There are three Economic Opportunity Areas (EOAs) identified in the AVAP that are located around major transit corridors that provide opportunities for growth and economic development in the vicinity of these projects. Within these EOA's, the AVAP designates areas of varying densities for residential development along with commercial and industrial designations. These designations will become zoning upon approval of the plan yet DRP staff has indicated that further studies and a more detailed planning effort will need to be done for any development within each EOA by way of a Community Plan.

Why is a plan being developed that must be amended in order to implement it? How can an EIR accurately analyze the impact of this plan if it must be amended before it can be implemented? The EOAs should be considered as presented in the plan and any requirement for further approval through a Community plan is redundant, counterproductive and unnecessary.

**Proposed Significant Ecological Areas (SEA's):**
The Antelope Valley Area Plan has included the proposed SEA Ordinance and a significant expansion of over 250,000 acres of SEA designated property in its Land Use Plan. This ordinance has not been approved by the Regional Planning Commission and is still being vetted through public comment. The AVAP should only analyze adopted ordinances and its

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EIR should not have to study un-adopted ordinance. With the November deadline given by the BOS, the AVAP EIR should not exhaust DRP's consultant's time with the examination of ordinance that may not even be adopted in the future.

Therefore, we ask that the AVAP EIR include an analysis of the approved SEA ordinance only. The proposed expansion should be studied only in the Project Alternatives and not the Project as proposed. In that analysis, include detailed scientific, research-based justification for the extent of the proposed designation areas including, but not limited to primary research on the potential impacts on agriculture, biota, geology, hydrology, land use planning, mineral resources, population and housing, delivery of public services, recreation and transportation. Especially because of the extent of the potential degradation of population, housing and other human activity-related environmental activities, justification of the boundaries and the incumbent regulation of that land need a substantial basis to give the lead agency an opportunity to weigh the impacts. Additionally, the EIR must address the balance of the SEA's to environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance, therefore the analysis should address the economic impact on individual properties.

**Land Use Proscription by Pre-defined Constraint:**
The land use patterns, densities and designations shown in the AVAP as proposed for the Project were developed under what has been described as a Hazard, Environmental and Resource Constraints Model (ECM) created by the county. The ECM is described as "a tool to inform stakeholders of potential site constraints and regulations" (General Plan Appendix C, Public Review Draft, 1/2014). However, the "tool to inform" about regulation has become the regulation itself.

The ECM is purported to 'front-load' all the underlying environmental hazards, issues, constraining factors and resources (or lack thereof) that could affect the ability of a particular site to be developed with improvements. However, the model's concept as presented does not provide any quantitative analysis or qualitative set of findings or determinations as to how the constraints identified translate into the development designations and densities imposed let alone the three 'classes' identified in the appendix. After a thorough analysis of the ECM itself and the underlying data and assumptions, the EIR should address 'how', 'why' and 'with what data' the links between the ECM and the AVAP land use designations were arrived at. This substantiation is critical to all the land use, population, housing and environmental justice analysis throughout the EIR and will also inform many portions of the other areas of review and analysis.

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**Use of all the most recent information and studies:**
The AVAP is shaping the Antelope Valley for future generations. The EIR must include with its analysis current and proposed transit projects, including NW 138, High Speed Rail and High Desert Corridor. And population growth associated with Southern California Association of Governments RTP/SCS projections. With these projections included in the AVAP EIR, it will give a unified planning effort that will allow the community's future housing and jobs to be pro-active and bring economic growth to that region.

**Community Standards Districts:**
The EIR of the AVAP will analyze impacts associated with land use changes and zoning changes proposed by the County. The Land Use portion proposes to down-zone much of the land within currently adopted and proposed Community Standards Districts. The AVAP EIR should address these changes and provide research-based substantiation for those changes. The activities that have led to the existing and the proposed Community Standards Districts have been vetted by the various communities and any changes via the AVAP to the underlying densities and land use designations have the potential for substantial alterations to housing, population and other human activity-related environmental activities. No environmental analysis will be considered complete unless the existing district land use patterns are included in all project alternatives, including the No Project Alternative.

**Rural town centers/Rural Town Areas vs. Rural preservation areas:**
The AVAP has created hardline boundaries for existing activity nodes without providing any substantiation for their existence. While a "town center" concept can help focus a balance between housing and jobs, the manner does not provide for the diversity of housing and population that is always found in rural areas of the country and in the existing land use patterns of the Antelope Valley. The areas identified as Rural Town Centers and Rural Town Areas need to include softer edges that allow for reasonable opportunities for the addition of a more diverse set of housing and commercial activities. The other area identified is the Economic Opportunity Areas whose creation is the provision of new locations for reasonable growth within the rural milieu of the valley. However, the down-zoning of the rural preservation areas, which include all remaining unincorporated areas, has the potential to create substantial environmental impacts across the Antelope Valley. The AVAP EIR must address those potential impacts, including, but not limited to, agriculture, biota, geology, hydrology, land use planning, mineral resources, population and housing, delivery of public services, recreation and transportation. The AVAP Project postulates a near vacancy of a substantial amount of the valley. At least one of the Project Alternatives must address a more open, organic (rather than proscribed) maturity of those open portions of the valley so a more diverse pattern of development closer to the existing pattern may continue. In addition, the rural preservation concept may not be consistent with the adopted or proposed with Community Standards Districts. The EIR should include

COLDWELL BANKER COMMERCIAL
VALLEY REALTY

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42402 TENTH STREET W, STE "E"
LANCASTER, CA 93534

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FAX (661) 945-2524

an alternative with the Community Standards Districts zoning. Additionally, the EIR must address the balance of development patterns and development diversity with environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

**Health Concerns:**
The RL-10 and RL-20 will allow one unit per 10 or 20 acres. While the AVAP is trying to create larger lots outside of the rural town centers, this could have a negative effect on both air quality and health impacts. Many lower density lots are graded and cleared of vegetation to allow the full use of the property. This can cause a significant increase in wind and borne dust. The AVAP EIR should address how such low density zones will affect the inherent health problems associated with Valley Fever, West, etc. that are directly related to large vacant lots with little or no vegetation or development to break up prevailing winds. Additionally, the EIR must address environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

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Regards,

Jordin Hance

Carl Vincent C. Nadela, AICP
Los Angeles County Dept. of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

July 11, 2014

Fax 213-6260434
tnc@planning.lacounty.gov

Re: Comment on NOP of an EIR for Antelope Valley Area Plan.

Per the slide shown at the L.A. Meeting 7-7-14, this EIR is supposed to "Provide a comprehensive environmental document that serves as a guiding tool for decision makers." It is a program EIR not a project EIR and thus it projects out 30 years. 30 days is too short a period to prepare a proper EIR without the comprehensive scientific data which proves the need for the drastic reduction in dwelling units in the rural areas this EIR calls for.

Even the 90% reduction of dwelling units on my property, or even one dwelling unit on 80 acres, is subject to **"Additional review."** This leaves a project open to whatever environmental whim is fashionable and does NOT provide a "tool for decision makers." Please produce the scientific proof for each area of the AVAP so an owner can predict what he/she can do with the property.

we have paid all our property taxes for thirty-six (36) years and now the proposed EIR essentially makes continuing to pay taxes seem not worthwhile. The cost to build anything makes such a notion insane. Please provide the EIR with an economic impact study of the rural lands on which it has so drastically reduced the number of dwelling units to determine if the AVAP EIR doesn't remove so much property from the tax rolls that L.A. County cannot support its Regional Planning Department and the grand transfer of rural land from private citizens and in essence, to environmental non tax producing entities.

Please consider putting my 80 acres (APN: 3064-016-021) in the MU-R land use/zone. We are in a transition area north of the proposed CR land use/zone for the Jesus Canyon Ranch (APNs: 3064-016-022,010) and residential land to the north.

Thank you,

Mary Justice
3998 Avenida Verano
Thousand Oaks, CA 91360 (805) 551-0776, fax (805) 531-9529
Attania7@gmail.com

KYLE & KYLE RANCHES, INC.

12345 East Avenue J

Lancaster, CA 93535

Phone (661) 946-1784

Fax (661-946-1514

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BY:

July 11, 2014

Carl Nadela

Regional Planner, Los Angeles County

Department of Regional Planning

320 West Temple Street, Room 1356

Los Angeles, CA 90012

RE: Significant Ecological Areas and Land Density

Dear Mr. Nadela,

As per discussions we have had in the past, the current proposals for SEA's and land density restrictions will have significant impacts on our farming operation (as well as other farmers in our area) and land in general.

As we discussed in previous meetings, agriculture should be exempt from SEA's. In our meeting (with Jeff Siebert) we were informed that "disturbed" or farmed ground would be exempt from SEA's. I do not see any reference to that now being made.

The proposed SEA's overlays are unfounded and are based on theory, not on science and need critical analysis. Where is the research based data that would support the massive SEA expansion? In addition, we are uncertain as to how the current

boundaries were selected as they appear to just be arbitrary boundary lines. We would like to know how the boundary lines were developed.

We are also disturbed by the acreage restrictions. Placing lot acreage restrictions, even at the 20 acre lot size, destroys property values and has a ripple effect on farm land in general (for example, devaluation of property value inhibits the ability to obtain financing for operating expenses). Our property in particular, is surrounded by lots cut primarily in 2 ½ acre lots and our property would be an island of large lots - this is an unfair restriction and conflicts with surrounding like property. What is this acreage restriction based upon? Property values are placed in jeopardy under this proposal.

The excessive down zoning and SEA's expansions are destructive and are of no benefit to the valley in general. Any analysis should have addressed the economic impact on individual parties.

Sincerely,

Julie Kyle

Kyle & Kyle Ranches, Inc.

cc: Emma Howard

NORTHROP GRUMMAN

July 11, 2014

Mr. Carl Nadela
Regional Planner
Department of Regional Planning
County of Los Angeles
320 West Temple Street, Room 1356
Los Angeles, CA 90012

Dear Mr. Nadela

**Subject: Los Angeles County Antelope Valley Areawide General Plan Update**

Northrop Grumman appreciates the opportunity provide comments on the Notice of Preparation related to the Draft Environmental Impact Report on the LA County Antelope Valley Areawide General Plan Update.

Northrop Grumman Corporation's operations in Southern California's Antelope Valley region include the Palmdale Aircraft Integration Center of Excellence at Air Force Plant 42, flight test support at Edwards Air Force Base and Scaled Composites in Mojave.

Northrop Grumman has operated in the Antelope Valley since the 1940s, when it supported flight testing at Muroc Army Air Field (now Edwards AFB). In 1986, Northrop Grumman moved into Plant 42's Site 4, which was built for production of the Air Force's B-2 Spirit stealth bomber.

Today, Northrop Grumman has about 3,500 employees working in the region, most of them in Palmdale. Northrop Grumman assembles in Palmdale the center fuselage of the F-35 Lightning II multirole fighter for Lockheed Martin, the prime contractor. Other activities include final assembly of the Air Force RQ-4 Global Hawk and Navy Triton unmanned reconnaissance systems. The company also built two X-47B air vehicles for the Navy Unmanned Combat Air System (UCAS) demonstration program, which completed the first at-sea carrier launch and recovery with a fixed-wing unmanned air system.

The Palmdale Aircraft Integration Center of Excellence also serves as headquarters for Northrop Grumman's work on the B-2 bomber. The plant was the site of the B-2's rollout in 1988 and its first flight the next year. Every B-2 was assembled there, and the aircraft come to Palmdale from Whiteman Air Force Base, Mo., for regular airframe maintenance. In addition, as the B-2 prime contractor, Northrop Grumman is working on a series of upgrades to improve the B-2's capabilities.

In 2007, Northrop Grumman acquired Scaled Composites in Mojave. Its world-class capabilities in innovative design, rapid prototyping and flight test complement Northrop

Grumman's own expertise in these areas. Scaled Composites continues to operate as a small, agile resource for advanced research and development.

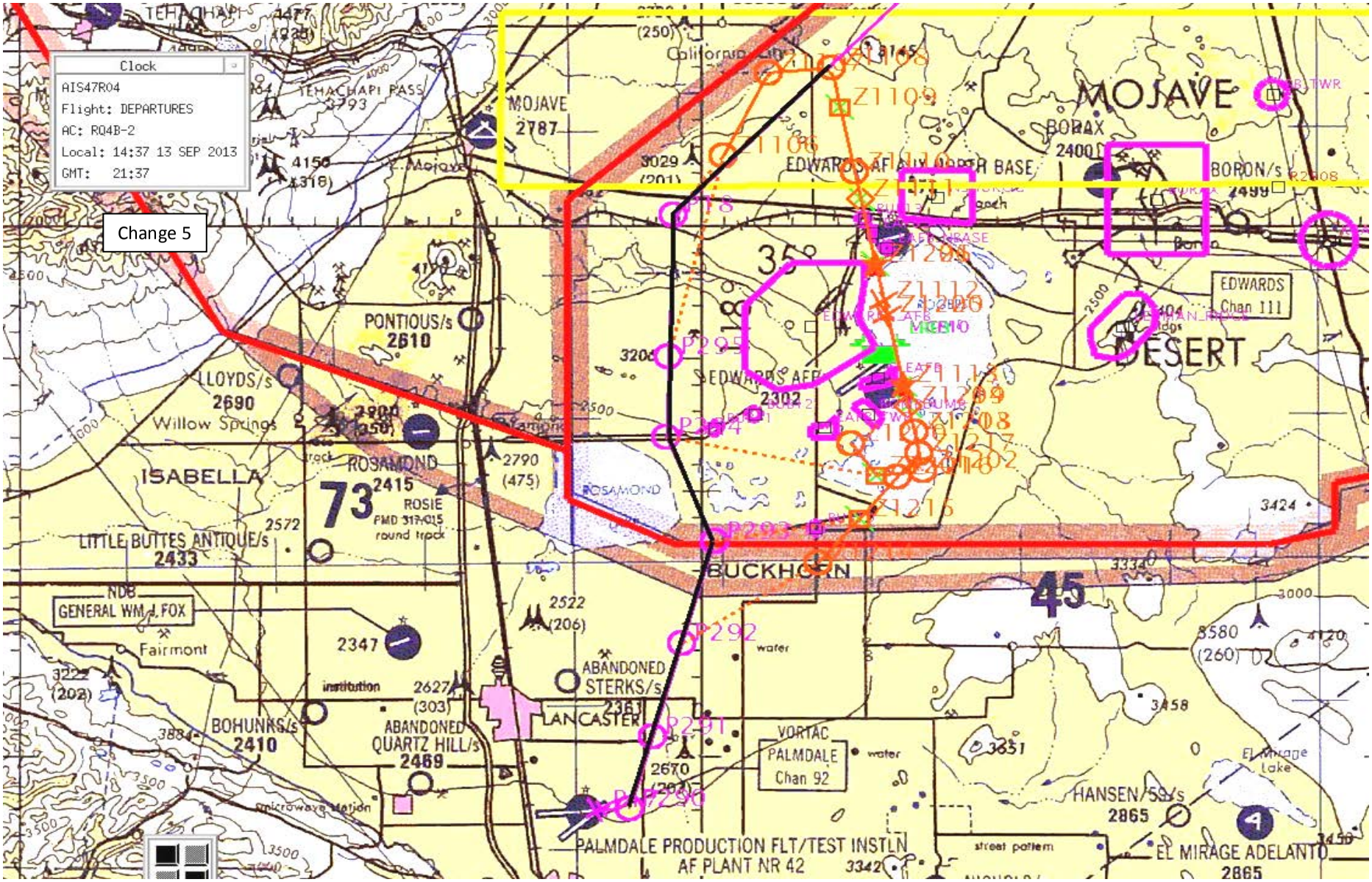
All of the programs mentioned in this letter have a direct link to the manufacturing operations at Northrop Grumman's Palmdale Plant 42 site. Northrop Grumman would like to offer the enclosed flight path maps to be included in the environmental impact analysis to ensure that the current future land use and zoning regulations developed with the Antelope Valley Areawide Plan take into consideration sensitive military operations that require unrestricted air space separated from all future land use developments. In addition to manufacturing operations, Northrop Grumman conducts sensitive research and development and testing in the Antelope Valley to meet its military mission. It is vital that Northrop Grumman works with Los Angeles County to develop a balanced zoning plan that takes into consideration encroachment issues from a variety of incompatible land use sources including commercial, industrial, residential and recreational developments that may interfere with our current and future operations. Northrop Grumman looks forward to working with you and the County to develop the most sensible zoning plan that allows the Antelope Valley to remain the aerospace gem of California.

If you have any questions, please feel free to contact me.

Sincerely,

*Joseph M. Ahn*

Joe Ahn
Division Manager
Government Relations and Public Affair
Aerospace Systems Sector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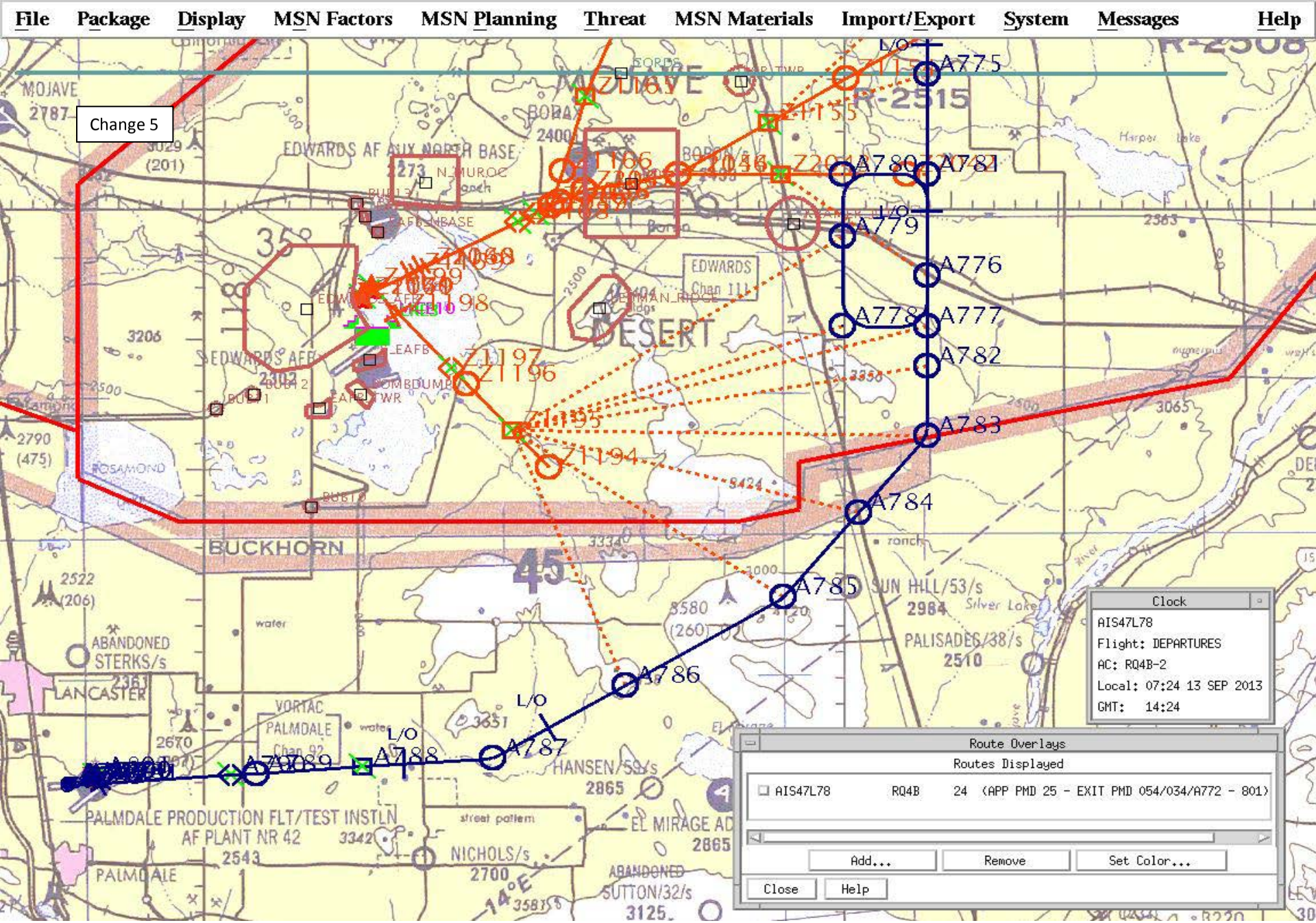
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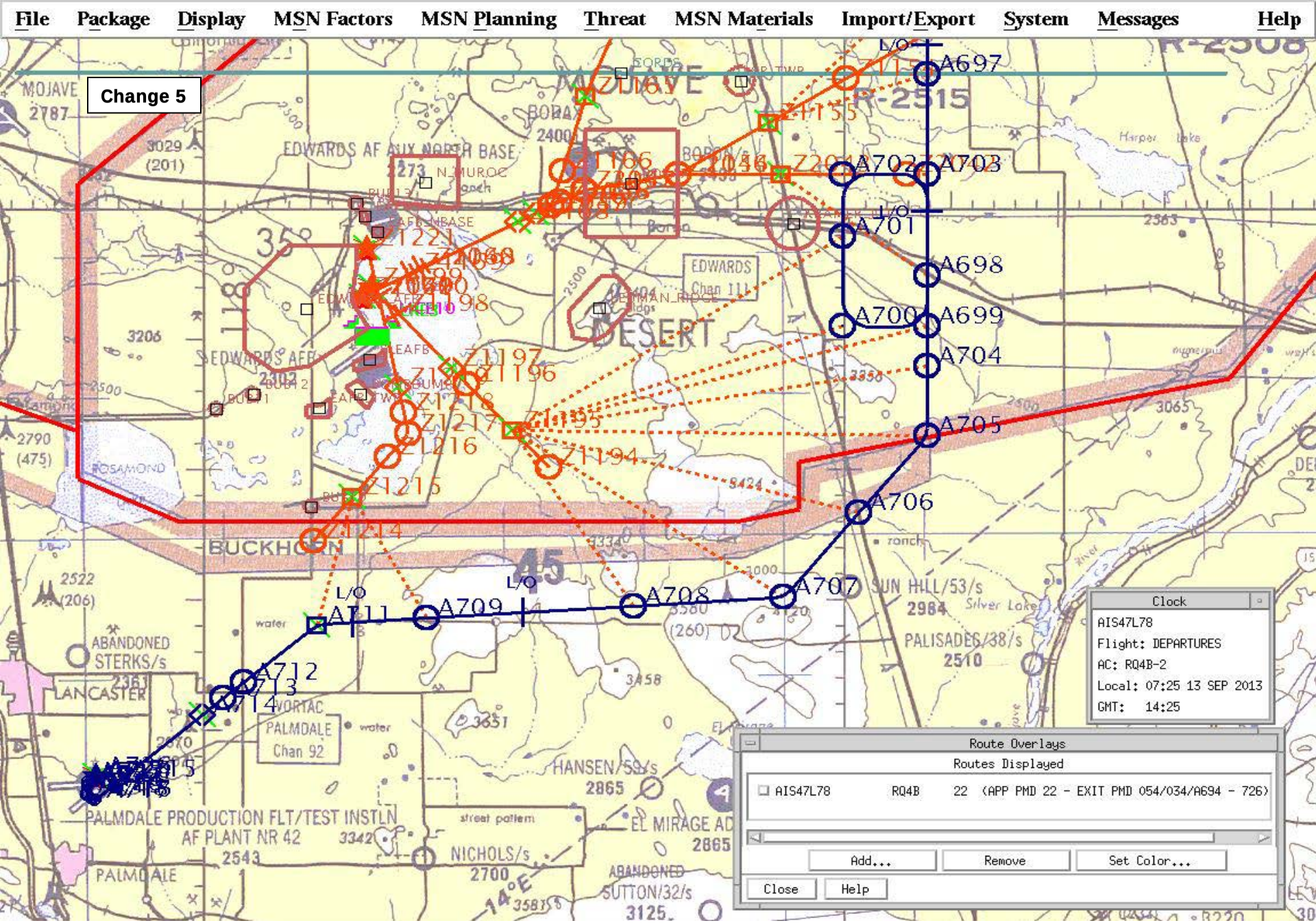
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# Antelope Valley Area Plan Update
## Scoping Meeting
## Comment Sheet

Please be as specific as possible regarding what you would like the EIR to analyze. Thank you.

This is a continuation.

I am proposing that the current plans incorporate suggestions for the placement of a potential CSU Antelope Valley or UC Antelope Valley state college campus. Proposed locations I am suggesting are (1) between Avenue D and Avenue H west of 110 Street West (there is a permitted solar farm just south of Avenue H) and (2) at the intersection of Avenue D and the California 14 freeway.

Choice #1 would be aligned with the Central EGA. Choice #2 would fit into planning for the 138 Northwest Corridor.

Could bring your jobs to residences ratio down to 1:1.5.

OPTIONAL


Name: Irwin Pascal
Address: 45153 110 Street W
Email Address: ipascal@hotmail.com
Phone Number: (818) 422-2999


Thank you for your participation and comments.

We really appreciate it!!!

DRP Staff

Vance Pomeroy

July 11, 2014

Carl Nadela
Regional Planner
Los Angeles County
Department of Regional Planning
320 West Temple Street, Room 1356
Los Angeles, CA 90012
*Transmitted via Electronic Mail to: tnc@planning.lacounty.gov*

Subject: **Los Angeles County Antelope Valley Areawide General Plan Update**
Comment on scope and content of the environmental information and analysis to be contained in the EIR

Mr. Nadela and Regional Planning Staff:

It is with pleasure that I transmit to you my comments on the scope and content of the upcoming environmental impact report for the update of the Antelope Valley Areawide Plan (AVAP).

As a working professional in the land use field for over thirty years with both heritage in the department and extensive experience in both private and public spheres, I have applauded the department's efforts in tackling the update of the comprehensive plans for the county. While it has taken some time longer than originally envisioned, we are now at a juncture at which we can now better review the details of all of our work.

The Environmental Impact Report for the AVAP will be an important document for the Regional Planning Commission and the Board of Supervisors – I hope that the document provides a thorough examination of the project and a reasonable range of workable alternatives: These alternatives must include real, public-driven options to the project as presented, and be offered up in a way that presents the balance available between their environmental and human value. The key focus of the EIR needs to be *balance*, especially as the work turns to the study and review of project alternatives and how the EIR treats the environmental issue areas that promote human activity and the livability of the valley for the future.

Director, Association of Rural Town Councils
Past President, Juniper Hills Town Council
Telephone / SMS : (661) 361 - 5619 Electronic Mail :vpomeroy@ravenhillranch.com
29319 121st Street East Juniper Hills, California 93543

The following are the topics and details that I believe will make the AVAP EIR meaningful and constructive in spirit that CEQA originally intended EIR's to be: a useful tool of information to give decision makers a range of choices with the best data possible for all alternative projects:

**Density vs. Dispersal:**
The project appears to dwell on both density and exclusion as the only measure of human activity in the valley. The normal and organic rural land use forms always also include dispersal and the compatible mix of land uses that would be unacceptable in an urban setting. Please address how the focus on population and activity concentration as an exclusive land use planning tool impacts the environment in all the environmental issue areas as well as how its impacts have potential effects beyond the land on which the concentration is places. Address how the inclusion of a rural dispersal model into a diverse collection of land use planning tools and land use forms impacts the environment in the environmental issue areas, and how it may or may not alleviate potential impacts and provide for a more diverse population across the valley.

**Land Use Proscription by Pre-defined Constraint:**
The land use patterns, densities and designations shown in the AVAP as proposed for the Project were developed under what has been described as a Hazard, Environmental and Resource Constraints Model (ECM) created by the county. The ECM is described as "a tool to inform stakeholders of potential site constraints and regulations" (General Plan Appendix C, Public Review Draft, 1/2014).

However, the "tool to inform" about regulation has become the regulation itself. No linkage is explained. No methodology is provided to provide a connection between the general ideas of the model and the detailed quantitative conclusions and assignments made in the plan.

The ECM is purported to 'front-load' all the underlying environmental hazards, issues, constraining factors and resources (or lack thereof) that could effect the ability of a particular site to be developed with improvements. However, the model's concept as presented does not provide any quantitative analysis or qualitative set of findings or determinations as to how the constraints identified translate into the development designations and densities imposed let alone the three 'classes' identified in the appendix. Additionally, this 'front-loading' was explained by staff as a way to predict the general outcomes of the development process that would occur even without the proposed designations – that any particular parcel could only make it through the existing planning, permitting and improvement processes to the level of the proposed designations. In other words, that the ECM is predictive in nature. (The suggestion that land use designations be predictive of land use patterns is not credible as the imposition of such a model of prediction in the southerly portion of the county as an academic exercise at any point in the 20$^{th}$ century would have rendered this model as false.)

After a thorough analysis of the ECM itself and the underlying data and assumptions, the EIR should address 'how', 'why' and 'with what data' the links between the ECM and the AVAP land use designations were arrived at. This substantiation is critical to all the land use, population, housing and environmental justice analysis throughout the EIR and will also inform many portions of the other areas of review and analysis.

**Rural town centers/Rural Town Areas vs. Rural preservation areas:**
The AVAP has created hard-line boundaries for existing activity nodes without providing any substantiation for their existence. While a "town center" concept can help focus a balance between housing and jobs, the manner does not provide for the diversity of housing and population that is always found in rural areas of the country and in the existing land use patterns of the Antelope Valley. The areas identified as Rural Town Centers and Rural Town Areas need to include softer edges that allow for reasonable opportunities for the addition of a more diverse set of housing and commercial activities. The other area identified is the Economic Opportunity Areas whose creation is the provision of new locations for reasonable growth within the rural milieu of the valley. However, the down-zoning of the rural preservation areas, which include all remaining unincorporated areas, has the potential to create substantial environmental impacts across the Antelope Valley. The AVAP EIR must address those potential impacts, including, but not limited to, agriculture, biota, geology, hydrology, land use planning, mineral resources, population and housing, delivery of public services, recreation and transportation.

The AVAP Project postulates a near vacancy of a substantial amount of the valley. At least one of the Project Alternatives must address a more open, organic (rather than proscribed) maturity of those open portions of the valley so a more diverse pattern of development closer to the existing pattern may continue. In addition, the rural preservation concept may not be consistent with the adopted or proposed with Community Standards Districts. The EIR should include an alternative with the Community Standards Districts zoning. Additionally, the EIR must address the balance of development patterns and development diversity with environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

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No environmental analysis will be considered complete unless the existing district land use patterns are included in most, if not all, project alternatives, including the No Project Alternative.

**Significant Ecological Areas:**
The AVAP has included portions* of the proposed SEA Ordinance and a significant expansion of over 250,000 acres of SEA designated property in its Land Use Plan. This ordinance has not been approved by the Regional Planning Commission and is still being vetted through public comment. The AVAP should only analyze adopted ordinances and its EIR should not have to study an un-adopted ordinance. With the November, 2014 deadline given by the BOS, the AVAP EIR should not exhaust DRP's consultant's time with the examination of ordinance that may not even be adopted in the future.
Therefore, we ask that the AVAP EIR include an analysis of the approved SEA ordinance only as include it only in Project Alternatives and not the Project as proposed. In that analysis, include detailed scientific, research-based justification for the extent of the proposed designation areas including, but not limited to primary research on the potential impacts on agriculture, biota, geology, hydrology, land use planning, mineral resources, population and housing, delivery of public services, recreation and transportation. Especially because of the extent of the potential degradation of population, housing and other human activity-related environmental activities, justification of the boundaries and the incumbent regulation of that land needs a substantial basis to give the lead agency an opportunity to weigh the impacts. Additionally, the EIR must address the balance of the SEA's to environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

* - The SEA Ordinance has seen more proposed revisions since the publication of the current draft AVAP maps (see SEA Connectivity and Constriction Map, April – June, 2014).

**Economic Opportunity Areas:**
Identified within the AVAP are three Economic Opportunity Areas (EOAs) centered around major transit corridors that "would bring tremendous opportunities for growth and economic development in the vicinity of these projects". These EOAs would bring stable economic growth for the future generations of the Antelope Valley.

In the AVAP, DRP staff has indicated that further studies and a more detailed planning effort will need to be done for each EOA by way of a Community Plan. The EIR will be inaccurate if some future Community Plan is postulated now with changes to the currently projected AVAP analysis and data. Any discussion of a future Community Plan to re-visit the EOA's must be only part of a Project Alternative and not part of the Project.

The EOA's are an important concrete part of the AVAP and must not have an open-ended reviewing/studying component; They need to be addressed directly in the EIR as the activity nodes that they are. The AVAP EIR must accurately

address any impacts associated with the allotted residential units and projected commercial acreage that will bring jobs/housing to those areas. We ask that the EIR include the EOA's in its analysis as is and that Community Plans not be a part of the AVAP. Future land owners will still have to submit a project level EIR for any development plans they want the County to approve and the EOA concept is already sufficient for programmatic determinations at the AVAP EIR level. This will ensure Los Angeles County's ability to review proposed development within these EOAs in more detailed without adding the unnecessary Community Plan that will alter the EIR currently being drafted. Additionally, the EIR must address how the EOA's balance environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

**Use of all the most recent information and studies:**
The AVAP is shaping the Antelope Valley for future generations. The EIR must include with its analysis current and proposed transit projects, including NW 138, High Speed Rail and High Desert Corridor. And population growth associated with Southern California Association of Governments RTP/SCS projections. With these projections included in the AVAP EIR, it will give a unified planning effort that will allow the community's future housing and jobs to be pro-active and bring economic growth to that region.

**Health Concerns:**
The RL-10 and RL-20 will allow one unit per 10 or 20 acres. While the AVAP is trying to create larger lots outside of the rural town centers, this could have a negative effect on both air quality and health impacts. Many lower density lots are graded and cleared of vegetation to allow the full use of the property. This can cause a significant increase in wind and borne dust. The AVAP EIR should address how such low density zones will affect the inherent health problems associated with Valley Fever and other wind-borne health hazards that are directly related to large vacant lots with no or little vegetation or development to break up prevailing winds. Additionally, the EIR must address environmental justice concerns for the existing and potential future human populations and constituencies that will rely on this valley to provide both habitation and sustenance.

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The AVAP EIR must address the potential impacts on the several school districts in the valley (Eastside, Wilsona, Keppel, Gorman, Westside, Acton-Agua Dulce, Antelope Valley Union High School and Antelope Valley College). Each of these sovereign jurisdictions regularly reviews its demographic and growth parameters. The AVAP EIR must address how the activities of the plan effect those plans and policies, and, in so far as is possible, provide how there is a conflict or consistency between the AVAP and the work of each district including but not limited to the areas of land use planning (over which the district hold certain levels of sovereignty), population and housing, delivery of public services, recreation

and transportation. Additionally, the EIR must address environmental justice concerns for the existing and potential future school and residential populations and constituencies that will rely on this valley to provide habitation, sustenance and education. Consideration must also be given to the long term impact that any change in land use has on the delivery of educational services. Decreasing rural density has a profound impact on delivery of instruction, length and cost of transportation, limitations on services to students, loss of revenue to school districts and thus reductions in staff. These may be unintended consequences of the proposed EIR.

I would also like the department to address why the consultant hired to assist the department in the preparation of the EIR was not on hand at any of the scoping sessions and why no scoping notes appear to have been taken by staff at those sessions. Additionally, please comment on how the public was to be sufficiently informed of the full breadth and depth of the proposed draft AVAP Project prior to the July 11, 2014 closure date for scoping comments when portions of the draft AVAP have not yet been finalized and published prior to that date let alone prior to the beginning of the comment period.

Please feel free to contact me with any questions you may have or clarifications you may need. I appreciate your attention and look forward to working with you and staff to keep the Antelope Valley a great place to live.

Sincerely,

Vance Pomeroy

Director, Association of Rural Town Councils
vpomeroy@ravenhillranch.com
Voice / Text : (661) 361-5619

Cc: Susie Tae
Supervisor Antonovich
Edel Vizcarra
Norm Hickling

# Appendix C Land Use and Zoning

# Appendices

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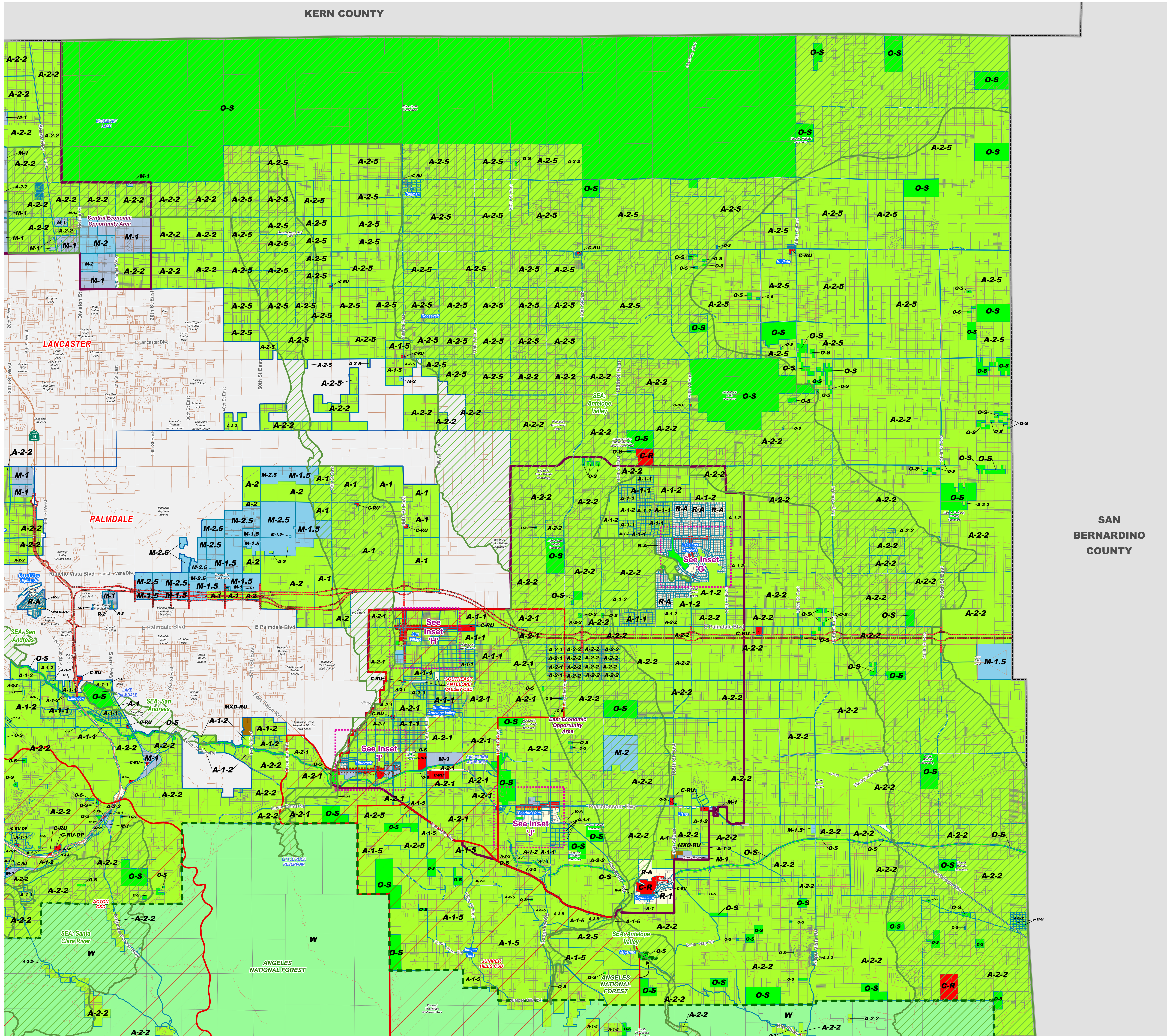
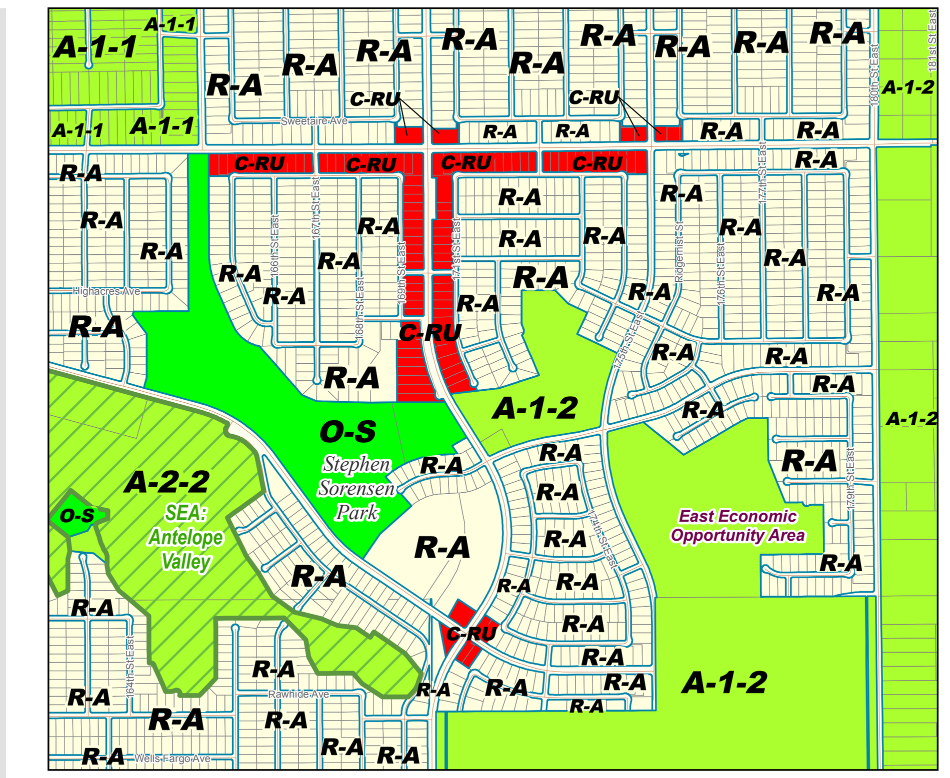
# Los Angeles County

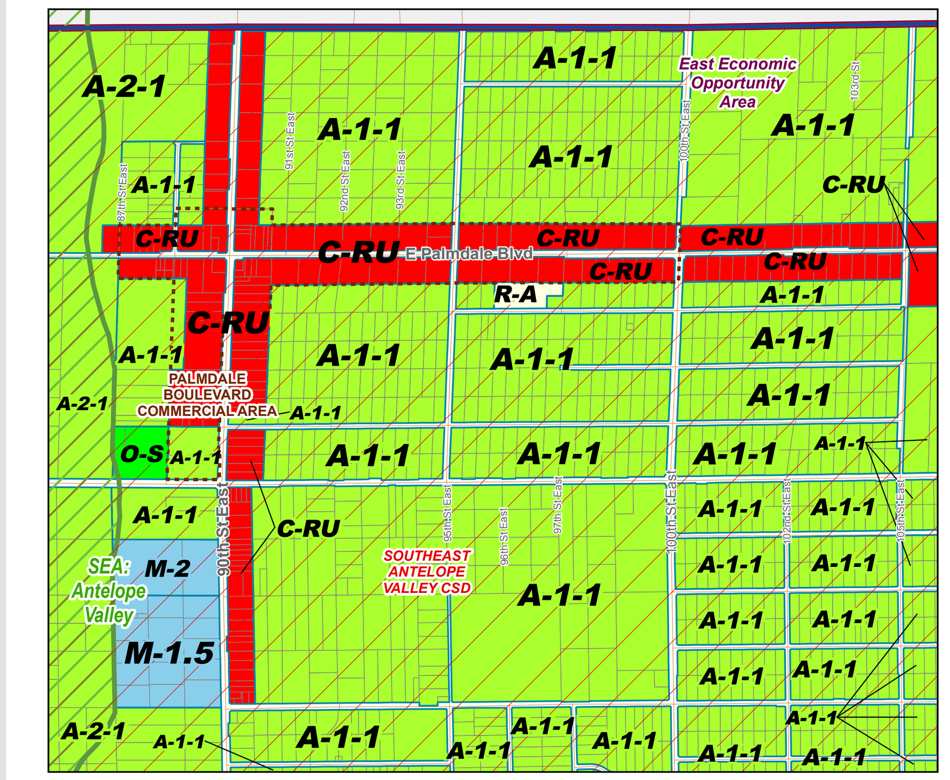
# ANTELOPE VALLEY EAST PORTION (Sheet 2 of 3)

## ZONING (Proposed)

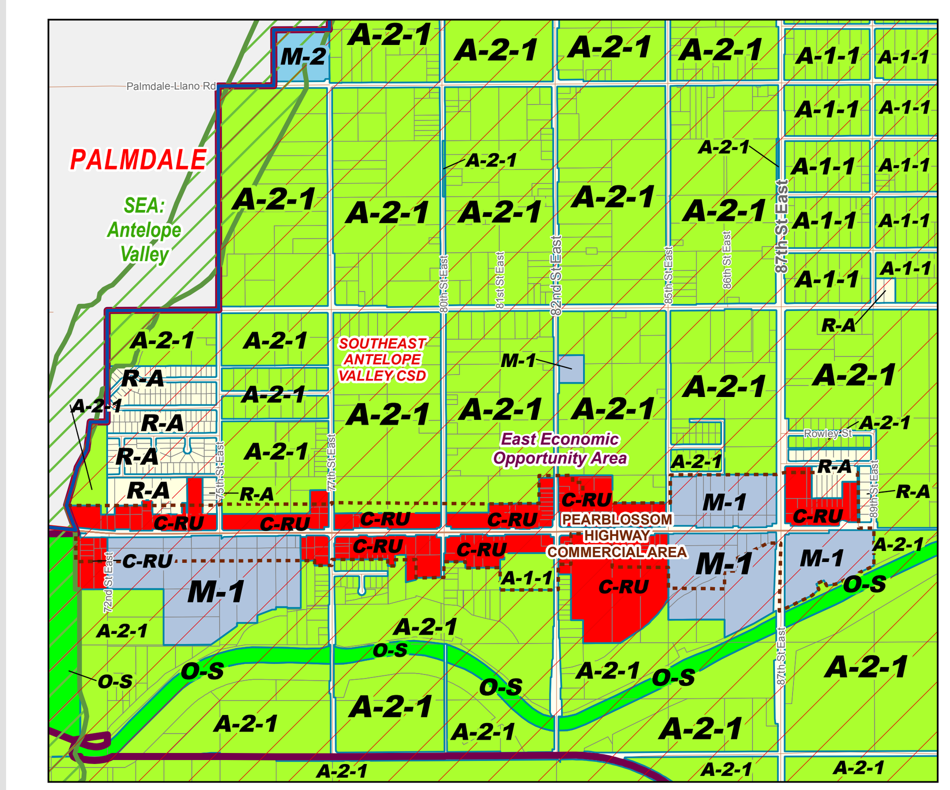


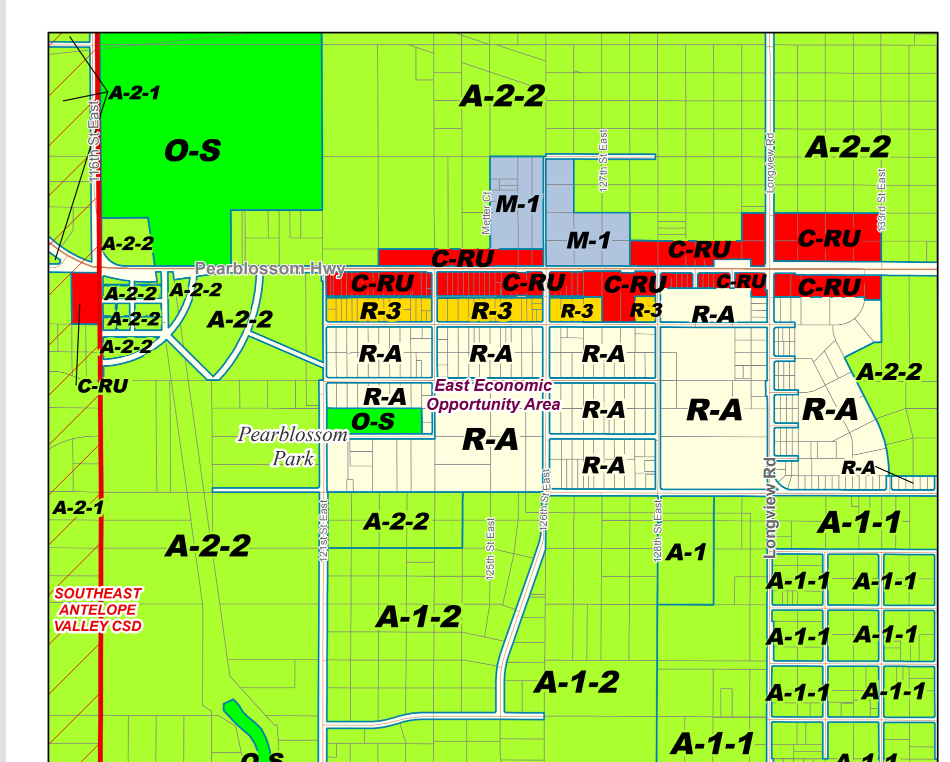

Inset "G" - Lake Los Angeles




Inset "H" - Sun Village




Inset "I" - Littlerock




Inset "J" - Pearblossom

## LEGEND:

### Zoning

- R-1 - Single-family residence
- R-2 - Two-family residence
- R-3-()U - Limited multiple residence
- R-4-()U - Unlimited residence
- R-A - Residential agriculture
- RPD - Residential planned development
- A-1 - Light agriculture
- A-2 - Heavy agriculture
- A-2-H - Heavy agriculture including hog ranches
- C-H - Commercial highway
- C-1 - Restricted business
- C-2 - Neighborhood commercial
- C-3 - Unlimited commercial
- C-M - Commercial manufacturing
- C-MJ - Major commercial
- C-R - Commercial recreation
- C-RU - Commercial - rural
- CPD - Commercial planned development
- M-1 - Light manufacturing
- D-2 - Desert-Mountain
- IT - Institutional
- SP - Specific Plan
- M-1.5 - Restricted heavy manufacturing
- MPD - Manufacturing industrial planned development
- M-2 - Heavy manufacturing
- M-3 - Unclassified
- M-4 - Unlimited manufacturing
- M-2.5 - Aircraft, heavy industrial
- B-1 - Buffer strip
- B-2 - Corner buffer
- R-R - Resort and recreation
- W - Watershed
- P-R - Restricted parking
- SR-D - Scientific research and development
- O-S - Open space
- A-C - Arts and crafts
- MXD - Mixed use development
- MXD-RU - Mixed use development - rural

### Overlays

- Northwest 138 Corridor Improvement Project
- High Desert Corridor Footprint
- Economic Opportunity Areas
- Community Standards District (CSD)
- CSD - Area Specific Standards
- Significant Ecological Area

### Base Layers

- Arterials
- Freeways
- City / Unincorporated Community Boundary
- County Boundaries
- National Forest
- Lakes and Reservoirs

NOTES:
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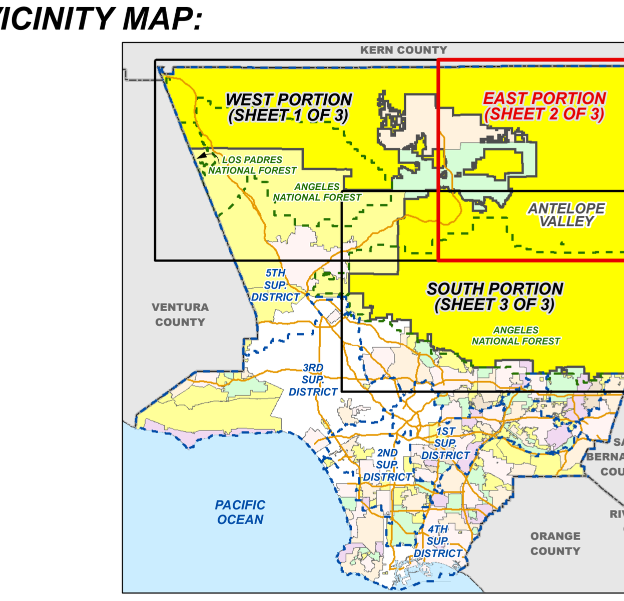
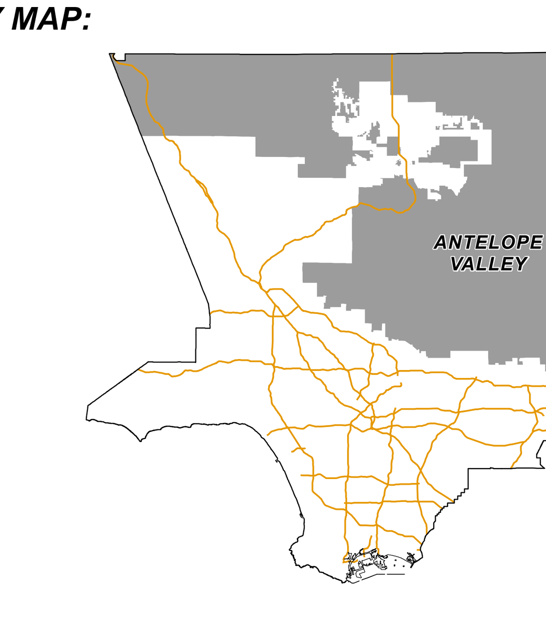
## VICINITY MAP:




NOTE: Colors denote incorporated cities and unincorporated areas and not land use classifications. Blue Dashed Line is the Supervisorial District Boundary.

## KEY MAP:




Current as of: July 9, 2014

LOS ANGELES COUNTY
Department of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Scale in Feet - Main Map: 0, 2,000, 4,000, 8,000, 12,000, 16,000

Scale in Feet - Inset Maps: 0, 500, 1,000, 2,000, 3,000, 4,000

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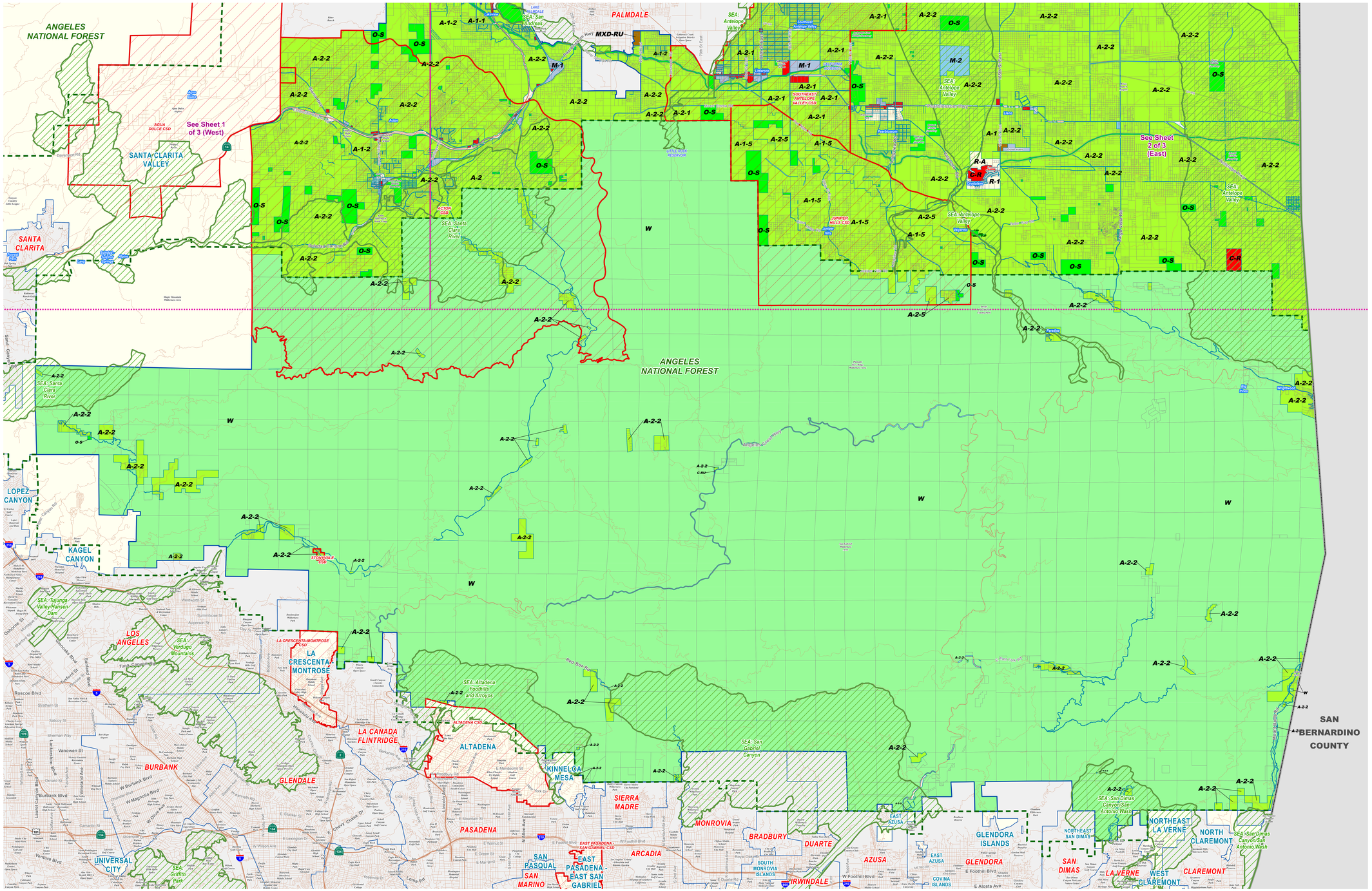


# Los Angeles County

# ANTELOPE VALLEY SOUTH PORTION (Sheet 3 of 3)

## ZONING (Proposed)

### LEGEND:

#### Zoning

- R-1 - Single-family residence
- R-2 - Two-family residence
- R-3-(I)U - Limited multiple residence
- R-4-(I)U - Unlimited residence
- R-A - Residential agriculture
- RPD - Residential planned development
- A-1 - Light agriculture
- A-2 - Heavy agriculture
- A-2-H - Heavy agriculture including hog ranches
- C-H - Commercial highway
- C-1 - Restricted business
- C-2 - Neighborhood commercial
- C-3 - Unlimited commercial
- C-M - Commercial manufacturing
- C-MJ - Major commercial
- C-R - Commercial recreation
- C-RU - Commercial - rural
- CPD - Commercial planned development
- M-1 - Light manufacturing
- D-2 - Desert-Mountain
- IT - Institutional
- SP - Specific Plan
- M-1.5 - Restricted heavy manufacturing
- MPD - Manufacturing industrial planned development
- M-2 - Heavy manufacturing
- M-3 - Unclassified
- M-4 - Unlimited manufacturing
- M-2.5 - Aircraft, heavy industrial
- B-1 - Buffer strip
- B-2 - Corner buffer
- R-R - Resort and recreation
- W - Watershed
- P-R - Restricted parking
- SR-D - Scientific research and development
- O-S - Open space
- A-C - Arts and crafts
- MXD - Mixed use development
- MXD-RU - Mixed use development - rural

#### Overlays

- Northwest 138 Corridor Improvement Project
- High Desert Corridor Footprint
- Economic Opportunity Areas
- Community Standards District (CSD)
- CSD - Area Specific Standards
- Significant Ecological Area

#### Base Layers

- Arterials
- Freeways
- City / Unincorporated Community Boundary
- County Boundaries
- National Forest
- Lakes and Reservoirs

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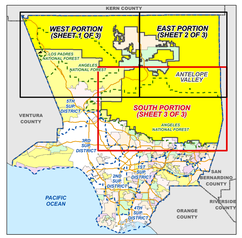
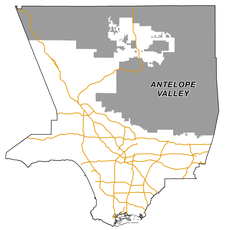
### VICINITY MAP:




NOTE: Colors denote incorporated cities and unincorporated areas and not land use classifications. Blue Dashed Line is the Supervisional District Boundary.

### KEY MAP:




*Current as of: July 9, 2014*

*LOS ANGELES COUNTY*
*Department of Regional Planning*
*320 W. Temple St.*
*Los Angeles, CA 90012*

Scale in Feet
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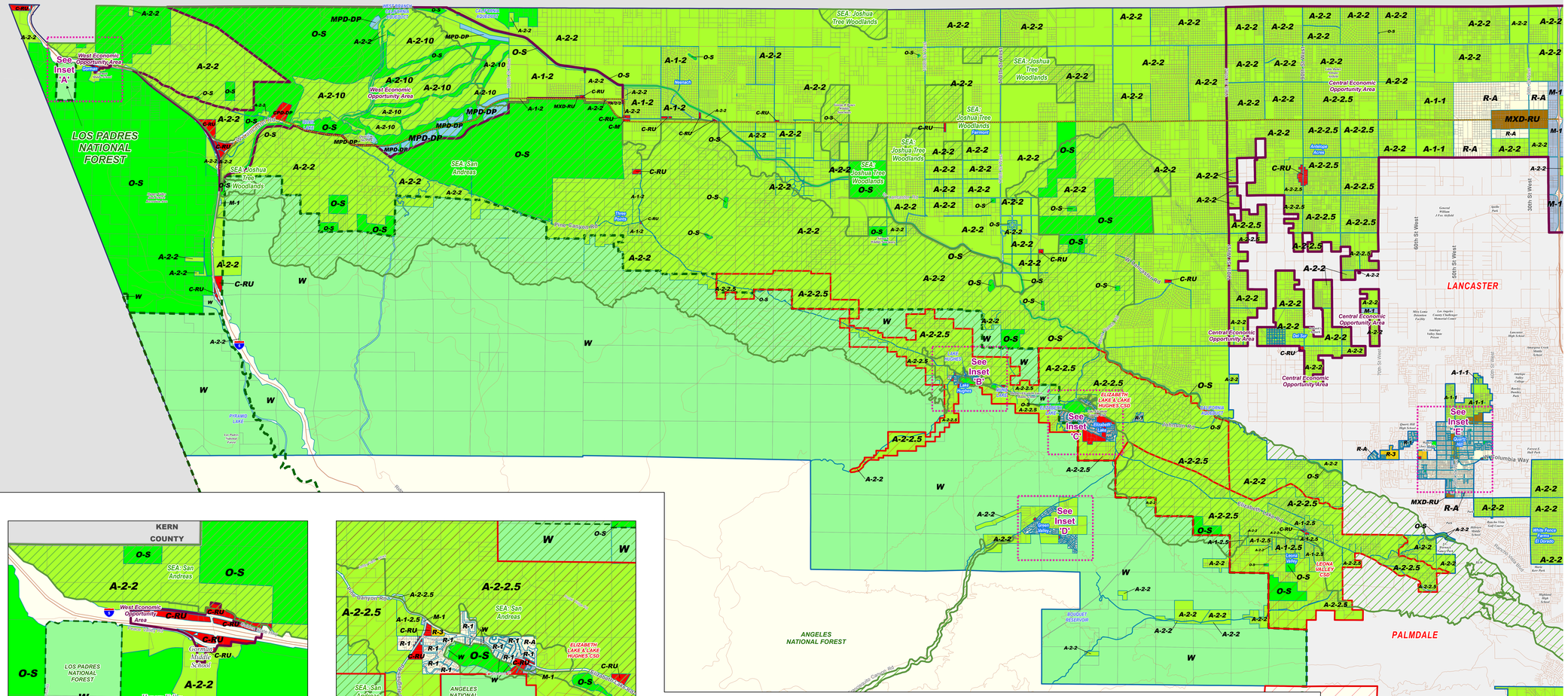
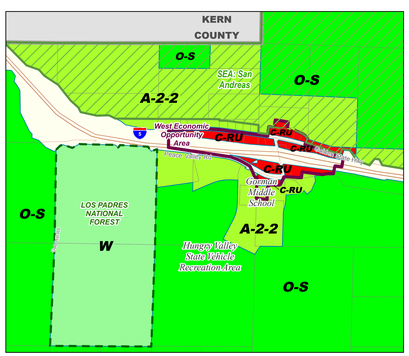
# Los Angeles County

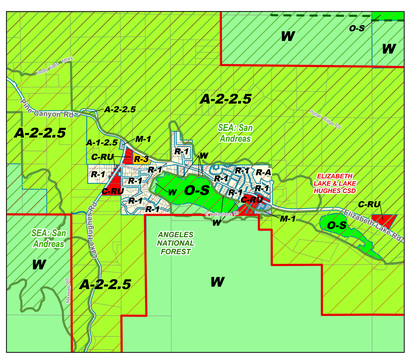
# ANTELOPE VALLEY WEST PORTION (Sheet 1 of 3)

## ZONING (Proposed)

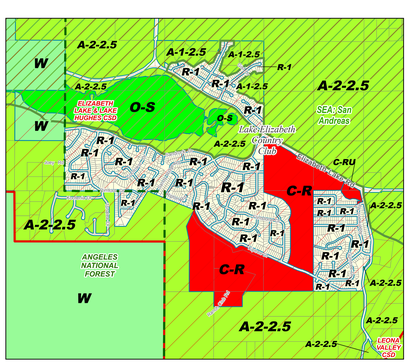


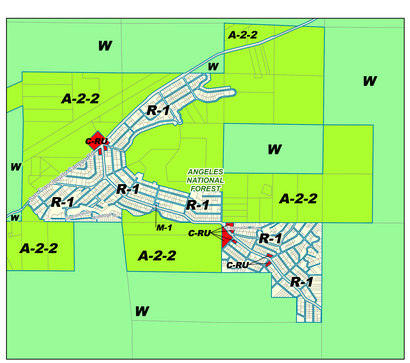

Inset "A" - Gorman



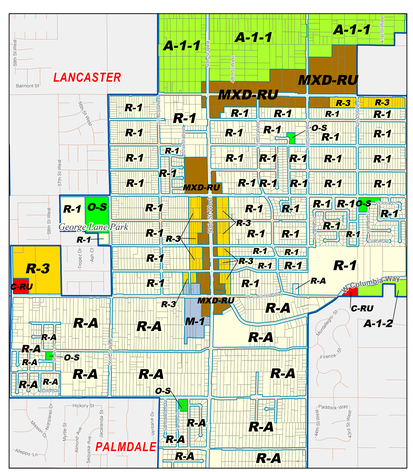

Inset "B" - Lake Hughes



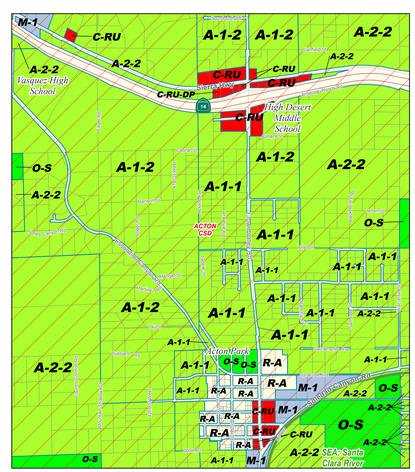

Inset "C" - Elizabeth Lake




Inset "D" - Green Valley




Inset "E" - Quartz Hill




Inset "F" - Acton

## LEGEND:

### Zoning

- R-1 - Single-family residence
- R-2 - Two-family residence
- R-3-(U) - Limited multiple residence
- R-4-(U) - Unlimited residence
- R-A - Residential agriculture
- RPD - Residential planned development
- A-1 - Light agriculture
- A-2 - Heavy agriculture
- A-2-H - Heavy agriculture including hog ranches
- C-H - Commercial highway
- C-1 - Restricted business
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- C-MJ - Major commercial
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- B-1 - Buffer strip
- B-2 - Corner buffer
- R-R - Resort and recreation
- W - Watershed
- P-R - Restricted parking
- SR-D - Scientific research and development
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- A-C - Arts and crafts
- MXD - Mixed use development
- MXD-RU - Mixed use development - rural

### Overlays

- Northwest 138 Corridor Improvement Project
- High Desert Corridor Footprint
- Economic Opportunity Areas
- Community Standards District (CSD)
- CSD - Area Specific Standards
- Significant Ecological Area

### Base Layers

- Arterials
- Freeways
- City / Unincorporated Community Boundary
- County Boundaries
- National Forest
- Lakes and Reservoirs

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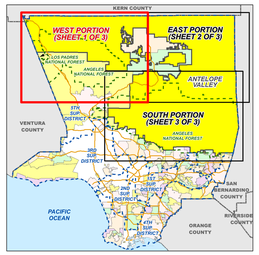
## VICINITY MAP:

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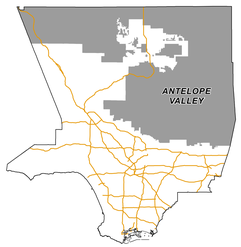
## KEY MAP:




Current as of: July 9, 2014

Scale in Feet - Main Map
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Scale in Feet - Inset Maps
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LOS ANGELES COUNTY
Department of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

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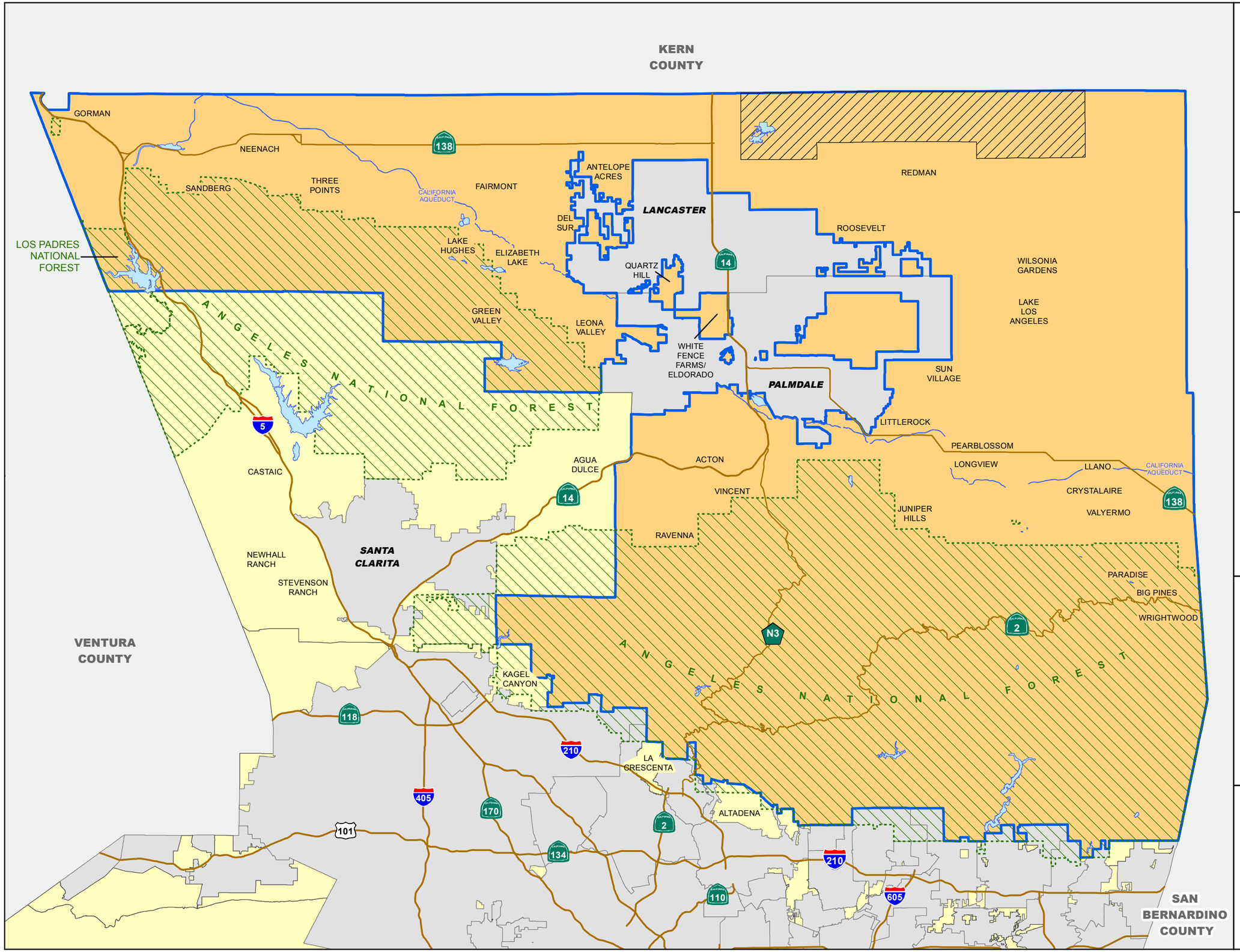


*COUNTY OF LOS ANGELES*

## *Town and Country Planning Area*

## *Area Boundary*

*Figure _____*

*LEGEND:*

- *Planning Area*
- *Incorporated Cities*
- *Other Unincorporated Area*
- *Edwards Air Force Base*
- *Lakes and Reservoirs*
- *National Forest*

**Note:** This map is a component of the Los Angeles County Antelope Valley Area Plan Update Program (Town & Country).

Information within cities is for reference only.


***LOS ANGELES COUNTY***
***Department of Regional Planning***
***320 W. Temple St.***
***Los Angeles, CA 90012***


*VICINITY MAP:*

*Current as of: 7/10/14*

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Miles

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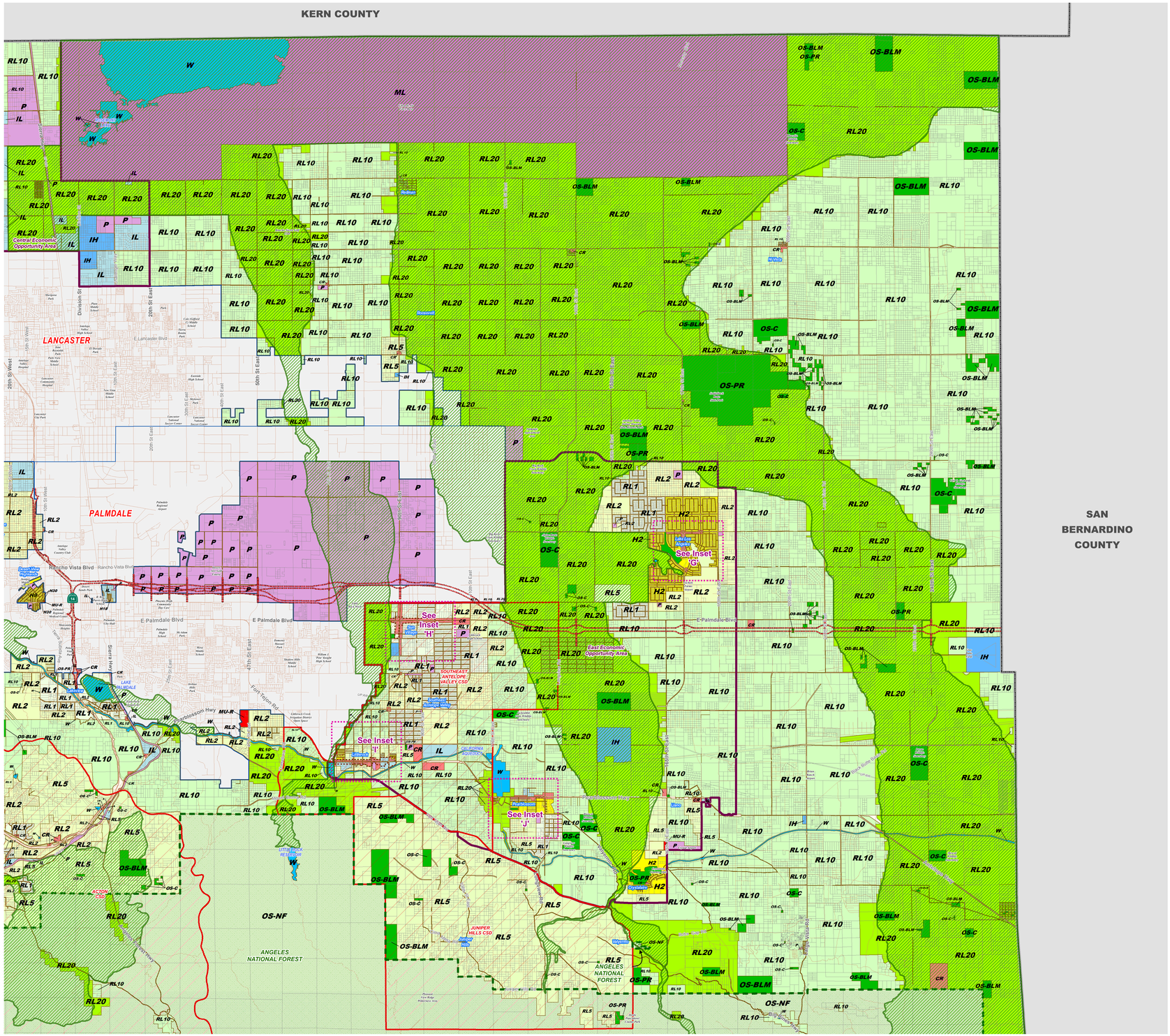
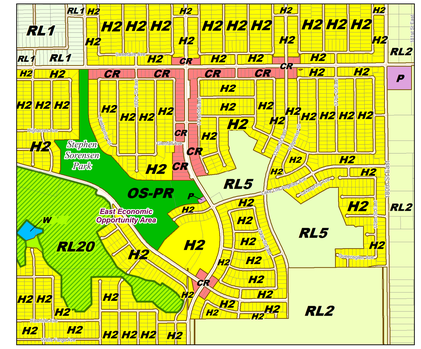
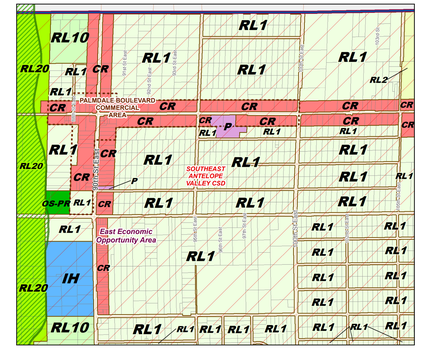
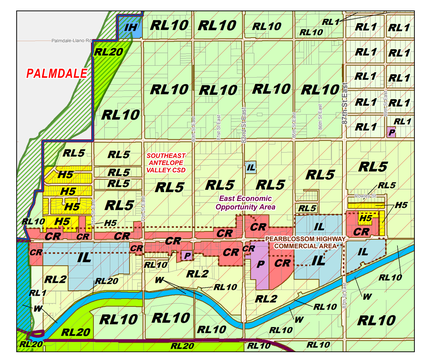


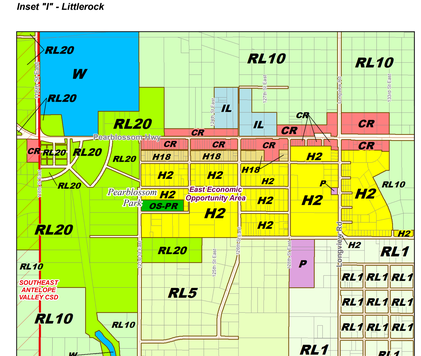

Inset "G" - Lake Los Angeles




Inset "H" - Sun Village




Inset "I" - Littlerock




Inset "J" - Pearblossom

# Los Angeles County

# ANTELOPE VALLEY EAST PORTION (Sheet 2 of 3)

## LAND USE POLICY

### LEGEND:

**LUP**

- RL1 - Rural Land 1 (1 du / 1 gross ac)
- RL2 - Rural Land 2 (1 du / 2 gross ac)
- RL5 - Rural Land 5 (1 du / 5 gross ac)
- RL10 - Rural Land 10 (1 du / 10 gross ac)
- RL20 - Rural Land 20 (1 du / 20 gross ac)
- RL40 - Rural Land 40 (1 du / 40 gross ac)
- H2 - Residential 2 (0-2 du / net ac)
- H5 - Residential 5 (0-5 du / net ac)
- H9 - Residential 9 (0-9 du / net ac)
- H18 - Residential 18 (9-18 du / net ac)
- H30 - Residential 30 (18-30 du / net ac)
- CR - Rural Commercial
- MU-R - Mixed Use - Rural
- CM - Major Commercial
- IL - Light Industrial
- IH - Heavy Industrial
- P - Public and Semi-Public
- ML - Military Land
- OS-C - Open Space Conservation
- OS-PR - Open Space Parks and Recreation
- OS-NF - Open Space National Forest
- OS-BLM - Bureau of Land Management
- W - Water

**Overlays**

- Northwest 138 Corridor Improvement Project
- High Desert Corridor Footprint
- Economic Opportunity Areas
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- CSD - Area Specific Standards
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**Base Layers**

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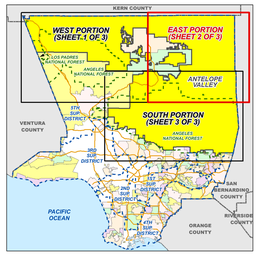
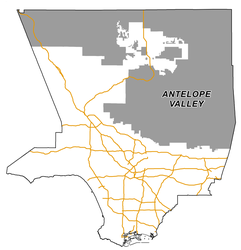
### VICINITY MAP:




NOTE: Colors denote incorporated cities and unincorporated areas and not land use classifications.
Blue Dashed Line is the Supervisorial District Boundary.

### KEY MAP:




Current as of: June 4, 2014

LOS ANGELES COUNTY
Department of Regional Planning
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Scale in Feet - Main Map
0 2,000 4,000 8,000 12,000 16,000

Scale in Feet - Inset Maps
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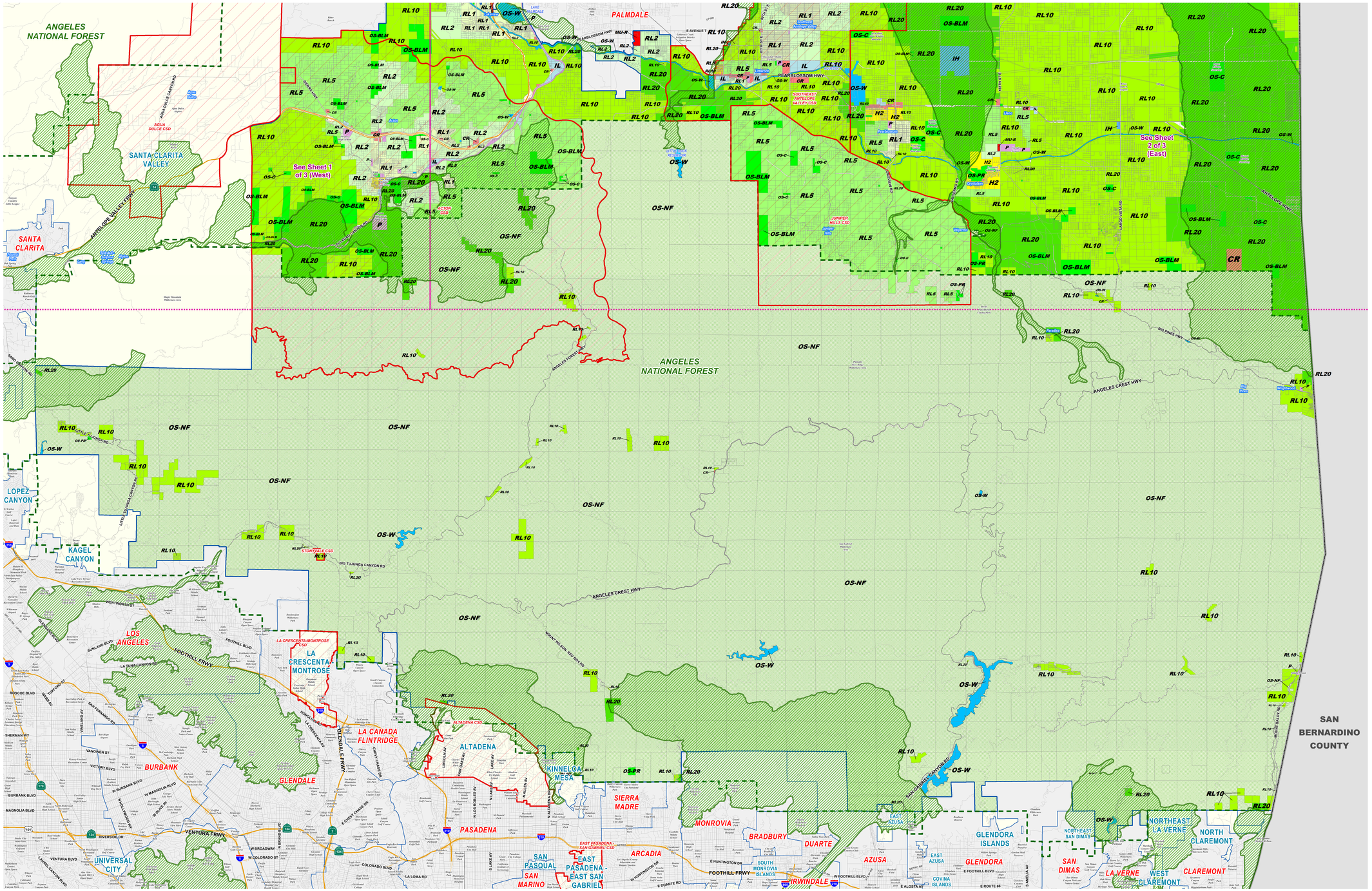


# Los Angeles County

# ANTELOPE VALLEY SOUTH PORTION (Sheet 3 of 3)

# LAND USE POLICY

## LEGEND:

### LUP

- RL1 - Rural Land 1 (1 du / 1 gross ac)
- RL2 - Rural Land 2 (1 du / 2 gross ac)
- RL5 - Rural Land 5 (1 du / 5 gross ac)
- RL10 - Rural Land 10 (1 du / 10 gross ac)
- RL20 - Rural Land 20 (1 du / 20 gross ac)
- RL40 - Rural Land 40 (1 du / 40 gross ac)
- H2 - Residential 2 (0-2 du / net ac)
- H5 - Residential 5 (0-5 du / net ac)
- H9 - Residential 9 (0-9 du / net ac)
- H18 - Residential 18 (9-18 du / net ac)
- H30 - Residential 30 (18-30 du / net ac)
- CR - Rural Commercial
- MU-R - Mixed Use - Rural
- CM - Major Commercial
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- P - Public and Semi-Public
- ML - Military Land
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- OS-PR - Open Space Parks and Recreation
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- OS-BLM - Bureau of Land Management
- OS-W - Water

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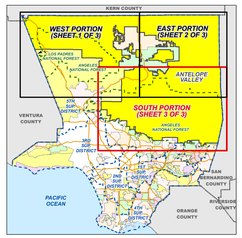
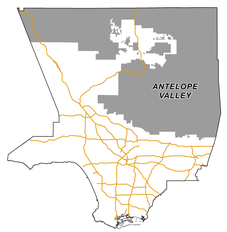
## VICINITY MAP:




NOTE: Colors denote incorporated cities and unincorporated areas and not land use classifications. Blue Dashed Line is the Supervisional District Boundary.

## KEY MAP:

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Scale in Feet
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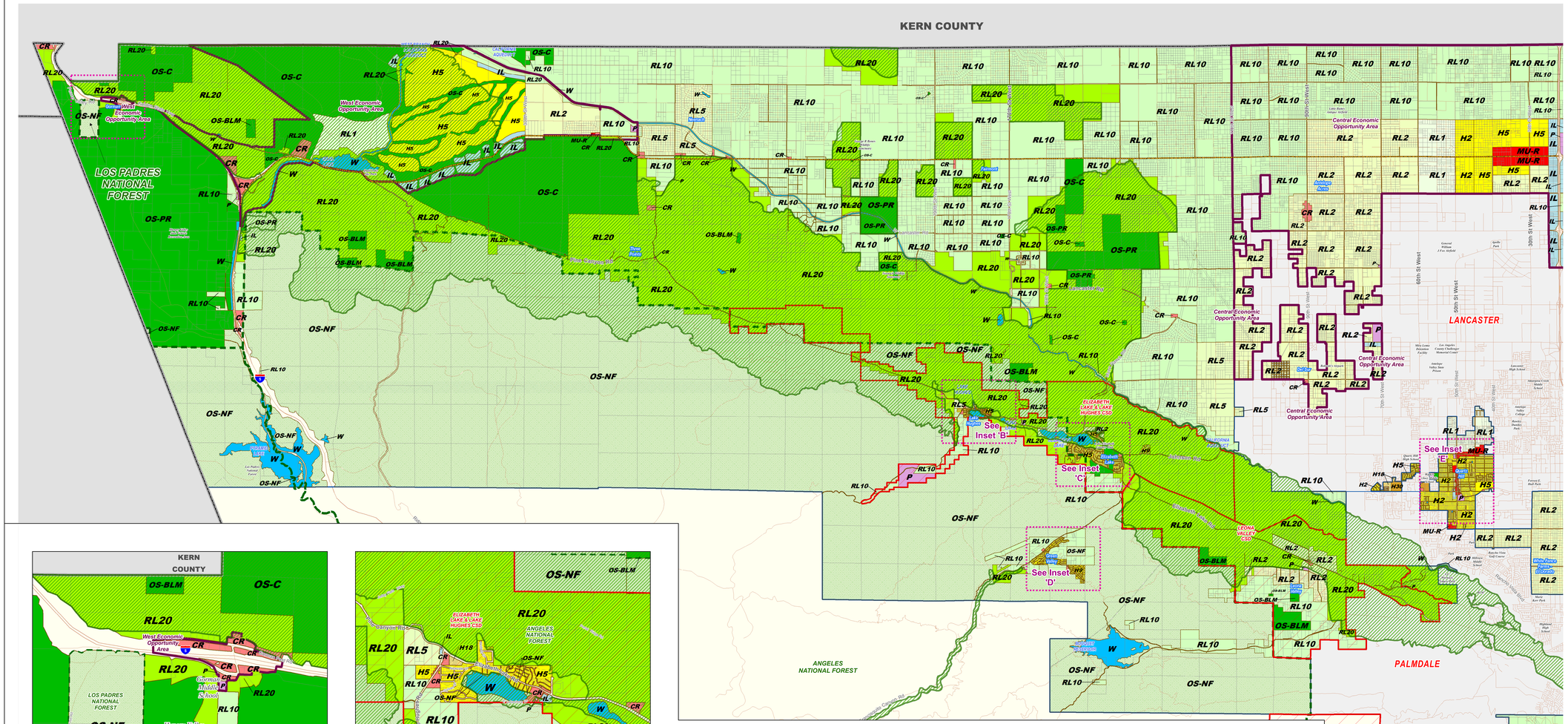
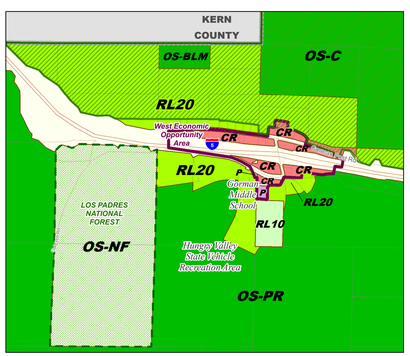
# Los Angeles County

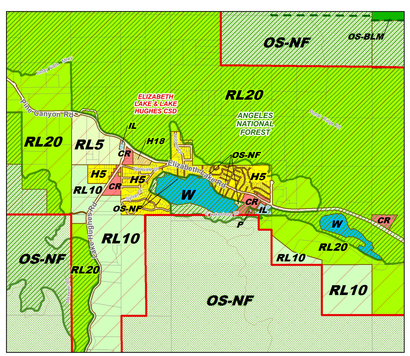
# ANTELOPE VALLEY WEST PORTION (Sheet 1 of 3)

## LAND USE POLICY




Inset "A" - Gorman

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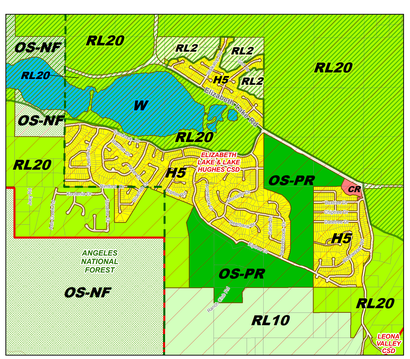


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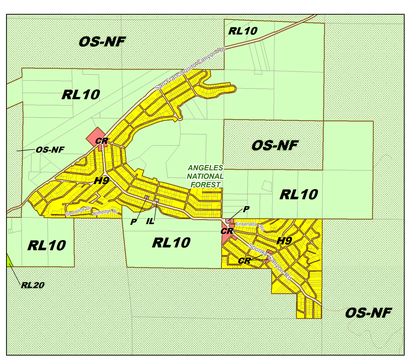


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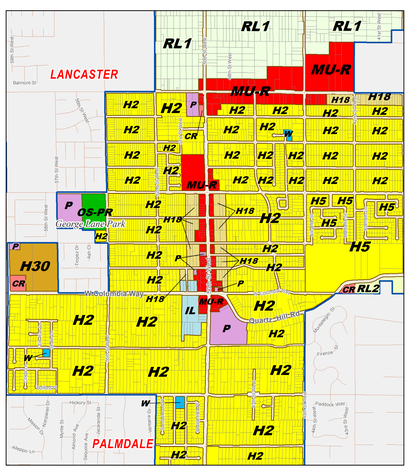
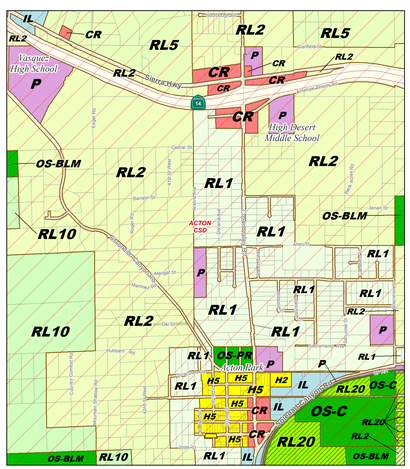



Inset "E" - Quartz Hill




Inset "F" - Acton

## LEGEND:

### LUP

- RL1 - Rural Land 1 (1 du / 1 gross ac)
- RL2 - Rural Land 2 (1 du / 2 gross ac)
- RL5 - Rural Land 5 (1 du / 5 gross ac)
- RL10 - Rural Land 10 (1 du / 10 gross ac)
- RL20 - Rural Land 20 (1 du / 20 gross ac)
- RL40 - Rural Land 40 (1 du / 40 gross ac)
- H2 - Residential 2 (0-2 du / net ac)
- H5 - Residential 5 (0-5 du / net ac)
- H9 - Residential 9 (0-9 du / net ac)
- H18 - Residential 18 (9-18 du / net ac)
- H30 - Residential 30 (18-30 du / net ac)
- CR - Rural Commercial
- MU-R - Mixed Use - Rural
- CM - Major Commercial
- IL - Light Industrial
- IH - Heavy Industrial
- P - Public and Semi-Public
- ML - Military Land
- OS-C - Open Space Conservation
- OS-PR - Open Space Parks and Recreation
- OS-NF - Open Space National Forest
- OS-BLM - Bureau of Land Management
- W - Water

### Overlays

- Northwest 138 Corridor Improvement Project
- High Desert Corridor Footprint
- Economic Opportunity Areas
- Community Standards District (CSD)
- CSD - Area Specific Standards
- Significant Ecological Area

### Base Layers

- Arterials
- Freeways
- City / Unincorporated Community Boundary
- County Boundaries
- National Forest
- Lakes and Reservoirs

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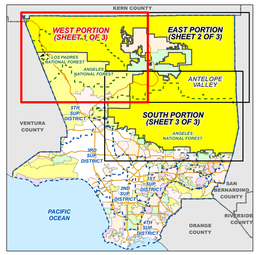
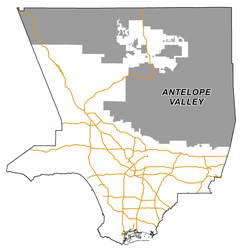
## VICINITY MAP:




NOTE: Colors denote incorporated cities and unincorporated areas and not land use classifications. Blue Dashed Line is the Supervisorial District Boundary.

## KEY MAP:




Current as of: June 4, 2014


LOS ANGELES COUNTY
Department of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012


Scale in Feet - Main Map
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Scale in Feet - Inset Maps
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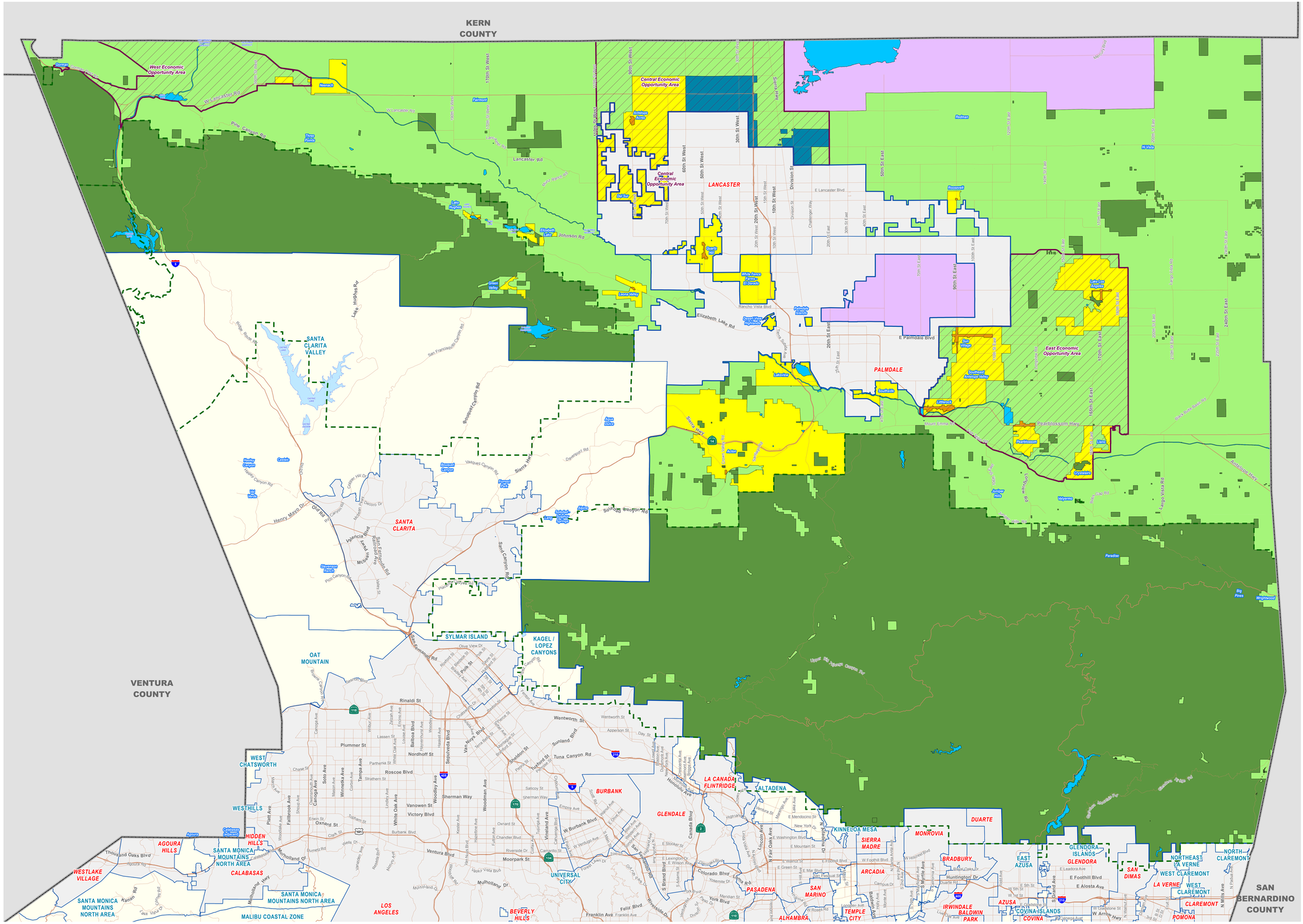


# Los Angeles County

# ANTELOPE VALLEY

## Rural Preservation Strategy Map

### LEGEND:

**Rural Preservation Areas**

- Rural Town Areas
- Rural Town Center
- Employment Protection District
- Rural Preserve Areas
- Aviation
- Open Space - National Forest, Parks, Conservation, BLM
- Open Space - Water

**Base Layers**

- Freeways and Highways
- Primary, Secondary, and Minor Streets
- Antelope Valley Boundary
- Economic Opportunity Areas
- City / Unincorporated Community Boundary
- National Forest
- County Boundaries

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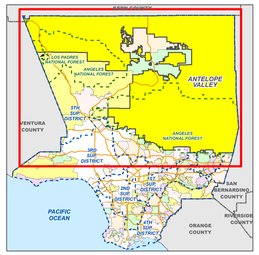
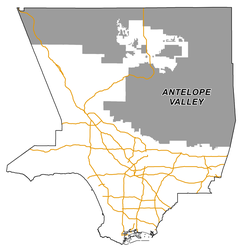



NOTE: Colors denote incorporated cities and unincorporated areas and not land use classifications.
Blue Dashed Line is the Supervisorial District Boundary.

### KEY MAP:




*Current as of: July 8, 2014*

*LOS ANGELES COUNTY*
*Department of Regional Planning*
*320 W. Temple St.*
*Los Angeles, CA 90012*

Scale in Feet
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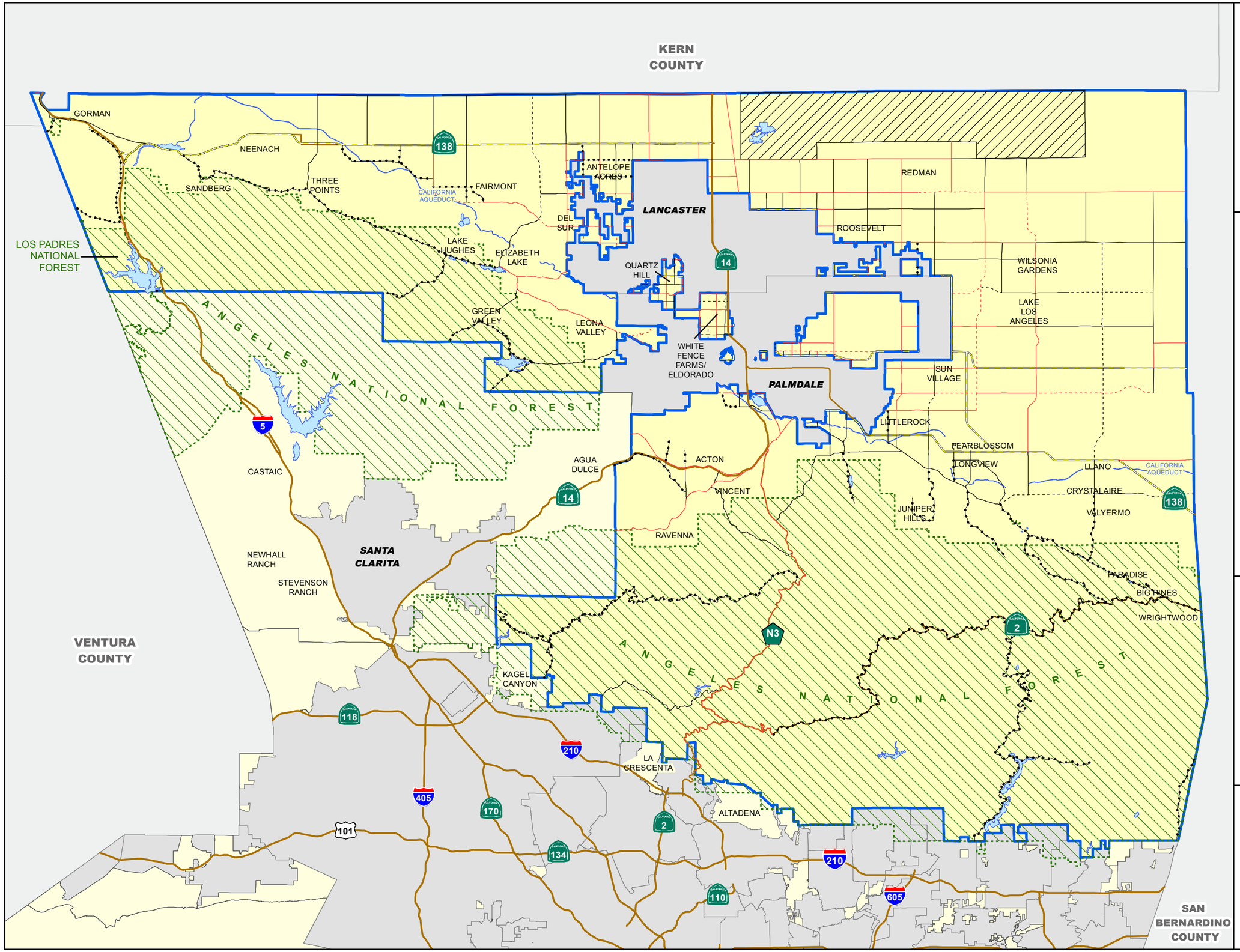


**COUNTY OF LOS ANGELES**

## Town and Country Planning Area

## Specific Highway Plan

**Figure _____**

**LEGEND:**

- Major Highway - Existing
- Major Highway - Proposed
- Secondary Highway - Existing
- Secondary Highway - Proposed
- Limited Secondary Highway - Existing
- Limited Secondary Highway - Proposed
- Parkway - Existing
- Parkway - Proposed
- Expressway - Existing
- Expressway - Proposed
- Planning Area
- Incorporated Cities
- Other Unincorporated Area
- Edwards Air Force Base
- Lakes and Reservoirs
- National Forest

**Note:** This map is a component of the Los Angeles County Antelope Valley Area Plan Update Program (Town & Country).

Information within cities is for reference only.

**LOS ANGELES COUNTY**
**Department of Regional Planning**
**320 W. Temple St.**
**Los Angeles, CA 90012**

**VICINITY MAP:**

**Current as of: 7/10/14**

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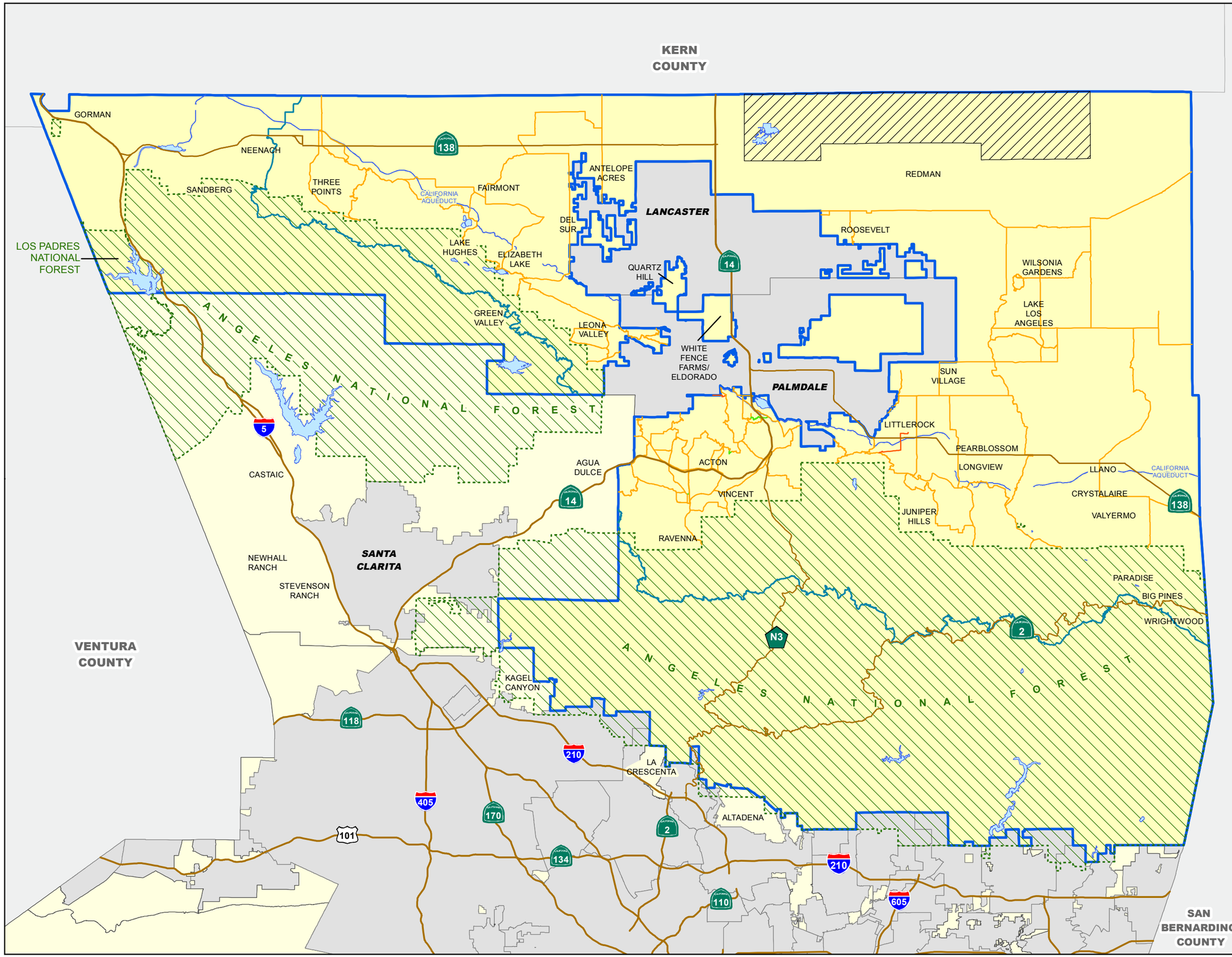


**COUNTY OF LOS ANGELES**

## Town and Country Planning Area

## Specific Trails Map

**Figure _____**

**LEGEND:**

- Existing County Trail*
- Proposed County Trail (from adopted 2007 Trails Map)*
- Pacific Crest Trail*
- Proposed County Trail*
- Planning Area
- Incorporated Cities
- Other Unincorporated Area
- Edwards Air Force Base
- Lakes and Reservoirs
- National Forest

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**Department of Regional Planning**
**320 W. Temple St.**
**Los Angeles, CA 90012**


**VICINITY MAP:**

**Current as of: 7/10/14**

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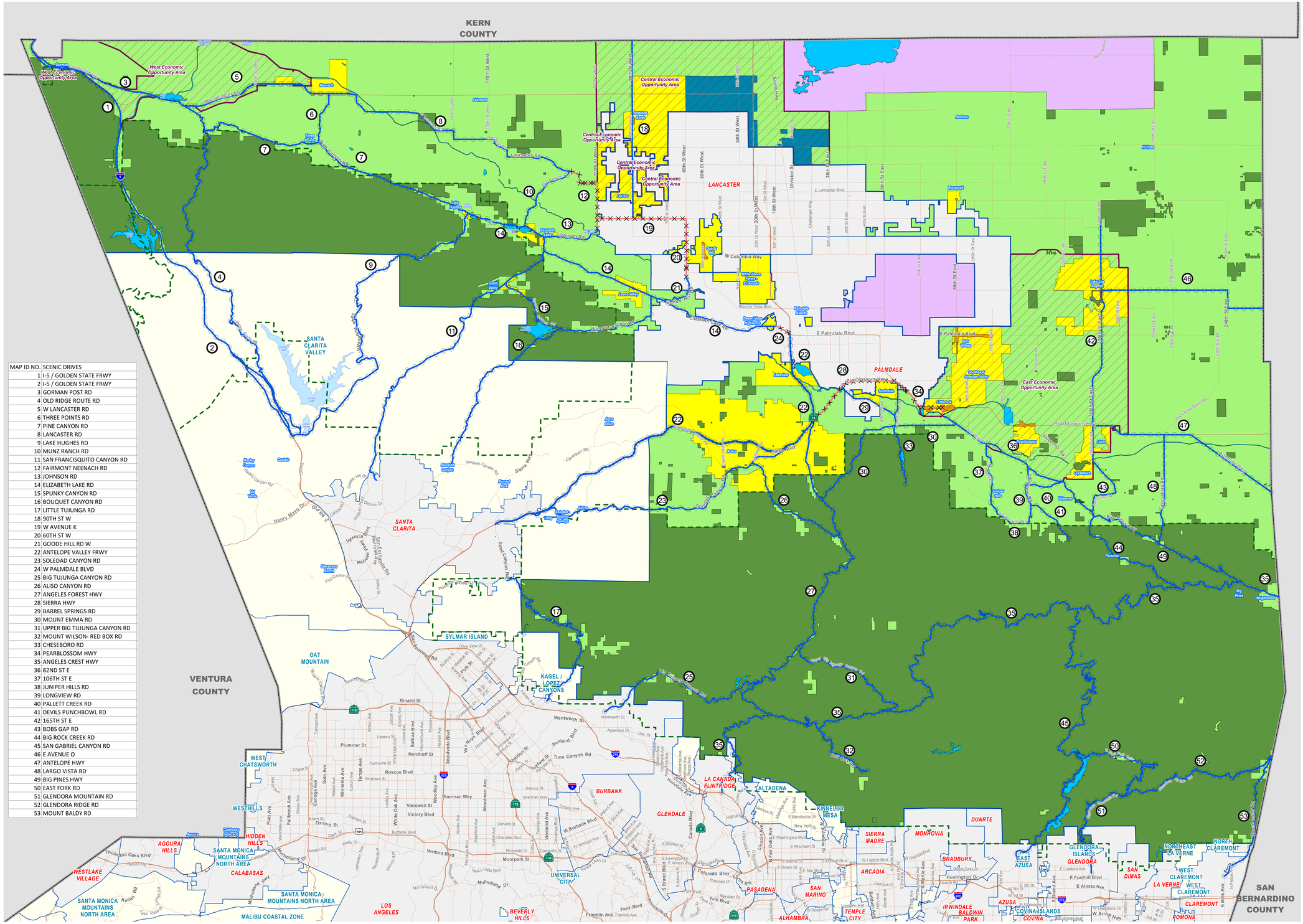
# Los Angeles County

# Town and Country Scenic Drives Map




| MAP ID NO. | SCENIC DRIVES |
|---|---|
| 1 | I-5 / GOLDEN STATE FRWY |
| 2 | I-5 / GOLDEN STATE FRWY |
| 3 | GORMAN POST RD |
| 4 | OLD RIDGE ROUTE RD |
| 5 | W LANCASTER RD |
| 6 | THREE POINTS RD |
| 7 | PINE CANYON RD |
| 8 | LANCASTER RD |
| 9 | LAKE HUGHES RD |
| 10 | MUNZ RANCH RD |
| 11 | SAN FRANCISQUITO CANYON RD |
| 12 | FAIRMONT NEENACH RD |
| 13 | JOHNSON RD |
| 14 | ELIZABETH LAKE RD |
| 15 | SPUNKY CANYON RD |
| 16 | BOUQUET CANYON RD |
| 17 | LITTLE TUJUNGA RD |
| 18 | 90TH ST W |
| 19 | W AVENUE K |
| 20 | 60TH ST W |
| 21 | GOODE HILL RD W |
| 22 | ANTELOPE VALLEY FRWY |
| 23 | SOLEDAD CANYON RD |
| 24 | W PALMDALE BLVD |
| 25 | BIG TUJUNGA CANYON RD |
| 26 | ALISO CANYON RD |
| 27 | ANGELES FOREST HWY |
| 28 | SIERRA HWY |
| 29 | BARREL SPRINGS RD |
| 30 | MOUNT EMMA RD |
| 31 | UPPER BIG TUJUNGA CANYON RD |
| 32 | MOUNT WILSON- RED BOX RD |
| 33 | CHESEBORO RD |
| 34 | PEARBLOSSOM HWY |
| 35 | ANGELES CREST HWY |
| 36 | 82ND ST E |
| 37 | 106TH ST E |
| 38 | JUNIPER HILLS RD |
| 39 | LONGVIEW RD |
| 40 | PALLETT CREEK RD |
| 41 | DEVILS PUNCHBOWL RD |
| 42 | 165TH ST E |
| 43 | BOBS GAP RD |
| 44 | BIG ROCK CREEK RD |
| 45 | SAN GABRIEL CANYON RD |
| 46 | E AVENUE O |
| 47 | ANTELOPE HWY |
| 48 | LARGO VISTA RD |
| 49 | BIG PINES HWY |
| 50 | EAST FORK RD |
| 51 | GLENDORA MOUNTAIN RD |
| 52 | GLENDORA RIDGE RD |
| 53 | MOUNT BALDY RD |

## LEGEND:

- Priority Scenic Drives
- Removed from Scenic Route List

### Rural Preservation Areas

- Rural Town Areas
- Rural Town Center
- Employment Protection District
- Rural Preserve Areas
- Aviation
- Open Space - National Forest, Parks, Conservation, BLM
- Open Space - Water

### Base Layers

- Freeways and Highways
- Primary, Secondary, and Minor Streets
- Antelope Valley Boundary
- Economic Opportunity Areas
- City / Unincorporated Community Boundary
- National Forest
- County Boundaries

**NOTES:**
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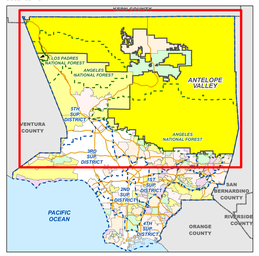
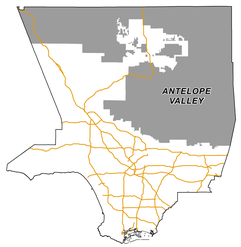
## VICINITY MAP:




NOTE: Colors denote incorporated cities and unincorporated areas and not land use classifications.
Blue Dashed Line is the Supervisorial District Boundary.

## KEY MAP:




*Current as of: July 8, 2014*


*LOS ANGELES COUNTY*
*Department of Regional Planning*
*320 W. Temple St.*
*Los Angeles, CA 90012*


Scale in Feet
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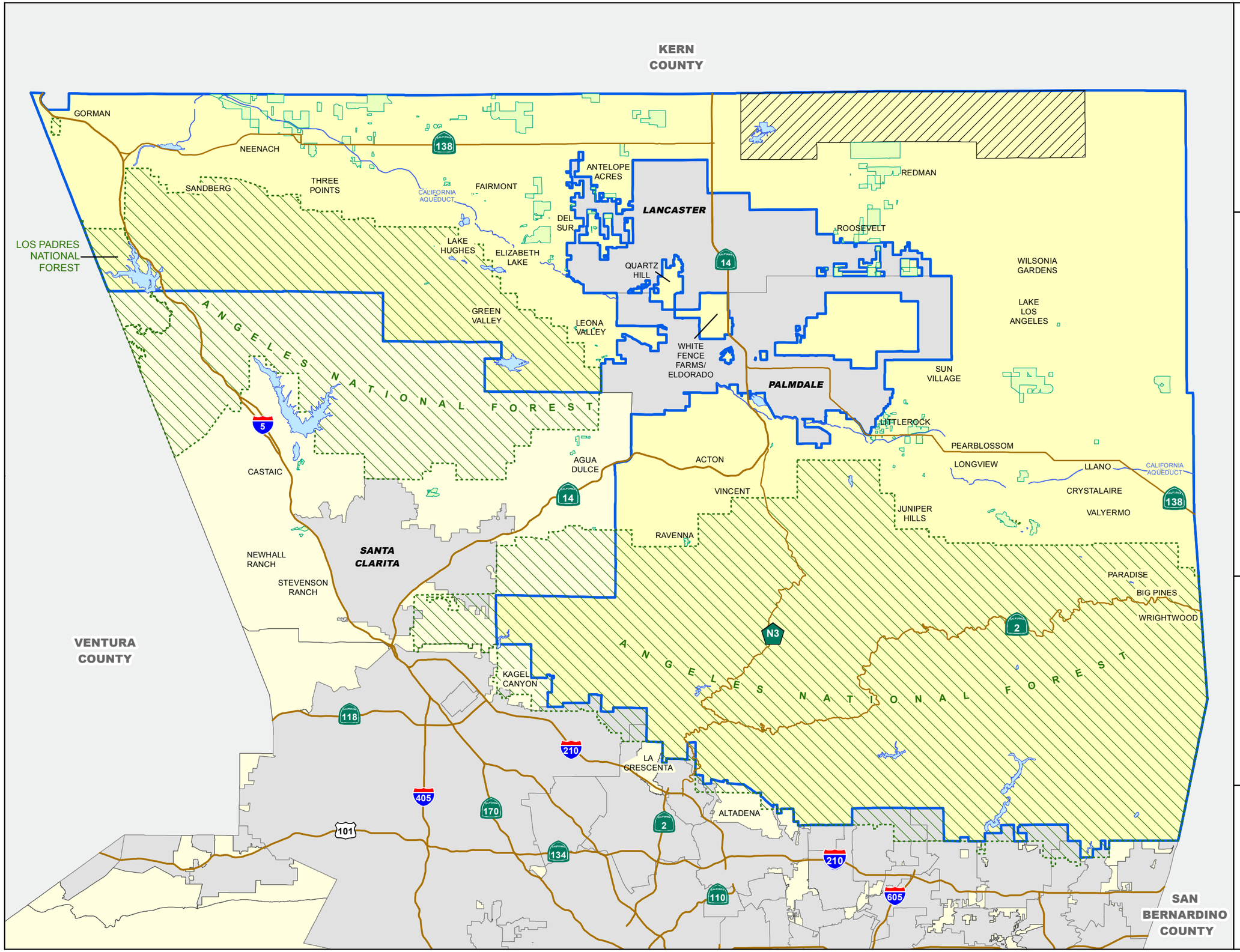


*COUNTY OF LOS ANGELES*

## *Town and Country Planning Area*

## *Agricultural Resource Area*

*Figure _____*

*LEGEND:*

- *Agricultural Resource Area*
- *Planning Area*
- *Incorporated Cities*
- *Other Unincorporated Area*
- *Edwards Air Force Base*
- *Lakes and Reservoirs*
- *National Forest*

**Note:** This map is a component of the Los Angeles County Antelope Valley Area Plan Update Program (Town & Country).

Information within cities is for reference only.


***LOS ANGELES COUNTY***
***Department of Regional Planning***
***320 W. Temple St.***
***Los Angeles, CA 90012***


*VICINITY MAP:*

*Current as of: 7/10/14*

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# Appendix D Proposed Ordinance Amendments

# Appendices

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**ORDINANCE NO. _____**

An ordinance amending Title 22 ï Planning and Zoning ï of the Los Angeles County Code to allow zip lines and museums in Zone C-R, add regulations concerning the applicability of zone changes and amendments as well as development applications that are pending at the time of adoption of the 2014 Antelope Valley Area Plan Update zoning consistency program, and to modify when a conditional use permit is required within Significant Ecological Areas.

**SECTION 1.** Section 22.08.250 is hereby added to read as follows:

22.08.250 Z.

- ñZip-lineò means a ride where a cable is suspended above an incline to which a pulley and harness are attached to a rider.

**SECTION 2.** Section 22.16.225 is hereby added to read as follows:

22.16.225 Applicability of zone changes and amendments.

A. Effective Date. Zone changes and amendments shall be effective 30 calendar days after the date that the ordinance is adopted by the Board of Supervisors unless otherwise specified in this Title 22.

B. 2014 Antelope Valley Area Plan Update -- Pending Applications. If a zone change or zone amendment is the result of the zoning consistency program of the 2014 Antelope Valley Area Plan Update, the following provisions shall apply to complete applications filed prior to the effective date:

1. The applicant may choose whether the application will be reviewed for compliance with the previous zone and previous regulations or with the changed zone and amended regulations that are the result of the zoning consistency

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program of the 2014 Antelope Valley Area Plan Update. In either case, approval of the application is not guaranteed.

2. If an application is reviewed for compliance with the previous zone and previous regulations, the applicant may modify the application prior to consideration by the Commission, Hearing Officer, or Director. The modification may necessitate the submittal of revised, updated, or additional materials and reports, such as site plans, elevations, oak tree reports, etc. The modification will be reviewed for compliance with the previous zone and previous regulations if it does not change the housing type (e.g. from single-family to two-family or multi-family) nor increase:

a. The residential density;

b. The floor area or lot coverage of non-residential space;

c. The amount of grading; or

d. The area of ground disturbance.

3. Modification to an application that is already approved but not used may be reviewed for compliance with the previous zone and previous regulations if it qualifies to be reviewed as a Revised Exhibit ñAò or an amended site plan. Otherwise, a modification shall be considered a new application and shall be reviewed for compliance with the changed zone and amended regulations that are the result of the zoning consistency program of the 2014 Antelope Valley Area Plan Update.

4. If an approval is used and has a grant term, the approved use may be maintained until the end of the grant term. At the end of the grant term, the use shall be subject to the provisions of Title 22 in effect at that time. During the grant

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term, a modification to the approved use will be reviewed for compliance with the previous zone and previous regulations if it qualifies to be reviewed as a Revised Exhibit ñAò or an amended site plan. Otherwise, a modification to the approved use shall be subject to the provisions of Title 22 in effect at that time.

5. If an approval is used and does not have a grant term, the approved use may be maintained in perpetuity unless a time limit is specified by Section 22.56.1540. In addition, all applicable provisions in Part 10 of Chapter 22.56 shall apply to the approved use. A modification to the approved use will be reviewed for compliance with the previous zone and previous regulations if it qualifies to be reviewed as a Revised Exhibit ñAò or an amended site plan. Otherwise, a modification to the approved use shall be subject to Part 10 of Chapter 22.56 and all other relevant provisions of Title 22 in effect at that time.

**SECTION 3.** Section 22.28.290 is hereby amended to read as follows:

A. Premises in Zone C-R may be used for:

é

2. Recreation and Amusement.

- Amusement rides and devices, including merry-go-rounds, ferris wheels, swings, toboggans, slides, rebound-tumbling, <u>zip-lines,</u> and similar equipment operated at one particular location not longer than seven days in any six-month period.

é

- Miniature golf courses.

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- Museums.

- Parks, playgrounds and beaches, with all appurtenant facilities customarily found in conjunction therewith.

é

**SECTION 4.** Section 22.28.320 is hereby amended to read as follows:

22.28.320 Uses Subject to Permits. Premises may be used for:

A. The following uses, provided a conditional use permit has first been obtained as provided in Part 1 of Chapter 22.56, and while such permit is in full force and effect in conformity with the conditions of such permit for:

- é

- Amusement rides and devices, including merry-go-rounds, ferris wheels, swings, toboggans, slides, rebound-tumbling, zip-lines, and similar equipment for longer than seven days.

- é

**SECTION 5.** Section 22.56.215 is hereby amended to read as follows:

22.56.215 Hillside Management and Significant Ecological Areas ï Additional Regulations.

A.

1. Permit Required. Except as specified in subsection C, prior to the issuance of any building or grading permits, the relocation of two or more property lines between three or more contiguous parcels in a coordinated effort as determined by the Director ~~of Planning~~ regardless of the ownership of the involved parcels and regardless of whether the relocations are applied for concurrently or through multiple successive

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applications, approval of a minor land division or subdivision, or the commencement of any construction or enlargement of any building or structure on a lot or parcel which is in or partly in an area designated in the County General Plan and related maps as a significant ecological area or within a hillside management area as specified herein, a conditional use permit shall be applied for and approved as provided by this ~~s~~Section.

é

3. A conditional use permit is required in significant ecological areas when:

a. The property contains an area designated in the County General Plan and related maps as a significant ecological area as adopted on or after January 1, 2012, and the portion of a lot or parcel within such area, is proposed to be developed; or

b. The property contains an area designated in the County General Plan and related maps as a significant ecological area as adopted prior to January 1, 2012, and any portion of a lot or parcel which is in or partly in such area, is proposed to be developed.

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**SECTION 1.** Part 9 of Chapter 22.28 is hereby added to read as follows:

**C R R RA CO ERCIA ONE**

**S**

22.28.350 Purpose.

22.28.360 Permitted Uses.

22.28.370 Accessory Uses.

22.28.380 Uses Subject to Director's Review and Approval.

22.28.390 Uses Subject to Permits.

22.28.400 Development Standards.

**22.2 .35 .** The Rural Commercial Zone (C-RU) is established to implement the CR (Rural Commercial) land use designation in areas of the County mapped in the General Plan. The zone provides for an appropriate mix of a limited range of commercial uses that are compatible with rural, agricultural, and low-density residential uses. The zone regulates both the type and intensity of development in order to protect natural resources, promote economic self-sufficiency, maintain compatibility, with surrounding Residential and Agricultural Zones, and preserve the rural character of the community.

**22.2 .3 .** Except as provided in Section 22.28.390.B below premises in Zone C-RU may be used for:

A. The following commercial uses:

1. Sales.

- Antique shops, genuine antiques only.
- Appliance stores, household.
- Art galleries.
- Art supply stores.
- Automobile supply stores, including incidental installation of parts, subject to the provisions of Subsection B of Section 22.28.380.
- Automobile sales, sale of new and used motor vehicles.
- Bait and tackle shops.
- Bakery shops, including baking only when incidental to retail sales from the premises.
- Bicycle shops.
- Boat and other marine sales.
- Bookstores.
- Ceramic shops, excluding a kiln or manufacture.
- Clothing stores.
- Confectionery or candy stores, including making only when incidental to retail sales from the premises.
- Delicatessens.
- Dress shops.
- Drugstores.
- Farm equipment – Storage, sales and rental.
- Feed and grain sales.

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- Fine arts galleries.
- Firewood, sale of, including the incidental cutting of firewood to size.
- Florist shops.
- Fruit and vegetable markets.
- Furniture stores.
- Furrier shops.
- Gift shops.
- Glass and mirror sales, including automobile glass installation only when conducted within an enclosed building.
- Grocery stores.
- Hardware stores, including the sale of lumber and other building materials and supplies, but excluding milling or woodworking other than incidental cutting of lumber to size.
- Health food stores.
- Hobby supply stores.
- Ice cream shops.
- Ice sales, excluding ice plants.
- Jewelry stores.
- Lapidary shops.
- Leather goods stores.
- Meat markets, excluding slaughtering.
- Millinery shops.

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- Mobilehome sales.
- Motorcycle, motorscooter and trail bike sales.
- Music stores.
- Newstands.
- Notion or novelty stores.
- Office machines and equipment sales.
- Paint and wallpaper stores.
- Pet supply stores, excluding the sale of pets other than tropical fish or goldfish.
- Photographic equipment and supply stores.
- Radio and television stores.
- Recreational vehicle sales.
- Retail stores.
- Secondhand stores.
- Shoe stores.
- Silver shops.
- Souvenir shops.
- Sporting goods stores.
- Stationery stores.
- Tobacco shops.
- Toy stores.

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- Yarn and yardage stores.

2. Services.

- Air pollution sampling stations.
- Arboretums and horticultural gardens.
- Ambulance emergency service facilities.
- Automobile battery service.
- Automobile brake repair shops.
- Automobile muffler shops.
- Automobile repair garages, excluding body and fender work, painting and upholstering.
- Automobile service stations, including oil and lube, incidental repair, washing, and rental of utility trailers subject to the provisions of Section 22.28.380.
- Automobile radiator shops.
- Automobile rental and leasing agencies.
- Banks, savings and loans, credit unions and finance companies.
- Barber shops.
- Beauty shops.
- Bicycle and motor scooter rentals.
- Blueprint shops.
- Boat rentals.
- Book binderies.

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- Butane and propane service stations.
- Carpet and rug cleaners.
- Catering services.
- Catalog and internet order businesses.
- Child day care centers.
- Churches, temples, and other places used exclusively for religious worship.
- Comfort stations.
- Communication equipment buildings.
- Community centers.
- Costume rentals.
- Dental clinics, including laboratories in conjunction therewith.
- Dry cleaning establishments, excluding wholesale dry cleaning plants, provided that the building is so constructed and the equipment is so installed and maintained and the activity is so conducted that all noise, vibration, dust, odor and all other objectionable factors will be confined or reduced to the extent that no annoyance or injury will result to persons or property in the vicinity.
- Earth stations.
- Electric distribution substations including microwave facilities, provided:

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a. That all such installations are completely surrounded by a masonry wall to a height of not less than eight feet. The Director may approve the substitution of a chain-link or other industrial-type fence with screen planting where he deems it appropriate. All such substitutions shall be subject to the provisions of Part 12 of Chapter 22.56 on the director's review; and

b. That the area between the fence or wall and the property line is landscaped and maintained while such use exists.

– Electrician's shops.

– Employment agencies.

– Family child care homes, large.

– Family child care homes, small.

– Fire stations.

– First aid stations.

– Foster family homes.

– Furniture and appliance rentals.

– Furniture and household goods, transfer and storage.

– Gas metering and control stations.

– Grange halls.

– Hospital equipment and supply rentals.

– Interior decorating studios.

– Laundries, self service.

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- Libraries.
- Locksmith shops.
- Lodge halls.
- Medical clinics, including laboratories in conjunction therewith.
- Microwave stations.
- Motorcycle, motorscooter and trail bike rentals.
- Offices, business or professional.
- Packaging businesses.
- Party equipment rentals.
- Pet grooming, excluding boarding.
- Photocopying and duplicating services.
- Photoengravers and lithographers.
- Photography studios.
- Picture mounting and framing.
- Plumbing shops and plumbing contractor’s shops.
- Police stations.
- Post offices.
- Printers or publishers.
- Public utility service centers.
- Real estate offices.
- Recreational equipment rentals.

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- Recreational vehicle rentals.
- Repair shops, household and fix-it.
- Restaurants and other eating establishments including food take-out and outdoor dining.
- Reupholsters, furniture.
- Schools, through grade 12, accredited, including appurtenant facilities, which offer instruction required to be taught in the public schools by the state of California, but excluding trade schools.
- Schools, business and professional, including art, barber, beauty, dance, drama and music, but not including any school specializing in manual training, shop work, or in the repair and maintenance of machinery or mechanical equipment.
- Shoe repair shops.
- Shoeshine stands.
- Sightseeing agencies.
- Tailor shops.
- Taxidermists.
- Telephone repeater stations.
- Tool rentals, including rototillers, power mowers, sanders and saws, cement mixers and other equipment, but excluding heavy machinery or trucks exceeding two tons' capacity.
- Tourist information centers.

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- Truck rentals, excluding trucks exceeding two tons' capacity, provided:
  a. That a specific parking area for fleet trucks is designated and located to the rear or the side of the lot, separated from the customer parking areas,
  b. That a customer drop-off parking area shall be designated in front of the lot and shall be clearly marked for customer drop off parking.
- Union halls.
- Veterinary clinics, small animal.
- Watch repair shops.

3. Recreation and amusement.

- Amusement rides and devices, operated at one particular location not longer than seven days in any six-month period.
- Athletic fields, excluding stadiums.
- Gymnasiums.
- Parks, playgrounds and beaches, with all appurtenant facilities.
- Riding and hiking trails, excluding trails for motor vehicles.

4. Agricultural uses.

- Crops--Field, tree, bush, berry and row, including the growing of nursery stock.
- Greenhouses.
- Nurseries, including the growing of nursery stock.

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5. Residential uses.

– Farm worker dwelling units, subject to the applicable provisions of Part 24 of Chapter 22.52.

– Farm worker housing complexes, subject to the applicable provisions of Part 24 of Chapter 22.52.

– Single family residences, limited to one on a lot with a gross area of not less than one acre in conjunction with a commercial use listed in Subsections A.1 and A.2 of this Section, provided that the commercial use is legally established on the same lot. The residence shall be subject to the provisions of Sections 22.20.105 (Development Standards for Single Family Residences), 22.20.110 (Height limits) and 22.20.130 (Parking). The residence shall not be located in the setback areas provided in Section 22.20.120 (Yard Requirements). These provisions shall not apply to commercial developments on the same lot.

**22.2 .3 A .** Premises in Zone C-RU may be used for the following accessory uses:

– Accessory buildings and structures.

– Automobile repair and parts installation incidental to the automobile service stations and automobile supply stores, provided:

1. That such automobile repair activities do not include body and fender work, painting, major engine overhaul, or transmission repair;

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2. That all repair and installation activities are conducted within an enclosed building only;
3. That a masonry wall is established and maintained along an abutting boundary with property in a Residential or Agricultural Zone, as if the area was developed for parking pursuant to Section 22.52.1060;
4. That all repair or installation activities are confined to the hours between 7:00 a.m. and 9:00 p.m. daily; and
5. That no automobile awaiting repair or installation service shall be parked or stored for a period exceeding 24 hours except within an enclosed building.

– Automobile washing, waxing, and polishing, accessory only to the sale of new automobiles, automobile service stations, and automobile supply stores.
– Boats, minor repair of, incidental to the sale of boats, provided all operations, other than the storage of boats held for sale, are conducted within an enclosed building.
– Building materials, storage of, used in the construction of a building or building project, during the construction and 30 days thereafter, including the contractor's temporary office, provided that any lot so used shall be part of the building project or on property adjoining the construction site.
– Cargo shipping containers, limited to one.
– Home-based occupations, subject to the limitations, standards and conditions contained in Section 22.20.020.
– Processing, small scale accessory to agriculture.

- Rental, leasing and repair of articles sold on the premises, incidental to retail sales.
- Rooms in a single-family residence, where permitted, may be rented to four or fewer residents, with or without table board, unless the residence is also used as an adult residential facility or a group home for children and either use has a capacity of more than six persons.
- Signs, as provided in Part 10 of Chapter 22.52.
- Used merchandise, retail sale of, taken as trade-in on the sale of new merchandise when such new merchandise is sold from the premises.

**22.2 .3 S D R A .** If site plans are first submitted to and approved by the Director pursuant to Part 12 of Chapter 22.56 premises in Zone C-RU may be used for:

- Access to property lawfully used for a purpose not permitted in Zone C-RU where such access will not alter the character of the premises in respect to permitted uses in Zone C-RU.
- Christmas trees and wreaths, the sale of, between December 1st and December 25th, both dates inclusive, to the extent permitted by other statutory and ordinance provisions. Any structures, facilities and materials used for the sale of trees and wreaths shall be removed from the premises by December 31st of the same calendar year, and the property restored to a neat condition.
- Circuses and animal exhibitions.

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- Domestic violence shelters, subject to the requirements of Section 22.56.1758.
- Grading projects, off-site transport, where no more than 100,000 cubic yards of materials is to be transported, subject to the standards and limitations specified in Sections 22.56.1710, 22.56.1752 and 22.56.1753.
- Homeless shelters, subject to the requirements of Section 22.56.1760.
- Joint live and work units, subject to the requirements of Section 22.56.1754.
- Live entertainment, accessory, in a legally established bar, cocktail lounge or restaurant having an occupant load of less than 200 people, where in full compliance with the conditions of Section 22.56.1754.
- Meteorological towers, temporary, in conformance with the standards and requirements specified in Part 15 of Chapter 22.52.
- Model home display centers and sales offices.
- Signs, as provided in Part 10 of Chapter 22.52.

**22.2 .3 S .**

**A.** Premises in Zone C-RU may be used for the following uses, provided that a conditional use permit has first be obtained as provided in Part 1 of Chapter 22.56, and while such permit is full force and effect in conformity with the conditions of such permit:

- Adult day care facilities.
- Airports.
- Alcoholic beverages, the sale of.

- Ambulance service facilities.
- Amphitheaters.
- Amusement rides and devices, including merry-go-rounds, Ferris wheels, swings, toboggans, slides, rebound-tumbling and similar equipment operated at one particular location for longer than seven days.
- Arcades, game or movie.
- Archery ranges.
- Assaying.
- Auction houses.
- Automobile body and fender repair shops.
- Automobile painting and upholstering shops.
- Bars and cocktail lounges, but excluding cabarets.
- Beer and wine, the concurrent sale of, with motor vehicle fuel, subject to the requirements of Sections 22.56.195 and 22.56.245.
- Billiard halls.
- Body piercing parlors.
- Bowling alleys.
- Bus or freight terminals.
- Cabins.
- Car washes, automatic, coin-operated and hand wash.
- Cardrooms or clubs.
- Cargo shipping containers, in excess of one.

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- Carnivals, commercial, including pony rides, for longer than seven days.
- Colleges and universities, including appurtenant facilities, giving advanced academic instruction approved by the State Board of Education or other recognized accrediting agencies, but excluding trade schools.
- Convents and monasteries.
- Dance halls.
- Dance pavilions, outdoor.
- Dog training schools.
- Drive-through services.
- Foster family homes.
- Games of skill.
- Golf courses, including customary clubhouse and appurtenant facilities.
- Golf driving ranges.
- Grading projects, off-site transport, where more than 100,000 cubic yards of material is to be transported, subject to the conditions and limitations of Sections 22.56.210 and 22.56.230.
- Grading projects, on-site, but excluding projects where the Director has previously considered such grading proposal as indicated by approval of an environmental document incorporating consideration of such grading project.
- Health clubs or centers.
- Helistops.
- Heliports.

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- Hospitals.
- Hospitals, small animal.
- Hotels.
- Live entertainment not in conformance with the requirements of Section 22.56.1754.
- Massage parlors.
- Menageries, zoos, animal exhibitions, or other facilities for the keeping or maintaining of wild animals, except as otherwise provided in Section 22.24.160.
- Miniature golf courses.
- Mobilehome parks, as provided in Part 6 of Chapter 22.52.
- Motion picture processing, reconstruction and synchronizing of film with soundtracks.
- Motor recreational facilities.
- Mortuaries.
- Motels.
- Museums.
- Nightclubs.
- Observatories.
- Oil wells.
- Outdoor dining, where the conditions of 22.28.070.G have not or cannot be met.

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- Pawnshops.
- Permanent cosmetics parlor.
- Pipeline or transmission line.
- Pool halls.
- Public utility service yards.
- Publicly owned uses necessary for the maintenance of public health, convenience, or general welfare in addition to those uses listed in this section.
- Racetracks.
- Recording studios.
- Recreation clubs, commercial, including tennis, polo, swimming and similar outdoor recreational activities, together with appurtenant clubhouse.
- Residences, caretaker, for use by a caretaker or supervisor and his immediate family where continuous supervision is required.
- Riding academies and stables, including boarding.
- Rifle, pistol or skeet ranges.
- Rodeos, excluding horse racing.
- Rooming and boarding houses.
- Schools, trade and manual training, including shop work, repair and maintenance of machinery or mechanical equipment.
- Shooting galleries.
- Skating rinks, ice or roller.
- Ski lifts, tows, runs and warming huts.

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- Stations, bus, railroad, and taxi.
- Steam or sauna baths.
- Swap meets.
- Tasting rooms, remote, subject to the applicable provisions of Part 23 of Chapter 22.52.
- Tattoo parlors.
- Tennis, volleyball, badminton, croquet, lawn bowling and similar courts.
- Theaters and other auditoriums.
- Tire retreading or recapping.
- Travel trailer parks, as provided in Part 6 of Chapter 22.52.
- Wedding chapels.
- Youth hostels.

B. Any use listed in Section 22.28.360 that would generate vehicular traffic as to require the provision of new or additional traffic lights shall be subject to a conditional use permit.

C. The following uses, provided that the specified permit has first been obtained, and while such permit is in full force and effect in conformity with the conditions of such permit for:

- Rehabilitation facilities for small wild animals, as provided in Part 3 of Chapter 22.56.
- Temporary uses as provided in Part 14 of Chapter 22.56.

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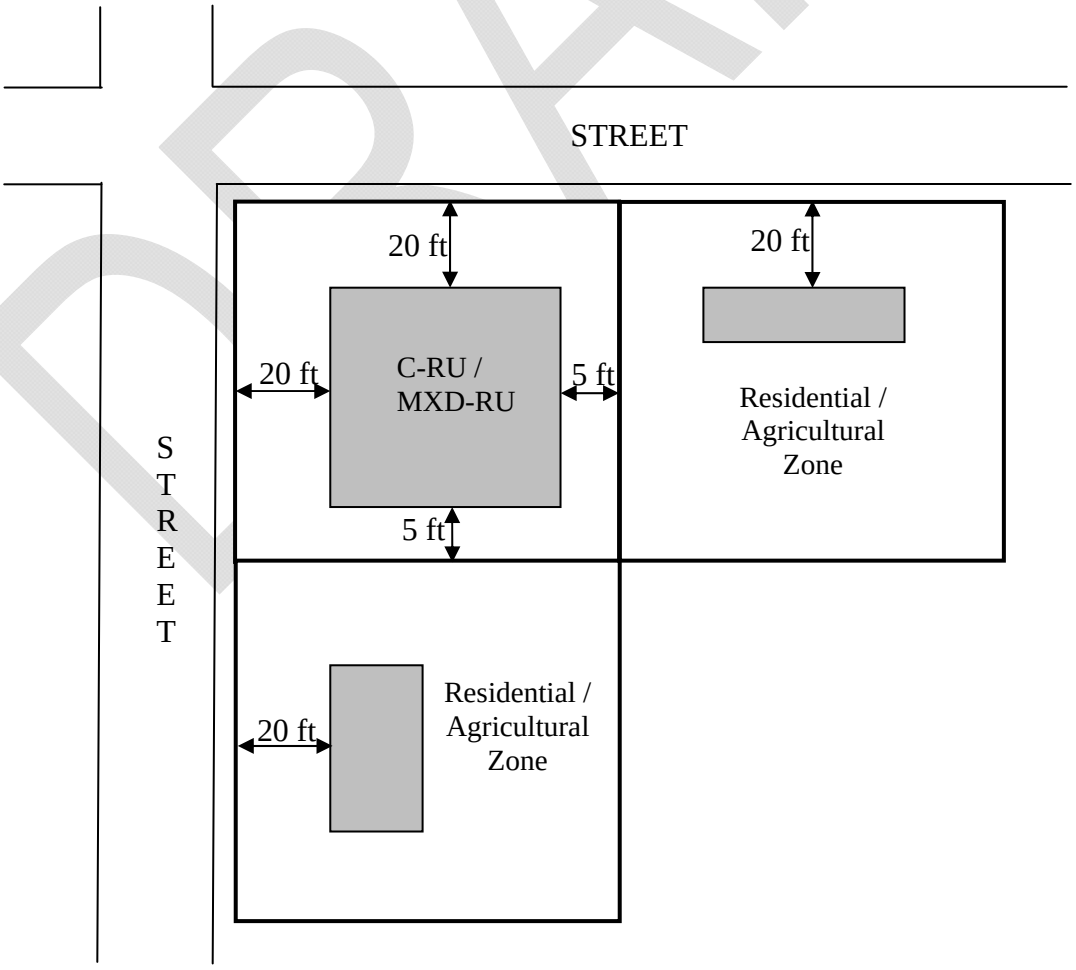
**22.2 .4 D S .** Premises in Zone C-RU shall be subject to the following development standards:

A. Minimum yards.

1. Minimum front or corner side yards shall be equal to the front yard required on any contiguous Residential or Agricultural Zone where the property adjoins a street.

2. Properties adjoining a Residential or Agricultural zone shall have a minimum side or rear yard of five feet from the lot line adjoining the Residential or Agricultural Zone.

3. Any required yards shall also be subject to the general provisions and exceptions contained in Chapter 22.48, as specified.

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B. Maximum Floor Area (FAR) ratio. The maximum commercial FAR shall be 0.5.

C. Maximum height. The maximum building height shall be 35 feet above grade, excluding signs which are permitted by Part 10 of Chapter 22.52, chimneys, and rooftop antennas, except as otherwise provided by an applicable Community Standards District.

D. Maximum lot coverage. The gross area occupied by buildings shall not exceed 50 percent of net lot area;

E. Minimum landscaped area.

1. Required landscaping. A minimum of 10 percent of the net lot area devoted to commercial use, including parking and other appurtenant uses, shall be landscaped with drought-tolerant landscaping and hardscaping, which shall be continuously maintained in good condition. Incidental walkways may be developed in the landscaped area.

F. Parking requirements. Bicycle and vehicle parking facilities shall be provided as required by Part 11 of Chapter 22.52, except as amended by this Subsection F. In addition, all vehicle parking facilities shall have the following requirements:

1. Parking areas shall be set back a minimum of five feet from any adjacent Residential or Agricultural Zone. The setback area shall be landscaped with at least one 24-inch box tree for every 20 linear feet of street frontage.

2. Parking spaces shall be used only by visitors, customers, owners or tenants of a legally established use on the premises.

3. Vehicles shall not be parked in the required parking spaces on the premises for more than 24 hours.

4. Parking spaces for recreational vehicles and trailers and semi-trucks shall be designed as pull-through parking spaces.

5. Different types of parking spaces shall not be placed within the same row.

a. Driveways for recreational vehicles and semi-trucks shall be separate from driveways for passenger vehicles wherever feasible. However, if a shared driveway is to be used where large vehicles would cross into identified pedestrian walkways, pavement markers, paint schemes or signs shall be used to indicate caution that pedestrians may be in the area.

7. Adequate turning spaces shall be provided on site so that vehicles shall enter into and exit out of the parking lot head first.

8. All requirements for ingress and egress to public rights of way shall be designed to the satisfaction of the Department of Public Works.

9. For ambulance emergency services facilities, no more than two ambulances may be on site at any one time and a designated parking space shall be provided for each ambulance on site.

G. Vehicle Parking Incentives. A maximum of 40 percent of the total required vehicle parking spaces may be converted to Large Vehicle, Recreational Vehicle and Trailer, and Semi-truck parking spaces, in any combination thereof, in accordance with the following provisions:

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1. The parking spaces shall be developed with the minimum dimensions specified below and shall count towards compliance with the required number of parking spaces equivalent to the number of standard parking spaces specified in the table below:

| Parking Type | Minimum Dimensions (based on a 90 degree angle | Equivalent in Counting Towards Required Parking Spaces |
|---|---|---|
| Large Vehicles (Classes 2 through 6, based on Gross Vehicle Weight Rating) | 13 x 23 ft | 2 standard parking spaces |
| Recreational Vehicles and Trailers | 13 x 50 ft | 4 standard parking spaces |
| Semi-trucks | 13 x 70 ft | 5 standard parking spaces |

2. Incentives for semi-truck parking spaces shall be applied only in Special Parking Districts identified by the local Area Plan.

1. If the parking incentives listed in subsection G.1, above, are requested, then any compact parking spaces pursuant to Section 22.52.1082 shall be prohibited.

H. Screening. All mechanical equipment, trash containers, and dumpsters shall be completely screened from view from adjacent streets, walkways, and residences through the use of walls and/or landscaping. Standards for trash and recycling containers shall be in conformance with Subsection C of Section 22.52.1930.

I. Storage.

1. Outside storage. Outdoor storage is permitted on the rear of a lot when such storage is strictly incidental to the permitted use on the same lot. Any outside area used for storage shall be completely enclosed by a solid masonry wall and solid gate, not less than five feet nor more than six feet in height, except that the

Director may approve the substitution of a fence or decorative wall that will adequately comply with the provisions of this section. All such requests for substitution shall be subject to the provisions of Part 12 of Chapter 22.56.

2. Cargo shipping containers. One cargo shipping container not exceeding 10 feet in height, 10 feet in width, and 40 feet in length, may be used for storage, provided that the cargo shipping container shall:

a. Be incidental to a permitted primary use on the same lot;

b. Be placed at least six feet from a legally established primary structure;

c. Be painted one uniform color and the sides of containers shall not display images or lettering, except for signs providing safety information related to the contents stored within, if required by the County Code or other applicable regulations; and

d. Be maintained in compliance with the Building Code Manual of the Department of Public Works, including the issuance of a Miscellaneous Permit by Public Works.

e. Additional cargo shipping containers on the same lot shall require a conditional use permit per Section 22.28.400, and shall comply with Subsections I.2.a, b and c of this Section, above, and also the following:

i. The containers shall not be stacked on top of each other; and

ii. The containers shall be placed at least six feet apart from each other, unless otherwise indicated on an approved site plan.

J. Outside display. Except for the following uses, all display in Zone C-RU shall be located entirely within an enclosed building unless otherwise authorized by a temporary use permit, provided that no vehicle or equipment shall be stacked on top of another:

- Antique shops.
- Automobile sales and rentals.
- Automobile service stations.
- Boat and other marine vehicle sales and rentals.
- Carnivals, temporary.
- Ceramic shops.
- Crops--field, tree, bush, berry and row, including nursery stock.
- Electric distribution substations.
- Farm equipment – storage, sales and rentals.
- Feed and grain sales, up to a maximum of eight feet in height, provided that no product is displayed within 10 feet of all property lines.
- Firewood sales, up to a maximum of eight feet in height, provided that no product is displayed or stored within 10 feet of all property lines.
- Florist shops.
- Fruit and vegetable markets, displayed up to a maximum eight feet in height, provided that no product is displayed within 10 feet of all property lines.
- Gas metering and control stations, public utility.
- Mobilehome sales.

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- Motorcycle, motorscooter and trail bike sales and rentals.
- Newsstands.
- Recreational vehicles sales and rentals.
- Restaurants and other eating establishments, including food take-out, subject to the standards specified by Subsection G of Section 22.28.070.
- Truck rentals, excluding trucks exceeding two tons' capacity.

K. Signs. All sign regulations for Zone C-RU shall be the same as for Zone C-2 in Part 10 of Chapter 22.52 (Signs).

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**SECTION 1.** Part 11 of Chapter 22.40 is hereby added to read as follows:

**11**

**D R R RA I ED SE DE E O ENT ONE**

**S**

22.40.500 Purpose.

22.40.505 Permitted Uses.

22.40.510 Accessory Uses.

22.40.515 Uses Subject to Director's Review and Approval.

22.40.520 Uses Subject to Permits.

22.40.525 Development Standards.

**22.4 .5 .** The Rural Mixed Use Development Zone (MXD-RU) is established to implement the MU-R (Mixed Use-Rural) land use designation in areas of the County mapped in the General Plan. The zone provides for an appropriate mix of a limited range of commercial uses and low-density residential uses within town centers. The zone encourages development of projects that serve as social and economic focal points for town centers, while maintaining compatibility with surrounding Rural Commercial, Residential and Agricultural Zones.

**22.4 .5 5 .** Premises in Zone MXD-RU may be used for:

A. The following commercial uses:

1. Sales.

– Antique shops, genuine antiques only.

- Appliance stores, household.
- Art galleries.
- Art supply stores.
- Automobile sales, new and used.
- Automobile supply stores, with no installation of parts.
- Bait and tackle shops.
- Bakery shops, including baking only when incidental to retail sales from the premises.
- Bicycle shops.
- Boat and other marine sales.
- Bookstores.
- Ceramic shops, excluding a kiln or manufacture.
- Clothing stores.
- Confectionery or candy stores, including making only when incidental to retail sales from the premises.
- Delicatessens.
- Dress shops.
- Drugstores.
- Feed and grain sales.
- Fine arts galleries.
- Firewood, sale of, but excluding the incidental cutting of firewood to

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size.

- Florist shops.
- Fruit and vegetable markets.
- Furniture stores.
- Furrier shops.
- Gift shops.
- Glass and mirror sales, including automobile glass installation only when conducted within an enclosed building.
- Grocery stores.
- Hardware stores, including the sale of lumber and other building materials and supplies but excluding milling or woodworking other than incidental cutting of lumber to size.
- Health food stores.
- Hobby supply stores.
- Ice cream shops.
- Ice sales, excluding ice plants.
- Jewelry stores.
- Lapidary shops.
- Leather goods stores.
- Meat markets, excluding slaughtering.
- Millinery shops.

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- Motorcycle, motorscooter and trail bike sales.
- Music stores.
- Newstands.
- Notion or novelty stores.
- Office machines and equipment sales.
- Paint and wallpaper stores.
- Pet supply stores, excluding the sale of pets other than tropical fish or goldfish.
- Photographic equipment and supply stores.
- Radio and television stores.
- Retail stores.
- Secondhand stores.
- Shoe stores.
- Silver shops.
- Souvenir shops.
- Sporting goods stores.
- Stationery stores.
- Tobacco shops.
- Toy stores.
- Yarn and yardage stores.

2. Services.

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- Air pollution sampling stations.
- Arboretums and horticultural gardens.
- Automobile rental and leasing agencies.
- Automobile service stations, including oil and lube, incidental repair, washing and rental of utility trailers subject to the provisions of Section 22.40.405.
- Banks, savings and loans, credit unions and finance companies.
- Barber shops, provided that such shops comply with American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) 62-2001 Indoor Air Quality Standards.
- Beauty shops, provided that such shops comply with American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) 62-2001 Indoor Air Quality Standards.
- Bicycle and motor scooter rentals.
- Blueprint shops.
- Catering services.
- Catalog and internet order businesses.
- Child care centers.
- Churches, temples, or other places used exclusively for religious worship.
- Communication equipment buildings.

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- Community centers.
- Costume rentals.
- Dental clinics, including laboratories in conjunction therewith.
- Dry cleaning establishments, excluding wholesale dry cleaning plants, provided that such shops comply with American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) 62-2001 Indoor Air Quality Standards.
- Earth stations.
- Electric distribution substations including microwave facilities, provided:
  a. That all such installations are completely surrounded by a masonry wall to a height of not less than eight feet. The director may approve the substitution of a chain-link or other industrial-type fence with screen planting where he deems it appropriate. All such substitutions shall be subject to the provisions of Part 12 of Chapter 22.56 on the director's review; and
  b. That the area between the fence or wall and the lot line is landscaped and maintained while such use exists.
- Electricians' shops.
- Employment agencies.
- Family child care homes, large.

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- Family child care homes, small.
- Fire stations.
- First aid stations.
- Foster family homes.
- Furniture and appliance rentals.
- Gas metering and control stations.
- Hospital equipment and supply rentals.
- Interior decorating studios.
- Laundries, self-service.
- Libraries.
- Locksmith shops.
- Lodge halls.
- Medical clinics, including laboratories in conjunction therewith.
- Microwave stations.
- Motorcycle, motorscooter and trail bike rentals.
- Offices, business or professional.
- Party equipment rentals.
- Pet grooming, excluding boarding.
- Photocopying and duplicating services.
- Photography studios.

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- Picture mounting and framing.
- Plumbing shops and plumbing contractor's shops.
- Police stations.
- Post offices.
- Printers or publishers.
- Public utility service centers.
- Real estate offices.
- Recreational equipment rentals.
- Repair shops, household and fixit.
- Restaurants and other eating establishments including food take-out and outdoor dining.
- Schools through grade 12, accredited, including appurtenant facilities, which offer instruction required to be taught in the public schools by the state of California, but excluding trade schools.
- Schools, business and professional, including art, barber, beauty, dance, drama and music, but not including any school specializing in manual training, shop work, or in the repair and maintenance of machinery or mechanical equipment.
- Shoe repair shops.
- Shoeshine stands.
- Sightseeing agencies.

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- Small family homes, children.
- Tailor shops.
- Telephone repeater stations.
- Tourist information centers.
- Truck rentals, excluding trucks exceeding two tons' capacity, provided:

  1. That a specific parking area for fleet trucks is designated and located to the rear or the side of the lot, separated from the customer parking areas; and

  2. That a customer drop-off parking area shall be designated in front of the lot and shall be clearly marked for customer drop off parking.
- Union halls.
- Veterinary clinics, small animal.
- Watch repair shops.

B. Recreation and amusement.

- Amusement rides and devices, operated at one particular location not longer than seven days in any six-month period.
- Parks, playgrounds and beaches, with all appurtenant facilities.
- Riding and hiking trails, excluding trails for motor vehicles.

C. Agricultural uses.

- Crops--Field, tree, bush, berry and row, including the growing of nursery stock.

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– Greenhouses.

– Nurseries.

D. Residential uses.

– Farm worker dwelling units, subject to the applicable provisions of Part 24 of Chapter 22.52.

– Farm worker housing complexes, subject to the applicable provisions of Part 24 of Chapter 22.52.

– Group homes for children, limited to six or fewer persons.

– Joint live/work units, subject to the requirements of Section 22.56.1754.

– Single-family residences, in conjunction with a commercial use listed in Subsections A.1 and A.2 of this Section, provided that the commercial use is legally established on the same lot. The residence shall be subject to the provisions of Sections 22.20.105 (Development Standards for Single Family Residences), 22.20.110 (Height Limits) and 22.20.130 (Parking). The residence shall not be located in the setback areas provided in Section 22.20.120 (Yard Requirements). These provisions shall not apply to commercial developments on the same lot.

– The following residential uses, provided that the residential uses are developed as a mixed use development with commercial components:

1. Apartments with five or less dwelling units;

2. Duplexes;

3. Townhouses

E. Other uses.

– Signs, as provided in Part 10 of Chapter 22.52.

**22.4 .51 A .** Premises in Zone MXD-RU may be used for the following accessory uses:

– Accessory buildings and structures.

– Automobile repair and parts installation incidental to the automobile service stations and automobile supply stores, provided:

1. That such automobile repair activities do not include body and fender work, painting, major engine overhaul, or transmission repair;
2. That all repair and installation activities are conducted within an enclosed building only;
3. That a masonry wall is established and maintained along an abutting boundary with property in a Residential or Agricultural Zone, as if the area was developed for parking pursuant to Section 22.52.1060;
4. That all repair or installation activities are confined to the hours between 7:00 a.m. and 9:00 p.m. daily; and
5. That no automobile awaiting repair or installation service shall be parked or stored for a period exceeding 24 hours except within an enclosed building.

– Automobile washing, waxing and polishing, accessory only to the sale of new automobiles, automobile service stations and automobile supply stores.

– Boats, minor repair of, incidental to the sale of boats, provided all operations,

other than the storage of boats held for sale, are conducted within an enclosed building.

- Building materials, storage of, used in the construction of a building or building project, during the construction and 30 days thereafter, including the contractor's temporary office, provided that any lot so used shall be part of the building project or on property adjoining the construction site.
- Cargo shipping containers, limited to one.
- Home-based occupations, subject to the limitations, standards and conditions contained in Section 22.20.020.
- Rental, leasing and repair of articles sold on the premises, incidental to retail sales.
- Rooms in a single-family residence, where permitted, may be rented to four or fewer residents, with or without table board, unless the residence is also used as an adult residential facility or a group home for children and either use has a capacity of more than six persons.
- Signs, as provided in Part 10 of Chapter 22.52.
- Used merchandise, retail sale of, taken in as trade-in on the sale of new merchandise when such new merchandise is sold from the premises.

**22.4 .515 S D R A .** If site plans are first submitted to and approved by the Director pursuant to Part 12 of Chapter 22.56 premises in Zone MXD-RU may be used for:

- Access to property lawfully used for a purpose not permitted in Zone MXD-RU

where such access will not alter the character of the premises in respect to permitted uses in Zone MXD-RU.

- Christmas trees and wreaths, the sale of, between December 1st and December 25th, both dates inclusive, to the extent permitted by other statutory and ordinance provisions. Any structures, facilities and materials used for the sale of trees and wreaths shall be removed from the premises by December 31st of the same calendar year, and the property restored to a neat condition.
- Domestic violence shelters.
- Grading projects, off-site transport, where no more than 100,000 cubic yards of materials is to be transported, subject to the standards and limitations specified in Sections 22.56.1710, 22.56.1752 and 22.56.1753.
- Homeless shelters, subject to the requirements of Section 22.56.1760.
- Live entertainment, accessory, in a legally established bar, cocktail lounge or restaurant having an occupant load of less than 200 people, where in full compliance with the conditions of Section 22.56.1754.
- Model home display centers and sales offices.
- Signs, as provided in Part 10 of Chapter 22.52.
- Temporary uses as provided in Part 14 of Chapter 22.56.

**22.4 .52 S .** Premises in Zone MXD-RU may be used for the following uses, provided that a conditional use permit has first been obtained as provided in Part 1 of Chapter 22.56, and while such permit is full force and effect in

conformity with the conditions of such permit:

- Adult day care facilities.
- Airports.
- Alcoholic beverage sales.
- Ambulance emergency service facilities.
- Amphitheaters.
- Apartment houses that are not part of a mixed use development or are part of a mixed use development but with more than five dwelling units.
- Arcades, games or movies.
- Assaying.
- Auction houses, excluding animal auctions.
- Automobile battery service.
- Automobile brake repair shops.
- Automobile muffler shops.
- Automobile radiator shops.
- Automobile repair garages, excluding body and fender work, painting and upholstering.
- Bars and cocktail lounges, but excluding cabarets.
- Beer and wine, the concurrent sale of, with motor vehicle fuel, subject to the requirements of Sections 22.56.195 and 22.56.245.
- Billiard halls.

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- Boat rentals.
- Body piercing parlors.
- Book binderies.
- Bowling alleys.
- Bus or freight terminals.
- Car washes, automatic, coin-operated and hand wash.
- Cardrooms or clubs.
- Carpet and rug cleaners.
- Colleges and universities, including appurtenant facilities, giving advanced academic instruction approved by the State Board of Education or other recognized accrediting agencies, but excluding trade schools.
- Convents and monasteries.
- Dance halls.
- Drive-through services.
- Golf driving ranges.
- Grading projects, off-site transport, where more than 100,000 cubic yards of material is to be transported, subject to the conditions and limitations of Section 22.56.210 and 22.56.230.
- Grading projects, on-site, but excluding projects where the hearing officer or the commission or the board of supervisors have previously considered such grading proposal as indicated by approval of an environmental document

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incorporating consideration of such grading project.

- Group homes for children, having seven or more children.
- Gymnasiums.
- Health clubs or centers.
- Heliport.
- Helistop.
- Hospitals.
- Hospitals, small animal.
- Hotels.
- Live entertainment not in conformance with the requirements of Section 22.56.1754.
- Massage parlors.
- Menageries, zoos, animal exhibitions or other facilities for the keeping or maintaining of wild animals.
- Miniature golf courses.
- Mobilehome parks, as provided in Part 6 of Chapter 22.52.
- Motels.
- Motion picture processing, reconstruction, and synchronizing of film with sound tracks.
- Museums.
- Nightclubs.

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- Observatories.
- Outdoor dining, where the conditions of Subsection G of Section 22.28.070 have not or cannot be met.
- Packaging businesses.
- Pawnshops.
- Permanent cosmetics parlor.
- Photoengravers and lithographers.
- Pool halls.
- Publicly owned uses necessary for the maintenance of public health, convenience, or general welfare in addition to those uses listed in this Section.
- Recording studios.
- Residences, caretaker, for use by a caretaker or supervisor and his immediate family where continuous supervision is required.
- Rooming and boarding houses.
- Schools, trade and manual training, including shop work, repair and maintenance of machinery or mechanical equipment.
- Skating rinks, ice or roller.
- Stations, bus, railroad and taxi.
- Steam or sauna baths.
- Swap meets.

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- Tasting rooms, remote, subject to the applicable provisions of Part 23 of Chapter 22.52.
- Tattoo parlors.
- Tennis, volleyball, badminton, croquet, lawn bowling and similar courts.
- Theaters and other auditoriums.
- Tool rentals, including rototellers, power mowers, sanders and saws, cement mixers and other equipment, but excluding heavy machinery or trucks exceeding two tons' capacity.
- Travel trailer parks, as provided in Part 6 of Chapter 22.52.
- Wedding chapels.
- Youth hostels.

B. The following uses, provided the specified permit has first been obtained and while such permit is in full force and effect in conformity with the conditions of such permit for:

- Qualified projects, as provided in Part 17 of Chapter 22.52 and Part 18 of Chapter 22.56
- Temporary uses, as provided in Part 14 of Chapter 22.56.

**22.4 .525 D S .** Premises in Zone MXD-RU shall be subject to the following development standards:

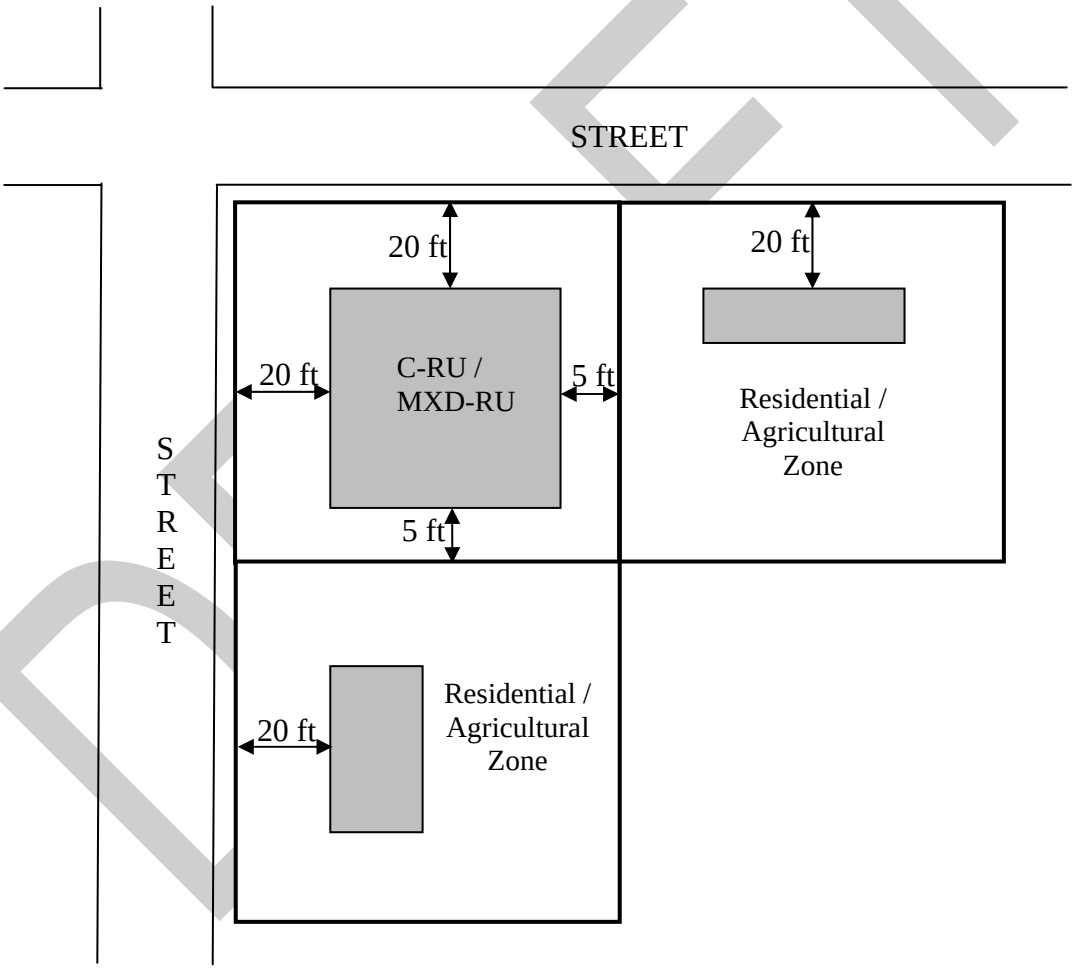
. A. Minimum yards.

1. Minimum front or corner side yards shall be equal to the front yard required on any contiguous Residential or Agricultural Zone where the property adjoins

a street.

2. Properties adjoining a Residential or Agricultural Zone shall have a minimum side or rear yard of five feet from the lot line adjoining the Residential or Agricultural Zone.

3. Any required yards shall be also subject to the general provisions and exceptions contained in Chapter 22.48, as specified.




B. Maximum Floor Area Ratio (FAR). The maximum commercial FAR shall be 0.5.

C. Maximum density. The maximum density for residential projects in Zone

MXD-RU is five dwelling units per acre.

D. Maximum height. The maximum building height shall be 35 feet above grade or two stories, excluding chimneys and rooftop antennas, except as otherwise provided by an applicable Community Standards District.

E. Maximum lot coverage. The gross area occupied by buildings shall not exceed 90 percent of net lot area.

F. Minimum landscaped area.

1. Required landscaping. A minimum of 10 percent of the net lot area devoted to commercial use, including parking and other appurtenant uses, shall be landscaped with drought-tolerant landscaping and hardscaping, which shall be continuously maintained in good condition. Incidental walkways may be developed in the landscaped area.

G. Parking requirements. Bicycle and vehicle parking facilities shall be provided as required by Part 11 of Chapter 22.52, except as amended by this Subsection G. In addition, all vehicle parking facilities shall have the following requirements:

1. Parking areas shall be set back a minimum of five feet from any adjacent Residential or Agricultural Zone. The setback area shall be landscaped with at least one 24 inch box tree for every 20 linear feet of street frontage.

2. Parking spaces shall be used only by visitors, customers, owners or tenants of a legally established use on the premises.

3. Vehicles shall not be parked in the required parking spaces on the

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premises for more than 24 hours.

4. Parking spaces for recreational vehicles and trailers and semi-trucks shall be designed as pull-through parking spaces.

5. Different types of parking spaces shall not be placed within the same row.

6. Driveways for recreational vehicles and semi-trucks shall be separate from driveways for passenger vehicles wherever feasible. However, if a shared driveway is to be used where large vehicles cross into identified pedestrian walkways, pavement markers, paint schemes or signs shall be used to indicate caution that pedestrians may be in the area.

7. Adequate turning spaces shall be provided on site so that vehicles shall enter into and exit out of the parking lot head first.

8. All requirements for ingress and egress to public rights of way shall be designed to the satisfaction of the Department of Public Works.

H. Vehicle Parking Incentives. A maximum of 40 percent of the total required vehicle parking spaces may be converted to Large Vehicle; Recreational Vehicle and Trailer; and Semi-truck parking spaces, in any combination thereof, in accordance with the following provisions:

1. The parking spaces shall be developed with the minimum dimensions specified below and shall count towards compliance with the required number of parking spaces equivalent to the number of standard parking spaces specified in the table below:

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| Parking Type | Minimum Dimensions (based on a 90 degree angle) | Equivalent in Counting Towards Required Parking Spaces |
|---|---|---|
| Large Vehicles (Classes 2 through 6, based on Gross Vehicle Weight Rating) | 13 ft x 23 ft | 2 standard parking spaces |
| Recreational Vehicles and Trailers | 13 ft x 50 ft | 4 standard parking spaces |
| Semi-trucks | 13 ft x 70 ft | 5 standard parking spaces |

2. Incentives for semi-truck parking spaces shall be applied only in Special Parking Districts identified by the local Area Plan.

3. If the parking incentives listed in subsection G.1, above, are requested, then any compact parking spaces pursuant to Section 22.52.1082 shall be prohibited.

I. Screening. All mechanical equipment, trash containers, and dumpsters shall be completely screened from view from adjacent streets, walkways, and residences through the use of walls and/or landscaping. Standards for trash and recycling containers shall be in conformance with Subsection C of Section 22.52.1930.

J. Storage

1. Outside storage. Outside storage is permitted on the rear of a lot when such storage is strictly incidental to the permitted use on the same lot. Any outside area used for storage shall be completely enclosed by a solid masonry wall and solid gate, not less than five feet nor more than six feet in height, except that the Director may approve the substitution of a fence or decorative wall that will adequately comply with the provisions of this section. All such requests for substitution shall be

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subject to the provisions of Part 12 of Chapter 22.56.

2. Cargo shipping containers. One cargo shipping container not exceeding 10 feet in height, 10 feet in width, and 40 feet in length, may be used for storage, provided that the cargo shipping container shall:

a. Be incidental to a permitted primary use on the same lot;

b. Be placed at least six feet from a legally established primary structure;

c. Be painted one uniform color and the sides of containers shall not display images or lettering, except for signs providing safety information related to the contents stored within, if required by the County Code or other applicable regulations; and

d. Be maintained in compliance with the Building Code Manual of the Department of Public Works, including the issuance of a Miscellaneous Permit byPublic Works.

d. Additional cargo shipping containers on the same lot shall require a conditional use permit per Section 22.40.520, and shall comply with SubsectionsJ.2.a, b and c of this Section, above, and also the following:

i. The containers shall not be stacked on top of each other; and

ii. The containers shall be placed at least six feet apart from each other, unless otherwise indicated on an approved site plan.

K . Outside display. Except for the following uses, all display in Zone MXD-RU

shall be located entirely within an enclosed building unless otherwise authorized by a temporary use permit, provided that no vehicle or equipment shall be stacked on top of another:

- Antique shops.
- Automobile sales and rentals.
- Automobile service stations.
- Boat and other marine vehicle sales and rentals.
- Ceramic shops.
- Crops--field, tree, bush, berry and row, including nursery stock.
- Electric distribution substations.
- Feed and grain sales, up to a maximum of eight feet in height, provided that no product is displayed within 10 feet of all lot lines.
- Firewood sales, up to a maximum of eight feet in height, provided that no product is displayed within 10 feet of all lot lines.
- Florist shops.
- Fruit and vegetable markets, displayed up to a maximum of eight feet in height, provided that no product is displayed within 10 feet of all lot lines.
- Gas metering and control stations, public utility.
- Motorcycle, motorscooter and trail bike sales and rentals.
- Newstands.
- Restaurants and other eating establishments, including food take-out, subject

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to the standards specified by Subsection G of Section 22.28.070.

– Truck rentals, excluding trucks exceeding two tons' capacity.

K. Signs. All sign regulations for Zone MXD-RU shall be the same as for Zone C-1 in Part 10 of Chapter 22.52 (Signs).

L. Standards for mixed use developments. Combined residential and/or commercial uses on the same lot shall be developed in either arrangement; however they shall conform to the maximum building height:

e. Vertical. Vertical mixed use developments shall be subject to the requirements and restrictions of Part 18 of Chapter 22.52 (Mixed Use Developments).

f. Horizontal. Horizontal mixed use development shall be subject to the following requirements and restrictions:

i. All restrictions and standards listed in Subsection B of Section 22.52.1910 (Permitted Areas), Subsections B and C of Section 22.52.1940 (Performance Standards) and Section 22.52.1950 (Covenant and Agreement) shall apply.

ii. Notwithstanding the provisions of Section 22.48.130, a minimum distance of 10 feet shall be required between all residential buildings and all commercial buildings established on the same lot, unless otherwise approved by a conditional use permit.

iii. Conversion from a mixed use development to an exclusively residential use pursuant to Section 22.52.1960 (Conversion of uses subject to permit) shall not be permitted in this zone.

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iv. Separate vehicular access shall be provided for commercial and residential uses.

g. Prohibited Activities. In addition to the activities listed in Section 22.52.1920 (Use Exceptions), the following activities shall be prohibited in mixed use developments in the zone:

i. Amphitheaters.

ii. Bus or freight terminals.

iii. Dry cleaning establishments, except that drop of and pick up sites may still be permitted in a mixed use development if the clothes are cleaned at a different location.

iv. Earth stations.

v. Feed and grain sales.

vi. Firewood sales.

vii. Golf driving ranges.

viii. Hospitals.

ix. Hospitals, small animal.

x. Meat markets.

xi. Menageries, zoos, animal exhibitions or other facilities for the keeping or maintaining of wild animals.

xii. Nightclubs.

xiii. Paint and wallpaper stores.

xiv. Travel trailer parks.

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xv. Veterinary clinics.

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# Appendix E Buildout Methodology

# Appendices

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2014

# Buildout Methodology

## FINAL DRAFT

This document describes the steps taken to generate the Buildout for the Department of Regional Planning's 2014 Antelope Valley Plan

Dan Hoffman
Department of Regional Planning
8/5/2014

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**Appendix A - Assumptions / Factors for Current Conditions**

**Appendix B - Assumptions / Factors for Proposed Conditions**

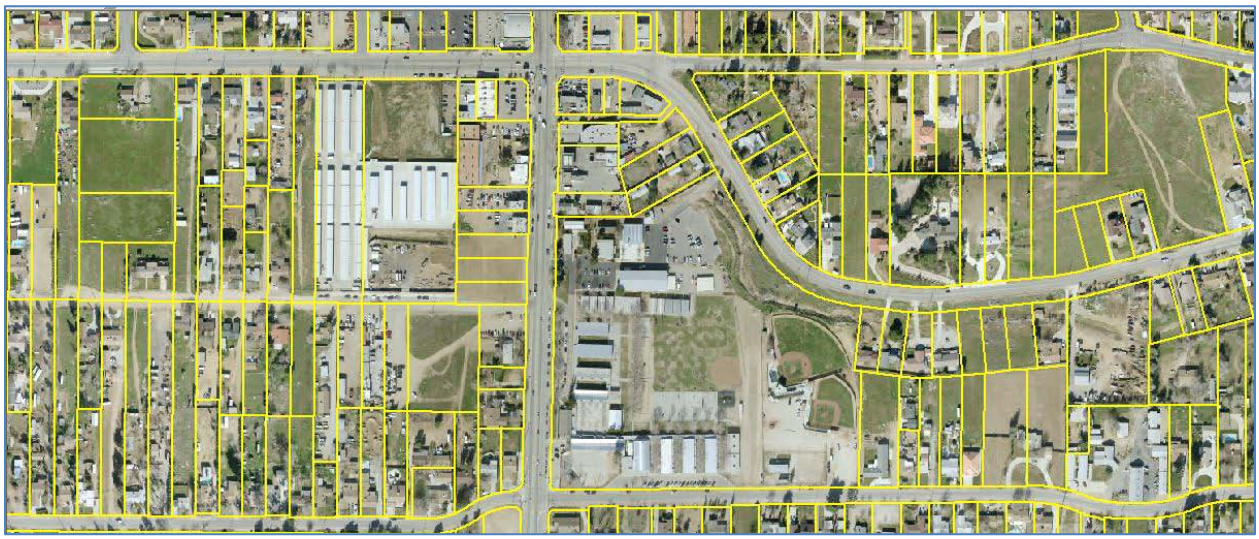
# Overview of Buildout Models

The buildout for the Los Angeles County Antelope Valley Areawide General Plan Update ("Proposed AV Plan") was established by Placeworks and put into a GIS format by the Department of Regional Planning. Three basic datasets were derived that show existing conditions, current conditions (adopted AV Plan), and proposed conditions (Proposed AV Plan). The following is a generalized description of the buildout and the basic steps and formulas used to arrive at the final projected numbers.

## 1. Existing Conditions

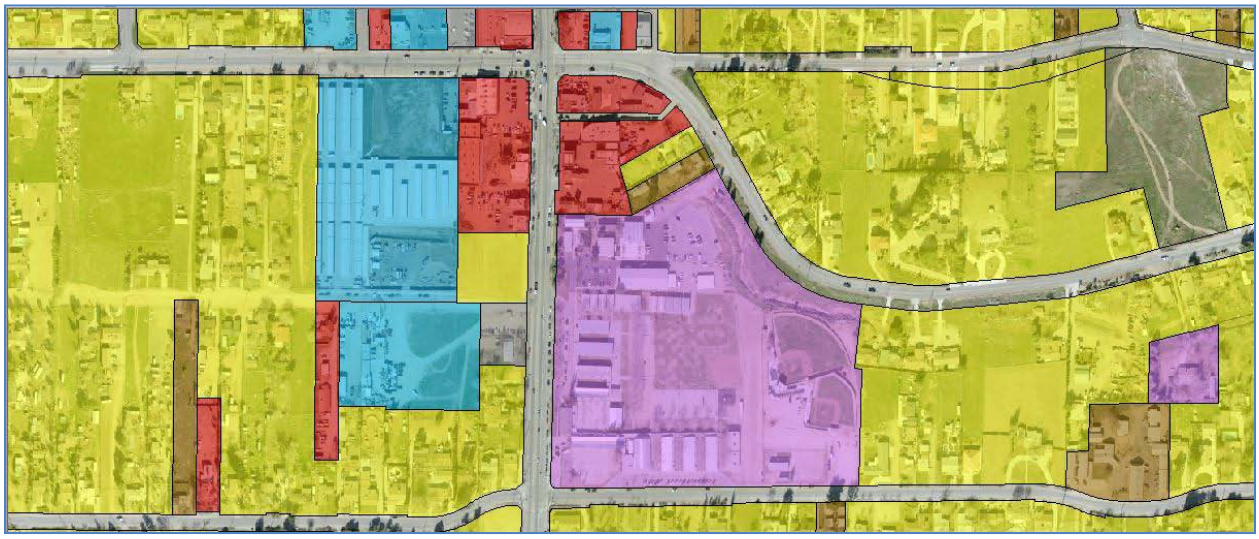
Existing Conditions are based on data from the Los Angeles County Assessor for the unincorporated areas only. The parcels were taken from the April, 2011 version of the Assessor Database. Figure 1.A shows a sample of parcels in the Quartz Hill Community.

***Figure 1.A***



Within the Assessor Parcel data is a 'Use Code' with categories that were established by the Assessor. The parcels were aggregated by Assessor Use Code and in Figure 1.B below, the different colors represent the different Residential, Commercial, and Industrial categories (among others) in this area. Red is commercial, yellow is single-family residential, brown is multi-family residential, pink is public facilities, and blue is industrial.

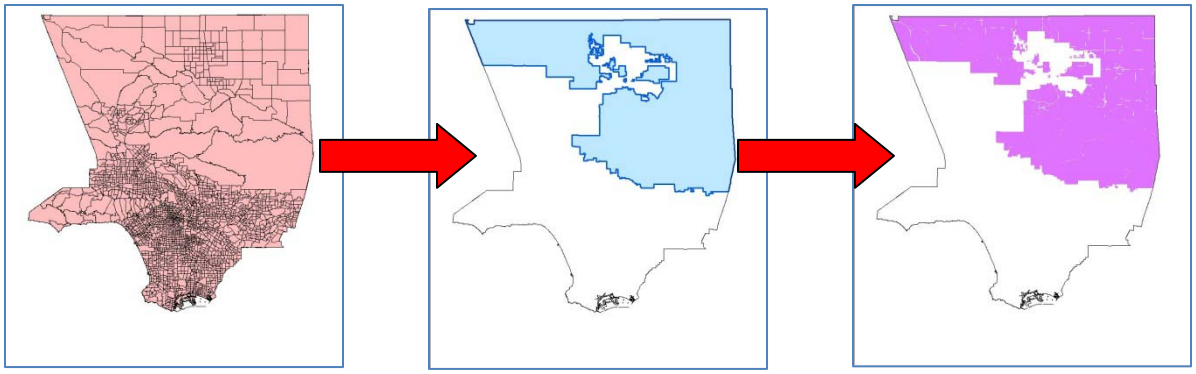
***Figure 1.B***



This aggregated parcel layer was then combined with the 2008 Traffic Analysis Zones (TAZ) from the Southern California Association of Governments (SCAG) and the Plan Areas used by the Department of Regional Planning (DRP).

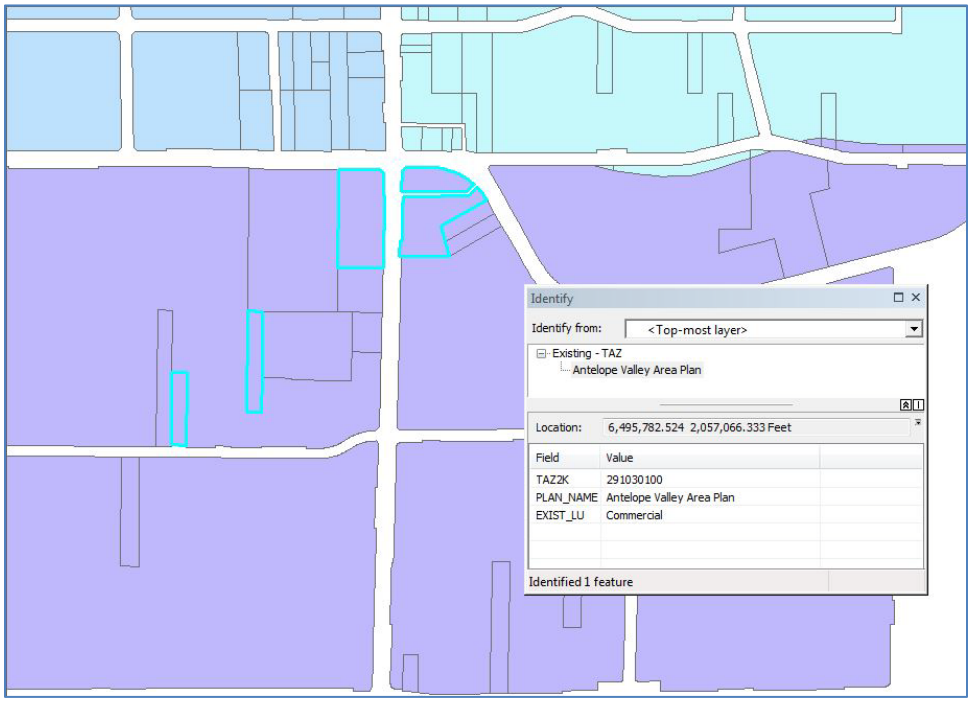
***Figure 1.C***

*TAZ* *DRP Plan Areas* *Aggregated Parcel layer*



The result of this combination is that each of the Aggregated land use categories have a SCAG TAZ ID and a DRP Planning Area coded into it. In Figure 1.D below the Assessor Land Use layer is colored based on the TAZ IDs. The blue outline is a selected aggregated polygon along with a pop-up window of the fields in the GIS data.

***Figure 1.D***




With this GIS layer now prepared, factors were established for each of the Assessor Land Use Categories in order to begin the calculations for the buildout.

## Factors

Existing use, building square footage, and number of dwelling units were provided by the Assessor parcel data. Population estimates were made by applying single-family and multifamily development person per household assumptions (established by the County) to the number of units in each parcel. Employment estimates were made by applying employee per square foot assumptions to nonresidential square footage recorded by the Assessor. The employee assumptions are from the Natelson Company Employment Density Study, with the exception of public/quasi-public uses, schools, and farms. Employment for public/quasi-public uses were calculated individually due to the range of uses within this category. Schools are estimated to employ 90 persons on average; based on a survey of LAUSD employment. This may vary by school type. Square feet per employee for farmworkers was determined by dividing the number of Los Angeles County farmworkers, as reported in the 2006 American Community Survey, by the building square footage for existing farms. See Figure 1.E below.

***Figure 1.E***

| Assessor Land Use | Persons per Household | Square Foot / Emp | Notes |
|---|---|---|---|
| Commercial | | 511 | |
| Commercial Reg | | 2,437 | |
| Farm | | 90 | |
| Industrial | | 1,306 | |
| Miscellaneous Government | | 1,306 | |
| Multifamily | 2.79 | | |
| Office | | 302 | |
| Parking | | 0 | |
| Public/Quasi-Public | | | Calculated individually. |
| ROW | | | |
| School | | | Calculated individually. |
| Single-Family | 3.85 | | |
| Utilities | | 1,306 | |
| Vacant | | | |
| Warehouse | | 1,306 | |
| Water | | 1,306 | Employment generation factor provided in the event that a utility structure is included, but none are in the water category (according to this data set) |

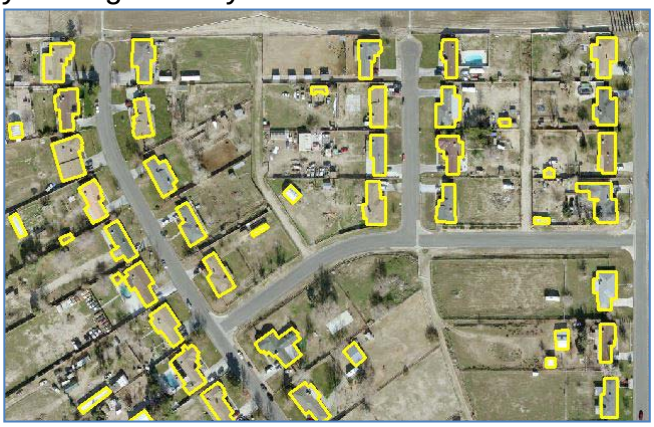
Once the factors are calculated for the various land uses, the following formulas can be applied to arrive at the final numbers:

1. Units - Single-Family and Multi-Family Units were taken directly from Assessor data. When the previously described data aggregation occurred the total units were summarized per land use category per TAZ.

2. Population - Units were multiplied by the Persons per Household factor shown in Figure 1.E above, based on multi-family or single-family:

   ***Formula:***

   **(Units) x (pph) = Population**



3. Employment[1] - Employment is calculated in one of two ways:

   a) Employment was generated by determining the Building Square Footage for each employment-

[1] For more about Employment, please see section 5 on page 18.

generating use. Using a 'Building Outline' layer that was derived from 2008 aerial imagery (see aerial shot on bottom of Page 5), the total building square footage was calculated...taking also into account the total number of floors. For those parcels that did not have a building polygon, building square footage from the Assessor was used.[2]

***Formula:***

**(Building Square Footage) / (Square Foot per Emp) = Employment**

b) Some areas have specific employment factors. A field was added in the GIS layer to indicate whether a factor was applied to a general use, or whether a specific number of employees was determined by either contacting the factility, or getting the information through a Census site, or other online resource. The table below (Figure 1.F) breaks down these uses:

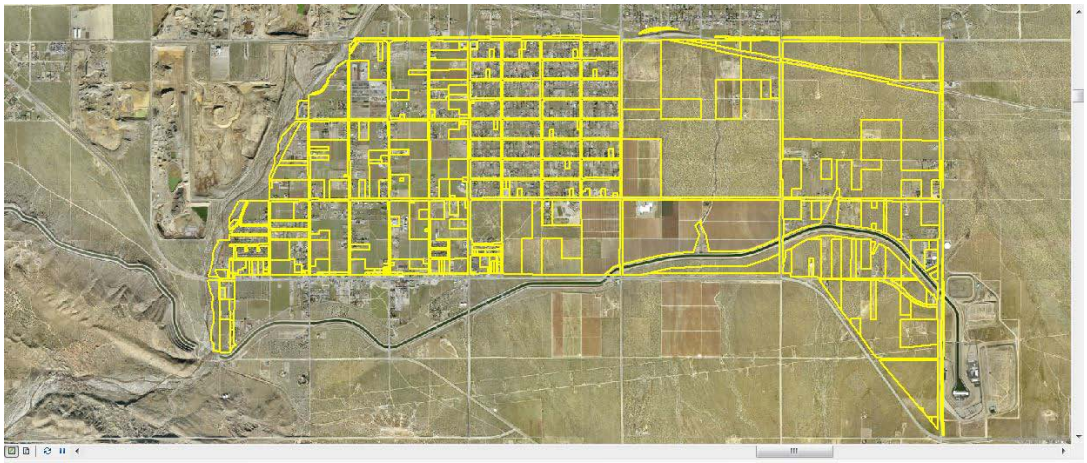
***Figure 1.F***

| Land Use Type | Factor / Specific number | EMP |
|---|---|---|
| Airport | Specific Number | Found # of employees for each site |
| Amusement Parks | Specific Number | Found # of employees for each site |
| Cemeteries | Factor | 100 |
| City Hall | Specific Number | Found # of employees for each site |
| Colleges & Universities | Specific Number | Found # of employees for each site |
| Golf Courses | Factor | 50 |
| Hospitals & Medical Centers | Specific Number | Found # of employees for each site |
| Military Facilities | Specific Number | Found # of employees for each site |
| Preschools | Factor | 90 |
| Private and Charter Schools | Factor | 100 |
| Public Elementary Schools | Factor | 100 |
| Public High Schools | Factor | 250 |
| Public Middle Schools | Factor | 100 |
| Regional Parks & Gardens | Factor (small park) | 25 |
| Regional Parks & Gardens | Factor (large park) | 50 |

After all of the Units, Population and Employment is determined, then all of the TAZs have a summary of Planning Area, Land Use, total units, population and employment. In Figure 1.G below, the GIS layer represents a sample TAZ and all of the data displayed in the table below it.

[2] Using this 'Building Outline' GIS layer was favorable as it represented a more accurate depiction of building square footage than what the Assessor had.

## *Figure 1.G*



Table

BUILDOUT_EXISTING_USE

| TAZ2K | EXIST_LU | UNITS_SF | UNITS_MF | UNITS_TTL | PPH | POP_SF | POP_MF | POP_TTL | SQFT_EMP | EMP | SOURCE | ACRES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 291000001 | Miscellaneous - Other | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | 1306 | 4.576119 | Used Assessor data and Factors from Planning Center | 111.310346 |
| 291000001 | Miscellaneous Government | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | 1306 | 23.050338 | Used Assessor data and Factors from Planning Center | 169.517246 |
| 291000001 | Multifamily | 0 | 105.773785 | 105.773785 | 2.79 | 0 | 295.10886 | 295.108861 | <Null> | <Null> | Used Assessor data and Factors from Planning Center | 63.884997 |
| 291000001 | Office | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | 302 | 123.93176 | Used Assessor data and Factors from Planning Center | 6.072765 |
| 291000001 | Parking | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | 3.189312 |
| 291000001 | Public Middle Schools | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | 100 | Based on factor from Planning Center | 19.094893 |
| 291000001 | Regional Parks & Gardens | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | 25 | Based on factor from Planning Center | 5.830693 |
| 291000001 | Single-Family | 1101.23813 | 0 | 1101.238133 | 3.85 | 4239.766813 | 0 | 4239.766813 | <Null> | <Null> | Used Assessor data and Factors from Planning Center | 1731.186956 |
| 291000001 | Vacant | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | <Null> | 1148.86611 |

## 2. Current Conditions (Adopted Antelope Valley Plan)

For current conditions, the Land Use Policy from the 1986 Antelope Valley Plan was used.

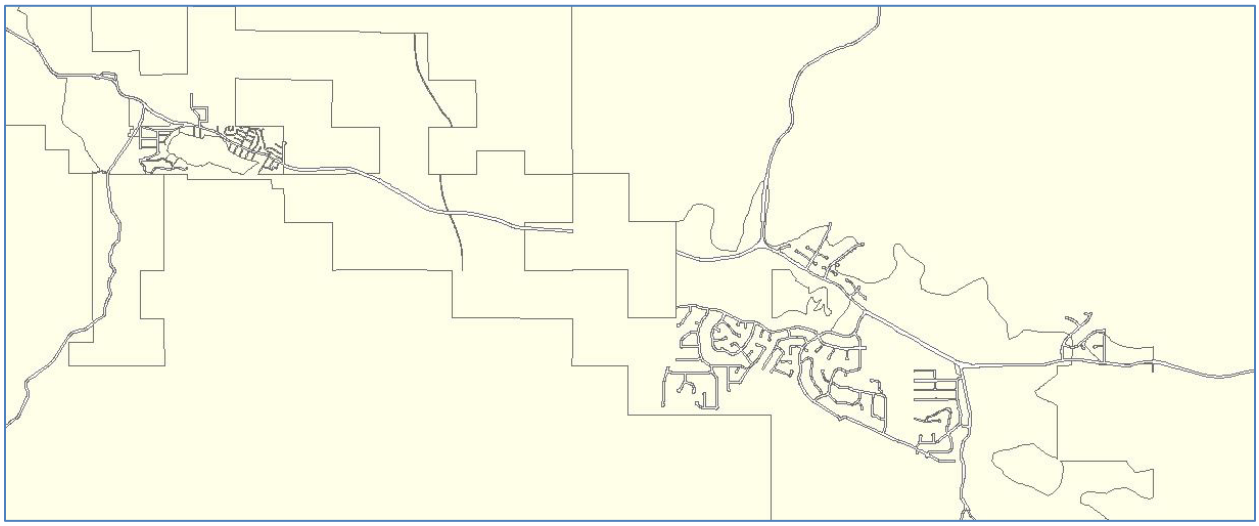
### GIS Analysis

Similar to how the Assessor Land Use was generated, the Adopted Land Use Policy was incorporated into the parcel layer. The parcels were then aggregated based on Land Use category, and then combined with the 2008 TAZ layer from SCAG and the DRP Plan Areas using the same procedure outlined above in the Existing Conditions section (illustrated by Figures 1-A through 1-C). One additional layer was added for Hillside Management, which shows slope areas 25-50% and greater than 50%. The target densities are reduced depending on their range of slope. Additionally, any open space or National Forest areas were not considered for the Hillside Management reduction[3]. See Figure 2.A below for an example in the Lake Hughes / Lake Elizabeth communities.

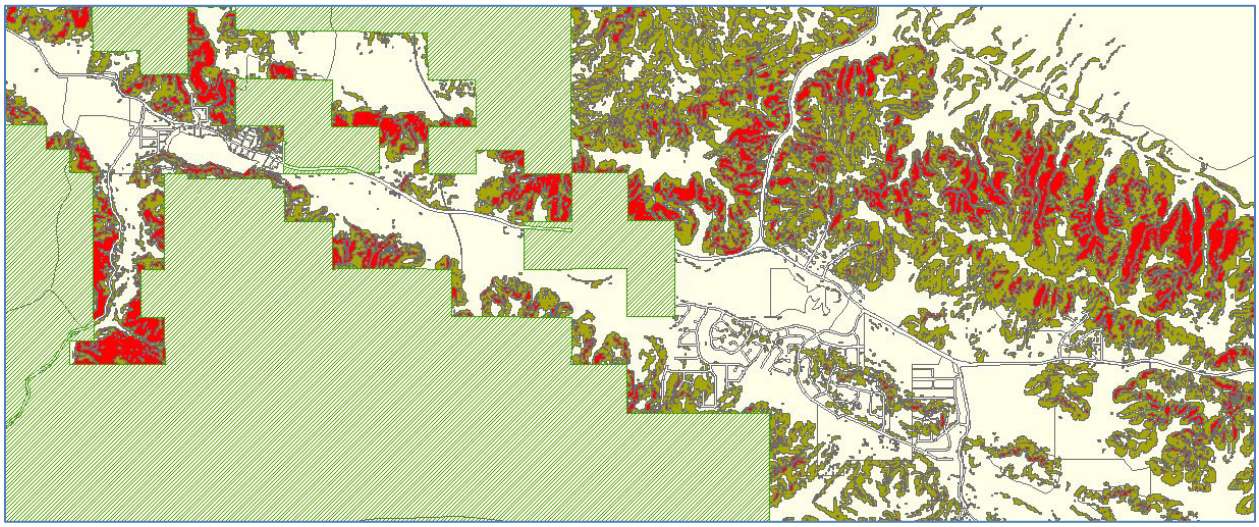
[3] The main reason for this is that adding thousands of small Hillside Management polygons to the GIS layer created a very large file. Since no Residential units are considered in Open Space categories, it was decided to take those Hillside Management areas out as is seen in the Altadena screenshot. Doing this made the data layers easier to process.

***Figure 2.A***

*Land Use Policy - aggregated parcels*

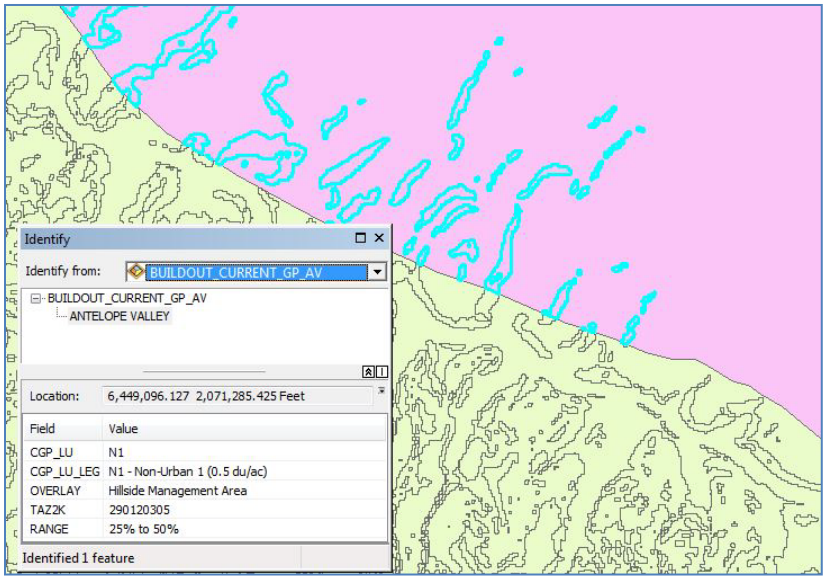


*Incorporated Hillside Management and Slopes (note Open Space / National Forest clipped out)*



Similar to how the GIS layer is set up for the Existing Conditions (Figure 1.D), the figure below shows the GIS layer for the Current Conditions. Land Use is aggregated per TAZ (representing the different colors in Figure 2.B). The blue outline below is a selected aggregated polygon along with a pop-up window of the fields in the GIS data. Please also note, that unlike the Existing Conditions, this has additional information as to whether this is a 'Hillside Management' area, and what type of slope it is.

***Figure 2.B***




With this GIS layer now prepared, factors were established for each of the Land Use Categories in order to begin the calculations for the buildout.

## Factors

Assumptions for density and floor area ratio were developed in response to development standards in the Antelope Valley Area Plan. Housing projections assume that most areas will develop at 80 percent of the maximum density, with exceptions for designations of no more than one unit per acre, which are expected to buildout at the maximum density. Population projections were established by applying County-determined person per household assumptions for single-family and multifamily housing types. Wherever possible, employment assumptions (using square feet per employee) were provided by the Natelson Company Employment Density Study. Employment estimates for public uses, such as Public Facilities, Public/Quasi-Public, and Institutions, were determined individually to reflect existing uses.

Residential development on county land was builtout based on 80 percent of the maximum residential density, with an exception for densities of no more than 1 unit per acre which may build out at the maximum. See Appendix A for a list of all of the factors per Land Use category.

Once the factors are calculated for the various land uses, the following formulas can be applied to arrive at the final numbers:

1. Units - Single-Family and Multi-Family Units were calculated using the factors in the 'Target Density' and 'MF vs. SF' fields in Appendix A.

a) The factors in the 'Target Density' field were multiplied by the total Acres for each aggregated land use polygon. The 'MF vs. SF' field is used to determine which Density factor to use.

b) There are certain higher density residential land use categories that should have both single-family and multi-family factors considered. For example, some categories show a "split 50/50" value in the 'MF vs. SF' field (Appendix A), so for those aggregated land use polygons, acreage is multiplied by the single-family density then divided by two; same for the multi-family density.

c) For land use designations with an Urban or a rural mixed use category, a further reduction will need to be done to account for a split between residential and commercial. Usually, this is a 50% split between the two, and 50% is used in the 'Formulas' example below.

d) Add Single-Family and Multi-Family Units together for Total Units

***Formulas:***

**(Acres) x (Density SF) = Single-Family Units**

**(Acres) x (Density MF) = Multi-Family Units**

**(Acres) x (Density SF / 2; Density MF / 2) = Single / Multi-Family splits**

**[for Mixed Use categories – 50/50 split in example below]**

**(Acres / 2) x (Density SF; Density MF) = Single / Multi-Family residential / commercial reductions**

**(Single-Family Units) + (Multi-Family Units) = Total Units**

2. Population - Single-Family and Multi-Family Population figures were derived by multiplying the Single-Family and Multi-Family Units by the 'Persons per Household' (PPH) figures that are in Appendix A.

a) Consult the 'MF vs. SF' field to see whether the Single-Family or Multi-Family populations should be calculated.

b) For land use designations with target densities that could accommodate both Single-Family and Multi-Family housing, a PPH factor of 3.60 was used. This PPH factor is an average of 3.85 and 3.34 PPH, reflecting both an assumption of 50/50 SF and MF mix in that designation, and the assumption that household sizes are bigger in lower density multifamily projects than the 2.79 PPH factor for higher density Multi-Family projects.

***Formulas:***

**(Units SF) * (PPH_SF) = Single-Family Population - *includes those with '50/50 split'***

**(Units MF) * (PPH_MF) = Multi-Family Population** - ***includes those with '50/50 split***

**(Single-Family Population) + (Multi-Family Population) = Total Population**

3. Building Square Footage - Target Floor Area Ratio (FAR) factors were used to determine Building Square Footage, which will then determine Employment. The 'Target FAR' field shown in the table in Appendix A has these factors for the non-residential land use categories, and these are simply multiplied by the total square footage of the aggregated land use polygons. For Mixed Use categories, these figures need to be reduced based on a split between Residential and Commercial (usually 50 / 50)

***Formula:***

**(Area) x (FAR) = Building Square Footage**

**[for Mixed Use categories – 50/50 split in example below]**

**(Area / 2) x (FAR) = Building Square Footage**

4. Employment[4] – Employment is calculated in one of two ways:

   a) Employment was generated one way by using the Building Square Footage calculations from the previous step.

   ***Formula:***

   **(Building Square Footage) / (Square Foot per Emp) = Employment**

   b) Some areas have specific employment factors. A field was added in the GIS layer to indicate whether a factor was applied to a general use, or whether a specific number of employees was determined by either contacting the factility, or getting the information through a Census site, or other online resource. Below are the different employment categories and their factors. For the 'Specific Employment Factors', please refer to the table in the 'Existing Conditions' section (Figure 1.F) for these uses.

[4] For more about Employment, please see section 5 on page 18

***Figure 2.D***

| **Employment Category** | **Employment Factory** |
|---|---|
| Commercial - General, Neighborhood, Rural | TPC factor - 511 |
| Commercial - Major, Regional | TPC factor - 2437 |
| Commercial - Office, Business Park | TPC factor - 302 |
| Industrial | TPC factor - 1306 |
| Specific Employment Number | Specific Employment Number |

## 3. Proposed Conditions (Proposed AV Plan)

For the Proposed Conditions, the Land Use Policy from the Proposed AV Plan was used to generate the units, population, and employment figures using the same method described in Steps 1-4 in the 'Current Conditions (Adopted Antelope Valley Plan)' section. Since those steps are already written out, they will not be repeated here (to see the factors used for the Proposed AV Plan, please refer to Appendix B).

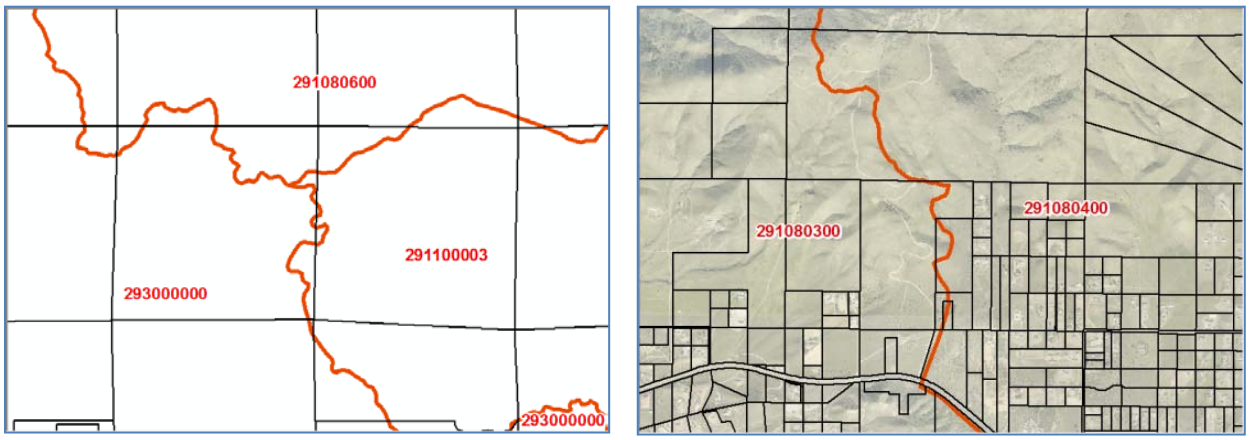
## 4. Accuracy of TAZ Layer vs. Parcels Layer

The TAZ layer from SCAG's 2008 "Regional Transportation Plan" was used for the duration of the Buildout iterations. At one point it was discussed to possibly use the 2010 or 2012 TAZ layers as they became available, but for purposes of consistancy, it was decided to keep the 2008 layer throughout. It should be noted that the 2008 GIS layer didn't line up with parcels in most areas. The TAZ data layer wasn't meant to line up with parcels, since the RTP covered a large, 6-county area, and it meant to follow 2000 Census geographies. Below in Figure 4.A are some screenshots that show how the lines cut through the parcels, and also a line showing where the line probably meant to go. Ideally it would have been best to update the TAZ linework to better follow parcels, however it would have been a very time consuming process requiring a lot of hours of manual updating.

***Figure 4.A***

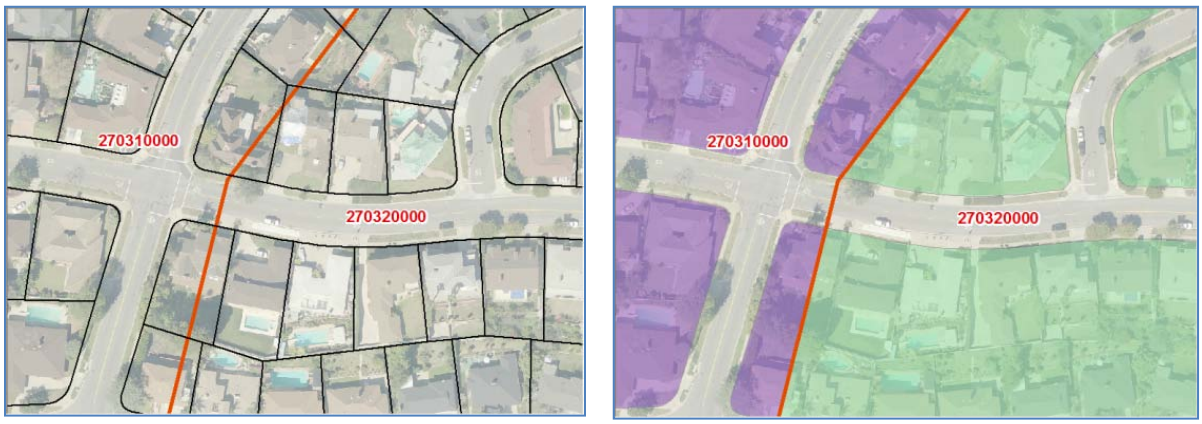
Additionally, there are many areas where TAZ boundaries are not meant to follow parcels at all. Mainly these occur in the National Forest, rural areas, or other areas of large, undeveloped land.

***Figure 4.B***



The best approach to take with this when aggregating the parcels by TAZ was to simply incorporate the split in the parcels into the data. So, if a parcel is 20% in one TAZ, and 80% in another, the parcel was simply split and aggregated based on those percentages (ie. 80% of the population / units / employment go in one TAZ, and 20% go into the other). In Figure 4.C below, the parcels are split by two TAZ's, then aggregated based on that split. This was discussed between Placeworks and DRP and it was decided that it was okay to do this, given the fact that there wasn't enough time or resources to fix the source TAZ layer, and that this was not meant to be a parcel level analysis...rather, a TAZ-level analysis.

***Figure 4.C***



## 5. Employment

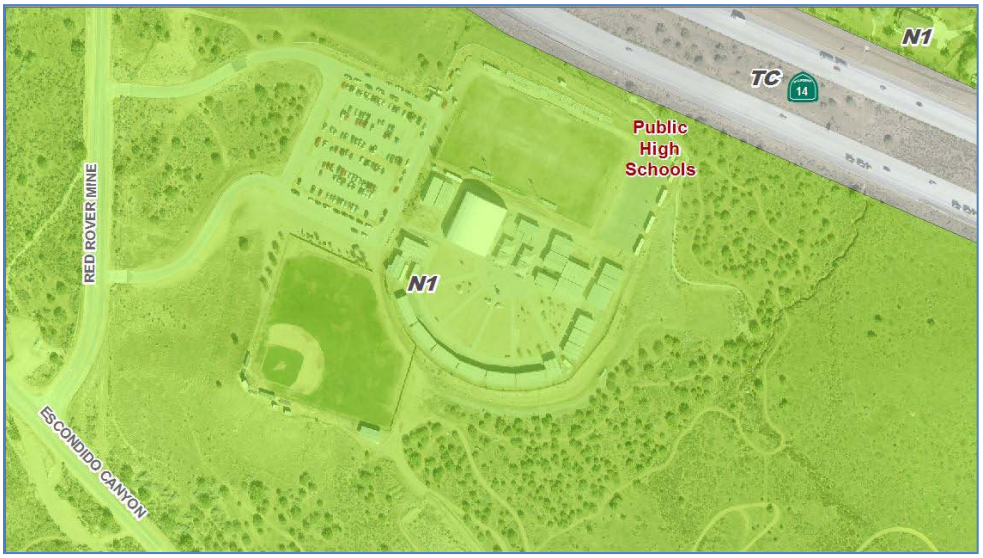
As was mentioned previously, there are Employment factors that are determined by dividing the 'Building Square Footage' by 'Square Footage per Employee', and there are also those that are determined by a specific factor depending on type of employment generator (please see Figure 1.F). In most cases these 'specific factors' correspond with a 'Public', 'Open Space', 'Commercial', or other similar category. However, it is possible that there are some residential land use categories that have some of these employment generating uses as well. A 'Land Types' GIS layer was used to determine all of the 'Use Types' in Figure 1.F, and was integrated into all of the Buildout layers (Existing, Current, and Proposed).

1. Current Conditions - Since Current Conditions are based on Adopted Land Use, there are several residential areas that have an employment generating use. The reason for this was that the older plans like the 1986 Antelope Valley Plan allowed for certain "public uses" within residential land use categories. The following excerpt is from the 1980 General Plan land use element:

   *"Within the generalized residential areas mapped, a variety of use types and intensities presently exist. Such uses typically include local commercial and industrial services, schools, churches, local parks and other community-serving public facilities."*

So, it's not abnormal to see examples like what is shown in Figure 5.A where a school shows up in a rural residential land use category.

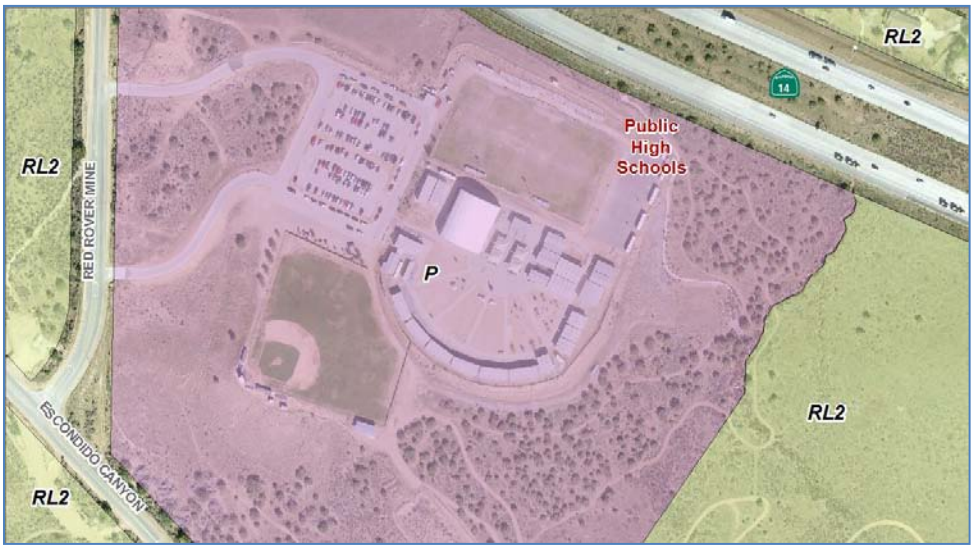
***Figure 5.A***



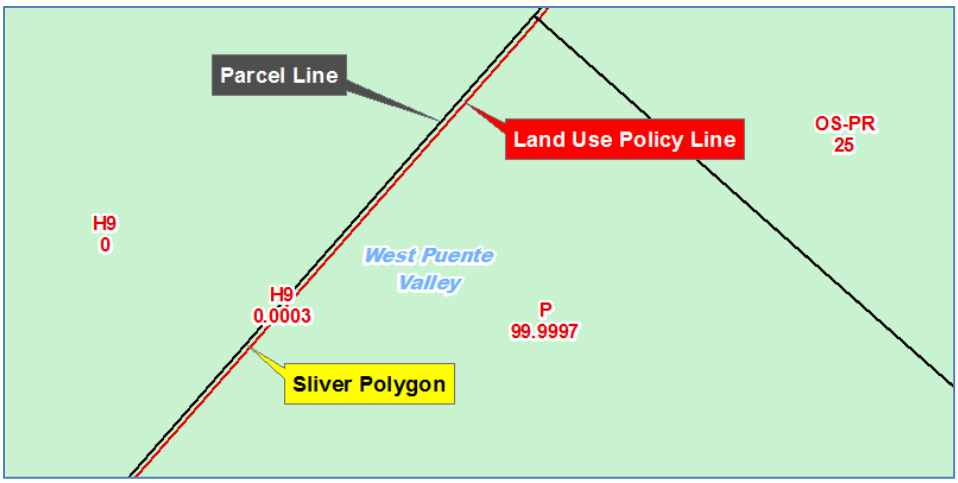

2. Proposed Conditions - Since the proposed land use for the Proposed AV Plan is parcel based, all the publically-owned land that have employment generating

uses should be coded as either "Public / Semi-Public" or "Open Space". So, in the case of Figure 5.A above, that school now has a 'P' category and is no longer rural residential. Most of the cases in which an employment figure shows up in a proposed residential land use category are those of Private and Charter Schools. Since these are not considered a "Public" use, they have a residential category and therefore, have an employment number.

***Figure 5.B***




3. <u>Sliver Polygons</u> - The other instance where there may be an employment number in a residential category is when the Land Use Policy layer doesn't quite line up with the parcels (where the 'Land Types' GIS layer was derived from). This creates "sliver polygons", and is a common issue whenever doing any overlay analysis with parcels. Given the volume of these sliver polygons and the time constraints, these slivers were left in the buildout.



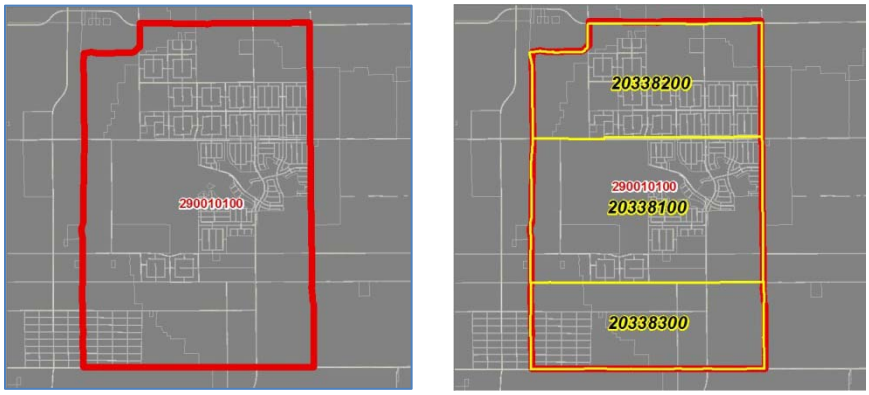
## 6. TAZ Update and export of GIS layers

Once the GIS analysis was done, the data was then re-allocated based on the needs of the consultants or sub-consultants, and most were then organized into spreadsheets. The spreadsheets were helpful so that consultants who did not have GIS software could work with the data. <u>All three datasets</u> (existing, current general plan, and proposed general plan) were allocated and exported in the following ways:

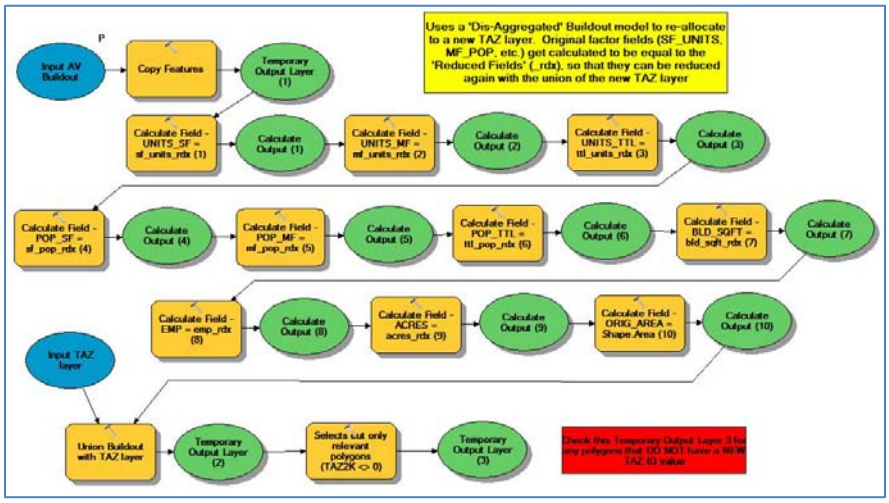
1. **<u>TAZ Update.</u>** When the Antelope Valley buildout was originally produced along with the General Plan buildout beginning in 2011, the only TAZ data available was SCAG's 2008 layer. In 2012 they updated their TAZ layer to be more accurate and have a higher level of detail. The screenshot below compares the 2008 version vs. the 2012 version. A GIS model was created to update the buildout datasets to use the 2012 TAZ geographies.

***Figure 6.A***

*2008 TAZ layer* *2012 TAZ layer*

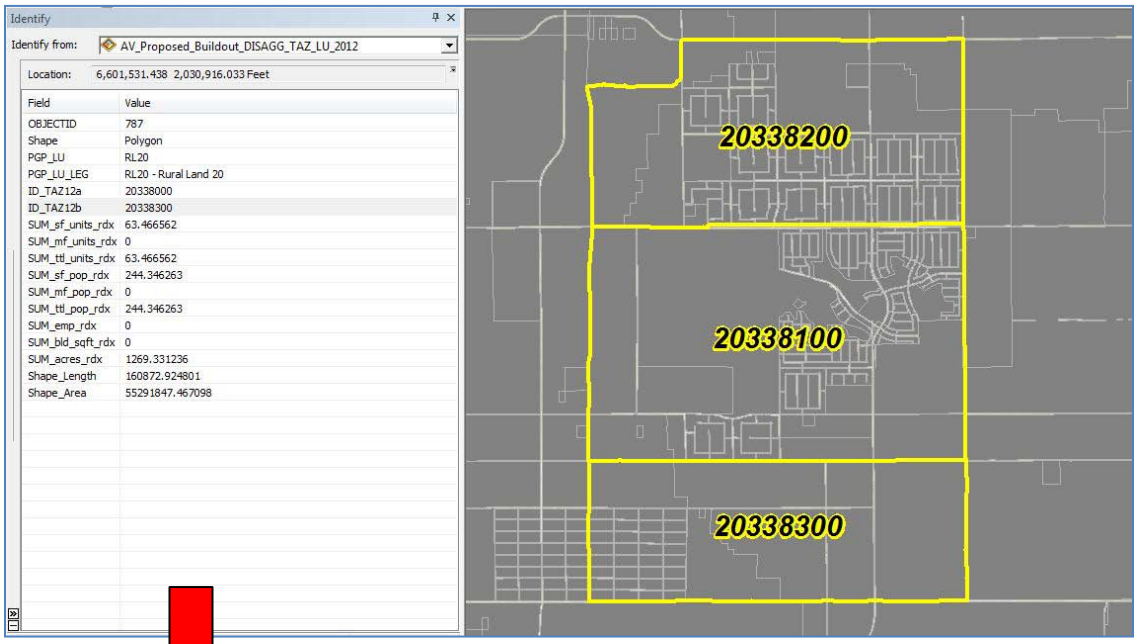



*GIS model that updated the buildout to updated 2012 TAZ layer*



2. **<u>TAZ / Land Use level.</u>** Following the TAZ geography update, datasets were exported at the level of TAZ <u>and</u> land use. In Figure 6.B below, a few sample TAZ polygons from the GIS layer are shown along with a view of the data, and the extracted spreadsheet. Please note that in the screenshot of the spreadsheet, that the selected rows represent one TAZ; the multiple rows within <u>each</u> TAZ represents different land use categories.

***Figure 6.B***




| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Proposed Land Use | TAZ 2012 - Tier 1 | TAZ 2012 - Tier 2 | Dwelling Units (Single-Family) | Dwelling Units (Multi-Family) | Dwelling Units (Total) | Population (Single-Family) | Population (Multi-Family) | Population (Total) | Jobs | Building Floor Area (sq ft) | Acres |
| 425 | RL10 - Rural Land 10 | 20338000 | 20338200 | 4 | 0 | 4 | 17 | 0 | 17 | 0 | 0 | 44 |
| 426 | RL2 - Rural Land 2 | 20338000 | 20338200 | 727 | 0 | 727 | 2,800 | 0 | 2,800 | 0 | 0 | 1,455 |
| 427 | RL20 - Rural Land 20 | 20338000 | 20338200 | 56 | 0 | 56 | 216 | 0 | 216 | 0 | 0 | 1,125 |
| 428 | RL5 - Rural Land 5 | 20338000 | 20338200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 429 | RL10 - Rural Land 10 | 20338000 | 20338300 | 251 | 0 | 251 | 968 | 0 | 968 | 0 | 0 | 2,514 |
| 430 | RL20 - Rural Land 20 | 20338000 | 20338300 | 63 | 0 | 63 | 244 | 0 | 244 | 0 | 0 | 1,269 |
| 431 | ML - Military Land | 20339000 | 20339100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19,567 |
| 432 | OS-BLM - Bureau of Land Management | 20339000 | 20339100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 433 | RL20 - Rural Land 20 | 20339000 | 20339100 | 65 | 0 | 65 | 252 | 0 | 252 | 0 | 0 | 1,308 |
| 434 | CR - Rural Commercial | 20340000 | 20340100 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 26,922 | 2 |
| 435 | OS-BLM - Bureau of Land Management | 20340000 | 20340100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 280 |
| 436 | OS-C - Conservation | 20340000 | 20340100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 437 | OS-PR - Parks and Recreation | 20340000 | 20340100 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 3,113 |
| 438 | RL10 - Rural Land 10 | 20340000 | 20340100 | 77 | 0 | 77 | 297 | 0 | 297 | 0 | 0 | 771 |
| 439 | RL2 - Rural Land 2 | 20340000 | 20340100 | 202 | 0 | 202 | 776 | 0 | 776 | 0 | 0 | 403 |

3. After all the GIS layers were prepared, and all of the relevant spreadsheets were exported, they were all put on the Department of Regional Planning's FTP site to be downloaded by EIR consultants and other parties that were helping with this project.

## *Appendix A*

| Land Use Plan Category | Target Density | Target FAR[1] | MF vs SF | PPH | SF/Emp[2, 3] | NOTES: |
|---|---|---|---|---|---|---|
| **Antelope Valley Area Plan** | | | | | | |
| C - Commercial | n/a | 0.5 | | | 511 | |
| M - Industry | n/a | 0.5 | | | 1306 | |
| N1 - Non-Urban 1 (max 0.5 du/gross ac) | 0.5 | n/a | SF | 3.85 | | |
| N2 - Non-Urban 2 (max 1.0 du/gross ac) | 1.0 | n/a | SF | 3.85 | | |
| O - Open Space | n/a | n/a | | | | |
| O-NF - National Forest | n/a | n/a | | | | |
| O-W - Water Body | n/a | n/a | | | | |
| P - Public Service Facilities | n/a | 0.5 | | | | individually estimated; assumed 0.5 for public/institutional categories. |
| Airport | n/a | n/a | | | | individually estimated (under Public Facilities in "Resources" spreadsheet); Designation applies to Palmdale Airport property. |
| U1 - Urban 1 (0 to 3.3 du/gross ac) | 2.6 | n/a | SF | 3.85 | | |
| U1.5 - Urban 1.5 (0 to 2.0 du/gross ac) | 1.6 | n/a | SF | 3.85 | | |
| U2 - Urban 2 (0 to 6.6 du/gross ac) | 5.3 | n/a | SF | 3.85 | | |
| U2-D (0 to 4 du/gross ac) | 3.2 | n/a | SF | 3.85 | | |
| Urban 3 (0 to 15.0 du/gross ac) | 12.0 | n/a | split 50/50 | 3.6 | | |
| U3-D (0 to 10 du/gross ac) | 8.0 | n/a | split 50/50 | 3.6 | | |
| Urban 4 (15.1 du/gross acre and greater) | 15.1 | n/a | split 50/50 | 3.6 | | |
| **Additional assumptions (HMAs)** | | | | | | |
| Hillside Management Areas (HMAs): 25% to 50% slope (Max 1 du/ 2 acres) | 0.5 | n/a | SF | 3.85 | | |
| Hillside Management Areas (HMAs): Greater than 50% slope (Max 1 du / 20 acres) | 0.05 | n/a | SF | 3.85 | | |

[1] For non-residential designations, FAR is assumed to be the larger of either: the highest FAR value of the range of existing conditions OR the GP assumption, when applicable. Some non-residential uses have specific assumptions as provided by a specific plan or the County.

[2] For residential designations density is generally assumed to be 80% of the maximum density unless the maximum density less than one unit per acre, in which case the maximum density it used.

[3] Yellow highlighted background indicates that the Community Plan does not specify density/intensity so General Plan assumptions were used. It may also indicate an assumption provided directly from County staff.

## *Appendix B*

| Land Use Plan Category | Target Density | Target FAR | MF vs SF | PPH | SF/Emp | NOTES: |
|---|---|---|---|---|---|---|
| | | | | | | |
| **Proposed Antelope Valley Plan** | | | | | | |
| **Rural** | | | | | | |
| Rural Land 1 | 1.0 | n/a | SF | 3.85 | n/a | While there is an allowance of FAR 0.5 to account for agricultural and other non-residential uses permitted in the RL categories, the buildout model uses the target densities for buildout. |
| Rural Land 2 | 0.5 | n/a | SF | 3.85 | n/a | |
| Rural Land 5 | 0.2 | n/a | SF | 3.85 | n/a | |
| Rural Land 10 | 0.1 | n/a | SF | 3.85 | n/a | |
| Rural Land 20 | 0.1 | n/a | SF | 3.85 | n/a | |
| Rural Land 40 | 0.03 | n/a | SF | 3.85 | n/a | |
| | | | | | | |
| **Residential** | | | | | | |
| Residential 2 | 1.6 | n/a | SF | 3.85 | n/a | |
| Residential 5 | 4.0 | n/a | SF | 3.85 | n/a | |
| Residential 9 | 7.20 | n/a | SF | 3.6 | n/a | |
| Residential 18 | 14.4 | n/a | split 50/50 | 3.6 | n/a | |
| Residential 30 | 24.0 | n/a | MF | 2.79 | n/a | |
| Residential 50 | 40.0 | n/a | MF | 2.79 | n/a | |
| Residential 100 | 80.0 | n/a | MF | 2.79 | n/a | |
| Residential 150 | 120.0 | n/a | MF | 2.79 | n/a | |
| | | | | | | |
| **Commercial** | | | | | | |
| Rural Commercial | n/a | 0.25 | n/a | n/a | 511 | |
| General Commercial | n/a | 0.5 | n/a | n/a | 511 | residential densities in CG and CM; however, for the purposes of the buildout model, we used the FAR, under the assumption that the general intended use of these land use designations are commercial uses. |
| Major Commercial | n/a | 1.5 | n/a | n/a | 2437 | |
| | | | | | | |
| **Industrial** | | | | | | |
| Light Industrial | n/a | 0.5 | n/a | n/a | 1306 | |
| Heavy Industrial | n/a | 0.5 | n/a | n/a | 1306 | |
| Office and Professional | n/a | 1.0 | n/a | n/a | 302 | |
| | | | | | | |
| **Mixed Use** | | | | | | |
| Rural Mixed Use | 4.0 | 0.25 | split 25/75 | 3.85 | 511 | |
| Mixed Use | 120.0 | 1.5 | MF | 2.79 | 511 | |
| | | | | | | |
| **Public** | | | | | | |
| Public and Semi-Public Facilities | n/a | 1.5 | | | indiv | individually estimated |
| | | | | | | |
| **Open Space** | | | | | | |
| Open Space Conservation | n/a | 0.0 | n/a | n/a | n/a | |
| Open Space Parks and Recreation | n/a | 0.0 | n/a | n/a | n/a | |
| Open Space National Forest | n/a | 0.0 | n/a | n/a | n/a | |
| Bureau of Land Management | n/a | 0.0 | n/a | n/a | n/a | |
| Water | n/a | 0.0 | n/a | n/a | n/a | |
| Mineral Resources | n/a | 0.0 | n/a | n/a | n/a | |
| Military | n/a | 0.0 | n/a | n/a | n/a | |

# Appendix F Air Quality and GHG Modeling

# Appendices

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## R O E E 2 14

**C A**

**S**

| Source | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 40,697 | 539 | 48,780 | 18 | 6,564 | 6,564 |
| Energy | 28 | 242 | 123 | 2 | 19 | 19 |
| Mobile | 1,709 | 2,428 | 30,793 | 44 | 3,500 | 947 |
| **T** | 42,434 | 3,209 | 79,696 | 64 | 10,083 | 7,530 |

| Source | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 40,697 | 539 | 48,780 | 18 | 6,564 | 6,564 |
| Energy | 28 | 242 | 123 | 2 | 19 | 19 |
| Mobile | 1,556 | 2,584 | 25,134 | 39 | 3,500 | 947 |
| **T** | 42,281 | 3,366 | 74,037 | 58 | 10,083 | 7,530 |

**D**

| Source | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 40,697 | 539 | 48,780 | 18 | 6,564 | 6,564 |
| Energy | 28 | 242 | 123 | 2 | 19 | 19 |
| Mobile | 1,709 | 2,584 | 30,793 | 44 | 3,500 | 947 |
| **T** | 42,434 | 3,366 | 79,696 | 64 | 10,083 | 7,530 |

**A**

| Source | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 2,063 | 23 | 2,105 | 1 | 270 | 270 |
| Energy | 5 | 44 | 22 | 0 | 4 | 4 |
| Mobile | 282 | 495 | 4,909 | 7 | 625 | 169 |
| **T** | 2,351 | 563 | 7,037 | 8 | 898 | 443 |

## R O E SCA D

**E 2 35**

**S**

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 40,689 | 538 | 48,721 | 18 | 6,564 | 6,564 |
| Energy | 28 | 242 | 123 | 2 | 19 | 19 |
| Mobile | 838 | 1,215 | 15,907 | 57 | 4,300 | 1,165 |
| **T** | 41,555 | 1,995 | 64,751 | 77 | 10,884 | 7,748 |

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 40,689 | 538 | 48,721 | 18 | 6,564 | 6,564 |
| Energy | 28 | 242 | 123 | 2 | 19 | 19 |
| Mobile | 776 | 1,285 | 12,798 | 50 | 4,300 | 1,165 |
| **T** | 41,493 | 2,065 | 61,641 | 70 | 10,884 | 7,748 |

**D**

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 40,689 | 538 | 48,721 | 18 | 6,564 | 6,564 |
| Energy | 28 | 242 | 123 | 2 | 19 | 19 |
| Mobile | 838 | 1,285 | 15,907 | 57 | 4,300 | 1,165 |
| **T** | 41,555 | 2,065 | 64,751 | 77 | 10,884 | 7,748 |

**2 35**

***Remaining Existing Buildings***

**S**

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 40,689 | 538 | 48,721 | 18 | 6,564 | 6,564 |
| Energy | 28 | 242 | 123 | 2 | 19 | 19 |
| Mobile | 838 | 1,215 | 15,907 | 57 | 4,300 | 1,165 |
| **T** | 41,555 | 1,995 | 64,751 | 77 | 10,884 | 7,748 |

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 40,689 | 538 | 48,721 | 18 | 6,564 | 6,564 |
| Energy | 28 | 242 | 123 | 2 | 19 | 19 |
| Mobile | 776 | 1,285 | 12,798 | 50 | 4,300 | 1,165 |
| **T** | 41,493 | 2,065 | 61,641 | 70 | 10,884 | 7,748 |

**D**

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 40,689 | 538 | 48,721 | 18 | 6,564 | 6,564 |
| Energy | 28 | 242 | 123 | 2 | 19 | 19 |
| Mobile | 838 | 1,285 | 15,907 | 57 | 4,300 | 1,165 |
| **T** | 41,555 | 2,065 | 64,751 | 77 | 10,884 | 7,748 |

***New Buildings***

**S**

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 134,565 | 1,768 | 160,256 | 60 | 21,609 | 21,608 |
| Energy | 109 | 957 | 604 | 6 | 75 | 75 |
| Mobile | 1,716 | 2,488 | 32,560 | 116 | 8,802 | 2,384 |
| **T** | 136,390 | 5,213 | 193,420 | 182 | 30,486 | 24,067 |

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 134,565 | 1,768 | 160,256 | 60 | 21,609 | 21,608 |
| Energy | 109 | 957 | 604 | 6 | 75 | 75 |
| Mobile | 1,589 | 2,630 | 26,195 | 102 | 8,802 | 2,384 |
| **T** | 136,262 | 5,356 | 187,055 | 169 | 30,486 | 24,067 |

**D**

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 134,565 | 1,768 | 160,256 | 60 | 21,609 | 21,608 |
| Energy | 109 | 957 | 604 | 6 | 75 | 75 |
| Mobile | 1,716 | 2,630 | 32,560 | 116 | 8,802 | 2,384 |
| **T** | 136,390 | 5,356 | 193,420 | 182 | 30,486 | 24,067 |

***Combined***

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 175,254 | 2,306 | 208,977 | 79 | 28,173 | 28,172 |
| Energy | 137 | 1,200 | 726 | 7 | 94 | 94 |
| Mobile | 2,555 | 3,915 | 48,467 | 173 | 13,102 | 3,549 |
| **T** | 177,945 | 7,421 | 258,170 | 259 | 41,370 | 31,815 |

**N D**

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 134,565 | 1,768 | 160,256 | 60 | 21,609 | 21,608 |
| Energy | 109 | 957 | 604 | 6 | 75 | 75 |
| Mobile | 1,716 | 2,630 | 32,560 | 116 | 8,802 | 2,384 |
| **T** | 136,390 | 5,356 | 193,420 | 182 | 30,486 | 24,067 |

## R O E A A D

### E 2 35

**A**

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 2,062 | 23 | 2,100 | 1 | 270 | 270 |
| Energy | 5 | 44 | 22 | 0 | 4 | 4 |
| Mobile | 140 | 246 | 2,493 | 9 | 767 | 208 |
| **T** | 2,208 | 314 | 4,615 | 10 | 1,041 | 481 |

### 2 35

***Remaining Existing Buildings***

**A**

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 2,062 | 23 | 2,100 | 1 | 0 | 270 |
| Energy | 5 | 44 | 22 | 0 | 0 | 4 |
| Mobile | 140 | 246 | 2,493 | 9 | 761 | 208 |
| **T** | 2,208 | 314 | 4,615 | 10 | 761 | 481 |

***New Buildings***

**A**

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 6,903 | 76 | 6,900 | 2 | 888 | 888 |
| Energy | 20 | 175 | 110 | 1 | 14 | 14 |
| Mobile | 287 | 504 | 5,103 | 19 | 1,571 | 426 |
| **T** | 7,210 | 755 | 12,112 | 23 | 2,472 | 1,328 |

***Combined***

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 8,966 | 100 | 8,999 | 3 | 888 | 1,157 |
| Energy | 25 | 219 | 133 | 1 | 14 | 17 |
| Mobile | 427 | 750 | 7,595 | 29 | 2,332 | 634 |
| **T** | 9,418 | 1,069 | 16,727 | 33 | 3,233 | 1,809 |

### N D

| | RO | NO | CO | SO2 | 1 T | 2.5 T |
|---|---|---|---|---|---|---|
| Area | 6,903 | 76 | 6,900 | 2 | 888 | 888 |
| Energy | 20 | 175 | 110 | 1 | 14 | 14 |
| Mobile | 287 | 504 | 5,103 | 19 | 1,571 | 426 |
| **T** | 7,210 | 755 | 12,112 | 23 | 2,472 | 1,328 |

## GHG Emissions Worksheet

## Existing (2014)

| Source | Buildout MTons/Year | Percent of Project Total |
|---|---|---|
| Area | 37,705 | 5% |
| Energy | 149,682 | 18% |
| Mobile | 582,391 | 70% |
| Waste | 34,928 | 4% |
| Water | 73 | 0% |
| Agriculture | 28,221 | 3% |
| Total All Sectors | 833,000 | 100% |
| Service Population (Residents+Employees)* | 125,328 | |
| Per Capita | 6.65 | N/A |

*Service population consists of 93,490 residents and 31,838 employees. See Table 3-2 of Chapter 3 of the DEIR.

## Proposed Project Buildout (2035)

**New Land Uses**

| Source | Buildout MTons/Year | Percent of Project Total |
|---|---|---|
| Area | 124,099 | 6% |
| Energy | 772,065 | 36% |
| Mobile | 1,105,266 | 52% |
| Waste | 116,534 | 6% |
| Water | 146 | 0% |
| Agriculture | 0 | 0% |
| Total All Sectors | 2,118,110 | 100% |

**Remaining Existing Land Uses**

| Source | Buildout MTons/Year | Percent of Project Total |
|---|---|---|
| Area | 37,705 | 5% |
| Energy | 149,682 | 19% |
| Mobile | 539,989 | 69% |
| Waste | 34,928 | 4% |
| Water | 73 | 0% |
| Agriculture | 20,615 | 3% |
| Total All Sectors | 782,991 | 100% |

**Combined**

| Source | Buildout MTons/Year | Percent of Project Total |
|---|---|---|
| Area | 161,804 | 6% |
| Energy | 921,747 | 32% |
| Mobile | 1,645,255 | 57% |
| Waste | 151,462 | 5% |
| Water | 219 | 0% |
| Agriculture | 20,615 | 1% |
| Total All Sectors | 2,901,101 | 100% |
| Service Population (Residents+Employees)** | 536,761 | |
| Per Capita | 5.40 | N/A |

* Service population consists of 405,410 residents and 134,351 employees. See Table 3-2 of Chapter 3 of the DEIR.

## Net Difference

| Source | Buildout MTons/Year | Percent Change |
|---|---|---|
| Area | 124,098 | 329% |
| Energy | 772,065 | 516% |
| Mobile | 1,062,864 | 183% |
| Waste | 116,534 | 334% |
| Water | 146 | 200% |
| Agriculture | -7,606 | -27% |
| Total All Sectors | 2,068,101 | 248% |

## Agriculturural Emissions Worksheet

| Scenario | Total Unincorporated LA County Farmland (Acres)[1] | Total Antelope Valley Area Plan Farmland (Acres) | Percentage of LA County | Agriculturural Emissions for Unincorporated LA County ($MTCO_2e$)[2] | Agricultural Emissions for Antelope Valley Area Plan (MTCO2e) |
|---|---|---|---|---|---|
| CEQA Baseline (2010) | 26,235 | 24,443 | 93% | 30,290 | 28,221 |
| Full Buildout 2035 (P-2035) | n/a | 17,855 | n/a | n/a | 20,615 |

[1] Based on Section 5.2, Agricultural Resources. Horizon Year 2035 is an estimate of agricultural land based on agriculture loss at buildout.

[2] GHG emissions from Table ES-1 of the Public Draft Unincorporated Los Angeles County Community Climate Action Plan 2020. January 2014.

**CalEEMod Land Use Inputs: Existing Land Uses**

| Type | | A | S | A | S | |
|---|---|---|---|---|---|---|
| Residential - Single Family | Single-Family | 23,082 | DU | 98,284 | 77,503,209 | 88,867 |
| Residential - MultiFamily | Multi-Family | 1,657 | DU | 5,555 | 3,096,379 | 4,623 |
| Commercial | General Office | 3,420.870 | 1000bsf | 2,070 | 3,420,870 | |
| Industrial | General Light Industrial | 2,963.408 | 1000bsf | 24,786 | 2,963,408 | |
| Commercial - Gov't | Government Office | 4,086.283 | 1000bsf | 570,046 | 4,086,283 | |
| Open Space | City Park | 15,493.585 | acre | 15,494 | 99,405 | |
| Golf Course | Golf Course | 398.958 | acre | 399 | 45,784 | |
| Parking | Surface Lot | 17.903 | acre | 18 | 0 | |
| Parking - Other | Other Non-Asphalt | 419,510 | acre | 419,510 | 0 | |
| Preschool | Daycare | 926 | students | 4 | 102,091 | |
| Elementary School* | Elementary School | 10,436 | students | 265 | 1,151,010 | |
| *Private Charter* | *Elementary* | *714* | *students* | *60* | *78,678* | |
| *Elementary School* | *Elementary* | *9,722* | *students* | *204* | *1,072,332* | |
| Middle School | Middle | 3,343 | students | 70 | 368,745 | |
| High School | High School | 2,614 | students | 108 | 288,284 | |
| | | | | 1,136,609 | 93,125,469 | |

*For purposes of modeling, the the inputs for the Elementary School and Private/Charter School land uses are combined and entered under the Elementary School land use in CalEEMod.

| | |
|---|---|
| Project Location: | Los Angeles County - Mojave Desert |
| Climate Zone: | 9 |
| Operation Year | 2014 |
| Land Use Setting | Rural |
| Utility Company | SCE |
| Source Receptor Area: | |

**CalEEMod Land Use Inputs: Existing Land Uses**

**Trip Generation:***

| | | |
|---|---|---|
| **Total Daily Vehicle Miles Traveled:** | 4,565,158 | miles |
| **Total Average Daily Trips:** | 251,375 | trip ends |
| **Average Trip Length:** | 18.16 | miles/trip end |

**VMT, ADT, and average trip length data provided by Fehr & Peers (2014)*

| Land Use Type | Building Square Feet | Proportioned | Trips |
|---|---|---|---|
| Residential - Single Family | 77,503,209 | 83.22% | 209,205 |
| Residential - MultiFamily | 3,096,379 | 3.32% | 8,358 |
| Commercial | 3,420,870 | 3.67% | 9,234 |
| Industrial | 2,963,408 | 3.18% | 7,999 |
| Commercial - Gov't | 4,086,283 | 4.39% | 11,030 |
| Open Space | 99,405 | 0.11% | 268 |
| Golf Course | 45,784 | 0.05% | 124 |
| Parking | | 0.00% | 0 |
| Parking - Other | | 0.00% | 0 |
| Preschool | 102,091 | 0.11% | 276 |
| Private/Charter/Elementary School | 1,151,010 | 1.24% | 3,107 |
| Middle School | 368,745 | 0.40% | 995 |
| High School | 288,284 | 0.31% | 778 |
| **TOTAL** | 93,125,469 | 100% | 251,375 |

2963.41 52889898.56

## CalEEMod Land Use Inputs: Existing Land Uses

**Residential - Single Family**

| | | | |
|---|---|---|---|
| 23,082 | dwelling units (DU) | | |
| 9.06 | trips/DU | *Daily VMT* | *Annual VMT* |
| 209,205 | Average Daily Trips (ADT)* | 3,799,330 | 1,382,956,156 |

**Residential - Multi Family**

| | | | |
|---|---|---|---|
| 1,657 | dwelling units (DU) | | |
| 5.04 | trips/DU | | |
| 8,358 | Average Daily Trips (ADT)* | 151,789 | 55,251,337 |

**Commercial**

| | | | |
|---|---|---|---|
| 3,420.87 | 1000bsf | | |
| 2.70 | trips/1000bsf | | |
| 9,234 | Average Daily Trips (ADT)* | 167,696 | 61,041,505 |

**Industrial**

| | | | |
|---|---|---|---|
| 2,963.41 | 1000bsf | | |
| 2.70 | trips/1000bsf | | |
| 7,999 | Average Daily Trips (ADT)* | 145,271 | 52,878,628 |

**Government**

| | | | |
|---|---|---|---|
| 4,086.28 | 1000bsf | | |
| 2.70 | trips/1000bsf | | |
| 11,030 | Average Daily Trips (ADT)* | 200,316 | 72,915,055 |

**Open Space**

| | | | |
|---|---|---|---|
| 15,494 | Acres | | |
| 0.02 | trips/DU | | |
| 268 | Average Daily Trips (ADT)* | 4,873 | 1,773,775 |

**Golf Course**

| | | | |
|---|---|---|---|
| 398.96 | acre | | |
| 0.31 | trips/acre | | |
| 124 | Average Daily Trips (ADT)* | 2,244 | 816,968 |

**Parking Lot**

| | | | |
|---|---|---|---|
| 18 | acres | | |
| 0 | trips/DU | *Daily VMT* | *Annual VMT* |
| 0 | Average Daily Trips (ADT)* | 0 | 0 |

**Parking - Other Non-Asphalt Surfaces**

| | | | |
|---|---|---|---|
| 419,510 | acres | | |
| 0 | trips/DU | | |
| 0 | Average Daily Trips (ADT)* | 0 | 0 |

**Preschool**

| | | | |
|---|---|---|---|
| 926 | students | | |
| 0.30 | trips/1000bsf | | |
| 276 | Average Daily Trips (ADT)* | 5,005 | 1,821,697 |

**Private/Charter School/Elementary School**

| | | | |
|---|---|---|---|
| 10,436 | students | | |
| 0.30 | trips/1000bsf | | |
| 3,107 | Average Daily Trips (ADT)* | 56,424 | 20,538,462 |

**Middle School**

| | | | |
|---|---|---|---|
| 3,343 | students | | |
| 0.30 | trips/DU | | |
| 995 | Average Daily Trips (ADT)* | 18,076 | 6,579,830 |

**High School**

| | | | |
|---|---|---|---|
| 2,614.00 | acre | | |
| 0.30 | trips/acre | | |
| 778 | Average Daily Trips (ADT)* | 14,132 | 5,144,094 |

**Total Weekday ADTs:** 251,375 **Total Weekday VMT:** 4,565,158 1,661,717,506

**CalEEMod Land Use Inputs: Existing Land Uses**

**Water Use**

| | | |
|---|---|---|
| *Total Wastewater:* | 7,105,240 | gallons per day |
| *Total Outdoor:* | 8,414,100 | gallons per day |
| *Total Water Demand:* | 15,519,340 | gallons per day |

| | |
|---|---|
| *Indoor Use:* | 46% |
| *Outdoor Use:* | 54% |

| Land Uses | CalEEMod Default Indoor Water Use | CalEEMod Default Outdoor Water Use | Total (gals/day) | Indoor Water Use Distribution (%) | Adjusted Indoor Distribution (%) | Outdoor Water Use Distribution (%) | Outdoor Water Use Distribution (%) | Indoor Water Use | Outdoor Water Use | Total Water Use |
|---|---|---|---|---|---|---|---|---|---|---|
| Residential - Single Family | 1,503,885,219.39 | 948,101,551.36 | 2,451,986,771 | 39.95% | 18.29% | 4.53% | 2.45% | 2,838,799 | 380,970 | 3,219,769 |
| Residential - MultiFamily | 107,960,220.45 | 68,061,878.11 | 176,022,099 | 2.87% | 1.31% | 0.33% | 0.18% | 203,790 | 27,349 | 231,139 |
| Commercial | 608,004,046.50 | 372,647,641.40 | 980,651,688 | 16.15% | 7.40% | 1.78% | 0.96% | 1,147,695 | 149,739 | 1,297,434 |
| Industrial | 685,288,562.50 | 0 | 685,288,563 | 18.21% | 8.34% | 0.00% | 0.00% | 1,293,580 | 0 | 1,293,580 |
| Commercial - Gov't | 811,779,101.15 | 497,542,029.74 | 1,309,321,131 | 21.57% | 9.87% | 2.38% | 1.29% | 1,532,349 | 199,925 | 1,732,274 |
| Open Space | 0 | 18,460,335,439.10 | 18,460,335,439 | 0.00% | 0.00% | 88.16% | 47.80% | 0 | 7,417,813 | 7,417,813 |
| Golf Course | 0 | 471,778,955.21 | 471,778,955 | 0.00% | 0.00% | 2.25% | 1.22% | 0 | 189,572 | 189,572 |
| Parking | 0 | 0 | 0 | 0.00% | 0.00% | 0.00% | 0.00% | 0 | 0 | 0 |
| Parking - Other | 0 | 0 | 0 | 0.00% | 0.00% | 0.00% | 0.00% | 0 | 0 | 0 |
| Preschool | 2,244,846.24 | 5,772,461.76 | 8,017,308 | 0.06% | 0.03% | 0.03% | 0.01% | 4,237 | 2,320 | 6,557 |
| Private/Charter/Elementary School | 25,299,368.64 | 65,055,519.36 | 90,354,888 | 0.67% | 0.31% | 0.31% | 0.17% | 47,756 | 26,141 | 73,897 |
| Middle School | 8,104,234.32 | 20,839,459.68 | 28,943,694 | 0.22% | 0.10% | 0.10% | 0.05% | 15,298 | 8,374 | 23,672 |
| High School | 11,514,565.44 | 29,608,882.56 | 41,123,448 | 0.31% | 0.14% | 0.14% | 0.08% | 21,735 | 11,898 | 33,633 |
| **TOTALs** | **3,764,080,165** | **20,939,743,818** | **24,703,823,983** | **100%** | **46%** | **1.0000** | 54.22% | **7,105,239** | **8,414,101** | **15,519,340** |
| | 15% | 85% | 100% | | | | | 15,519,340 | | |

**For purposes of modeling, 40 percent of residential uses are assumed to be connected to sewer and the remaining 60 percent are connected to a septic system.*

## CalEEMod Land Use Inputs: Existing Land Uses

**Solid Waste***

| | | |
|---|---|---|
| *Total Solid Waste Generation:* | 420,705 | pounds per day |
| | 210.35 | tons per day |
| | *76,778.66* | *tons per year* |

| Land Uses | CalEEMod Default Solid Waste (tons/year) | Solid Waste Distribution (%) | Adjusted Solid Waste (tons/year) |
|---|---|---|---|
| Residential - Single Family | 36,435.47 | 69.12% | 53,067.36 |
| Residential - MultiFamily | 762.22 | 1.45% | 1,110.15 |
| Commercial | 3,181.41 | 6.04% | 4,633.65 |
| Industrial | 3,674.63 | 6.97% | 5,352.01 |
| Commercial - Gov't | 3,800.24 | 7.21% | 5,534.96 |
| Open Space | 1,332.45 | 2.53% | 1,940.68 |
| Golf Course | 368.24 | 0.70% | 536.33 |
| Parking | 0.00 | 0.00% | 0.00 |
| Parking - Other | 0.00 | 0.00% | 0.00 |
| Preschool | 169.00 | 0.32% | 246.14 |
| Private/Charter/Elementary School | 1,904.57 | 3.61% | 2,773.96 |
| Middle School | 610.10 | 1.16% | 888.60 |
| High School | 477.06 | 0.90% | 694.83 |
| **TOTALs** | **52,715** | **100.00%** | **76,779** |

*Waste generation rates provided in Section 5.15.4 of Chapter 5.15, Utilities and Service Systmes, of the DEIR.

**Energy Use**

**Historical Data Enabled:** All existing buildings are assumed to meet the 2005 Building Energy Efficiency Standards.

**CalEEMod Land Use Inputs: Buildout: Remaining Existing Land Uses**

| Type | | A | S | A | S | |
|---|---|---|---|---|---|---|
| Residential - Single Family | Single-Family | 23,082 | DU | 98,284 | 77,503,209 | 88,867 |
| Residential MultiFamily | Multi-Family | 1,657 | DU | 5,555 | 3,096,379 | 4,623 |
| Commercial | Strip Mall | 3,420.870 | 1000bsf | 2,070 | 3,420,870 | |
| Industrial | Office Park | 2,963.408 | 1000bsf | 24,786 | 2,963,408 | |
| Government | General Light Industrial | 4,086.283 | 1000bsf | 570,046 | 4,086,283 | |
| Open Space | City Park | 15,493.585 | acre | 15,494 | 99,405 | |
| Golf Course | Golf Course | 398.958 | acre | 399 | 45,784 | |
| Parking | Surface Lot | 17.903 | acre | 18 | 0 | |
| Parking - Other | Other Non-Asphalt | 419,510 | acre | 419,510 | 0 | |
| Preschool | Daycare | 926 | students | 4 | 102,091 | |
| Elementary School* | Elementary | 10,436 | students | 265 | 1,151,010 | |
| *Private Charter* | *Elementary* | *714* | *students* | *60* | *78,678* | |
| *Elementary School* | *Elementary* | *9,722* | *students* | *204* | *1,072,332* | |
| Middle School | Middle | 3,343 | students | 70 | 368,745 | |
| High School | High School | 2,614 | students | 108 | 288,284 | |
| | | | | 1,136,609 | 93,125,469 | |

*For purposes of modeling, the the inputs for the Elementary School and Private/Charter School land uses are combined and entered under the Elementary School land use in CalEEMod.

| | |
|---|---|
| Project Location: | Los Angeles County |
| Climate Zone: | 9 |
| Operation Year | 2035 |
| Land Use Setting | Rural |
| Utility Company | SCE |
| Source Receptor Area: | |

**CalEEMod Land Use Inputs: Buildout: Remaining Existing Land Uses**

**Trip Generation:***

| | | |
|---|---|---|
| **Total Daily Vehicle Miles Traveled:** | 5,602,133 | miles |
| **Total Average Daily Trips:** | 251,375 | trip ends |
| **Average Trip Length:** | 22.29 | miles/trip end |

**VMT, ADT, and average trip length data provided by Fehr & Peers (2014)*

| Land Use Type | Building Square Feet | Proportioned | Trips |
|---|---|---|---|
| Residential - Single Family | 77,503,209 | 83.22% | 209,205 |
| Residential MultiFamily | 3,096,379 | 3.32% | 8,358 |
| Commercial | 3,420,870 | 3.67% | 9,234 |
| Industrial | 2,963,408 | 3.18% | 7,999 |
| Government | 4,086,283 | 4.39% | 11,030 |
| Open Space | 99,405 | 0.11% | 268 |
| Golf Course | 45,784 | 0.05% | 124 |
| Parking | | 0.00% | 0 |
| Parking - Other | | 0.00% | 0 |
| Preschool | 102,091 | 0.11% | 276 |
| Private/Charter/Elementary School | 1,151,010 | 1.24% | 3,107 |
| Middle School | 368,745 | 0.40% | 995 |
| High School | 288,284 | 0.31% | 778 |
| **TOTAL** | 93,125,469 | 100% | 251,375 |

**CalEEMod Land Use Inputs: Buildout: Remaining Existing Land Uses**

**Residential - Single Family**

| | |
|---|---|
| 23,082 | dwelling units (DU) |
| 9.06 | trips/DU |
| 209,205 | Average Daily Trips (ADT)* |

**Residential - Multi Family**

| | |
|---|---|
| 1,657 | dwelling units (DU) |
| 5.04 | trips/DU |
| 8,358 | Average Daily Trips (ADT)* |

**Commercial**

| | |
|---|---|
| 3,420.87 | 1000bsf |
| 2.70 | trips/1000bsf |
| 9,234 | Average Daily Trips (ADT)* |

**Industrial**

| | |
|---|---|
| 2,963.41 | 1000bsf |
| 2.70 | trips/1000bsf |
| 7,999 | Average Daily Trips (ADT)* |

**Government**

| | |
|---|---|
| 4,086.28 | 1000bsf |
| 2.70 | trips/1000bsf |
| 11,030 | Average Daily Trips (ADT)* |

**Open Space**

| | |
|---|---|
| 15,494 | Acres |
| 0.02 | trips/DU |
| 268 | Average Daily Trips (ADT)* |

**Golf Course**

| | |
|---|---|
| 398.96 | acre |
| 0.31 | trips/acre |
| 124 | Average Daily Trips (ADT)* |

**Parking Lot**

| | |
|---|---|
| 18 | acres |
| 0 | trips/DU |
| 0 | Average Daily Trips (ADT)* |

**Parking - Other Non-Asphalt Surfaces**

| | |
|---|---|
| 419,510 | acres |
| 0 | trips/DU |
| 0 | Average Daily Trips (ADT)* |

**Preschool**

| | |
|---|---|
| 926 | students |
| 0.30 | trips/1000bsf |
| 276 | Average Daily Trips (ADT)* |

**Private/Charter School/Elementary School**

| | |
|---|---|
| 10,436 | students |
| 0.30 | trips/1000bsf |
| 3,107 | Average Daily Trips (ADT)* |

**Middle School**

| | |
|---|---|
| 3,343 | students |
| 0.30 | trips/DU |
| 995 | Average Daily Trips (ADT)* |

**High School**

| | |
|---|---|
| 2,614.00 | acre |
| 0.30 | trips/acre |
| 778 | Average Daily Trips (ADT)* |

**Total Weekday ADTs:** 251,375 2,039,176,465

**CalEEMod Land Use Inputs: Buildout: Remaining Existing Land Uses**

**Water Use**

| | | |
|---|---|---|
| *Total Wastewater:* | 7,105,240 | gallons per day |
| *Total Outdoor:* | 8,414,100 | gallons per day |
| *Total Water Demand:* | 15,519,340 | gallons per day |

| | |
|---|---|
| *Indoor Use:* | 46% |
| *Outdoor Use:* | 54% |

| Land Uses | CalEEMod Default Indoor Water Use | CalEEMod Default Outdoor Water Use | Total (gals/day) | Indoor Water Use Distribution (%) | Adjusted Indoor Distribution (%) | Outdoor Water Use Distribution (%) | Outdoor Water Use Distribution (%) | Indoor Water Use | Outdoor Water Use | Total Water Use |
|---|---|---|---|---|---|---|---|---|---|---|
| Residential - Single Family | 1,503,885,219.39 | 948,101,551.36 | 2,451,986,771 | 39.95% | 18.29200582825250 0% | 4.53% | 2.45% | 2,838,799 | 380,970 | 3,219,769 |
| Residential MultiFamily | 107,960,220.45 | 68,061,878.11 | 176,022,099 | 2.87% | 1.31% | 0.33% | 0.18% | 203,790 | 27,349 | 231,139 |
| Commercial | 608,004,046.50 | 372,647,641.40 | 980,651,688 | 16.15% | 7.40% | 1.78% | 0.96% | 1,147,695 | 149,739 | 1,297,434 |
| Industrial | 685,288,562.50 | 0 | 685,288,563 | 18.21% | 8.34% | 0.00% | 0.00% | 1,293,580 | 0 | 1,293,580 |
| Government | 811,779,101.15 | 497,542,029.74 | 1,309,321,131 | 21.57% | 9.87% | 2.38% | 1.29% | 1,532,349 | 199,925 | 1,732,274 |
| Open Space | 0 | 18,460,335,439.10 | 18,460,335,439 | 0.00% | 0.00% | 88.16% | 47.80% | 0 | 7,417,813 | 7,417,813 |
| Golf Course | 0 | 471,778,955.21 | 471,778,955 | 0.00% | 0.00% | 2.25% | 1.22% | 0 | 189,572 | 189,572 |
| Parking | 0 | 0 | 0 | 0.00% | 0.00% | 0.00% | 0.00% | 0 | 0 | 0 |
| Parking - Other | 0 | 0 | 0 | 0.00% | 0.00% | 0.00% | 0.00% | 0 | 0 | 0 |
| Preschool | 2,244,846.24 | 5,772,461.76 | 8,017,308 | 0.06% | 0.03% | 0.03% | 0.01% | 4,237 | 2,320 | 6,557 |
| Elementary School* | 25,299,368.64 | 65,055,519.36 | 90,354,888 | 0.67% | 0.31% | 0.31% | 0.17% | 47,756 | 26,141 | 73,897 |
| Middle School | 8,104,234.32 | 20,839,459.68 | 28,943,694 | 0.22% | 0.10% | 0.10% | 0.05% | 15,298 | 8,374 | 23,672 |
| High School | 11,514,565.44 | 29,608,882.56 | 41,123,448 | 0.31% | 0.14% | 0.14% | 0.08% | 21,735 | 11,898 | 33,633 |
| **TOTALs** | **3,764,080,165** | **20,939,743,818** | **24,703,823,983** | **100%** | **46%** | **1.0000** | 54.22% | **7,105,240** | **8,414,100** | **15,519,340** |
| | | | | | | | | 15,519,340 | | |

**For purposes of modeling, 40 percent of residential uses are assumed to be connected to sewer and the remaining 60 percent are connected to a septic system.*

**CalEEMod Land Use Inputs: Buildout: Remaining Existing Land Uses**

**Solid Waste***

| | | |
|---|---|---|
| *Total Solid Waste Generation:* | 420,705 | pounds per day |
| | 210.35 | tons per day |
| | 76,779 | tons per year |

| Land Uses | CalEEMod Default Solid Waste (tons/year) | Solid Waste Distribution (%) | Adjusted Solid Waste (tons/year) |
|---|---|---|---|
| Residential - Single Family | 36,435.47 | 69.12% | 53,067.36 |
| Residential MultiFamily | 762.22 | 1.45% | 1,110.15 |
| Commercial | 3,181.41 | 6.04% | 4,633.65 |
| Industrial | 3,674.63 | 6.97% | 5,352.01 |
| Government | 3,800.24 | 7.21% | 5,534.96 |
| Open Space | 1,332.45 | 2.53% | 1,940.68 |
| Golf Course | 368.24 | 0.70% | 536.33 |
| Parking | 0.00 | 0.00% | 0.00 |
| Parking - Other | 0.00 | 0.00% | 0.00 |
| Preschool | 169.00 | 0.32% | 246.14 |
| Elementary School* | 1,904.57 | 3.61% | 2,773.96 |
| Middle School | 610.10 | 1.16% | 888.60 |
| High School | 477.06 | 0.90% | 694.83 |
| **TOTALs** | **52,715** | **100.00%** | **76,778.66** |

*Waste generation rates provided in Section 5.15.4 of Chapter 5.15, Utilities and Service Systmes, of the DEIR.

**Energy Use**

**Historical Data Enabled:** All existing buildings are assumed to meet the 2005 Building Energy Efficiency Standards.

**CalEEMod Land Use Inputs: Proposed Buildout - New Land Uses**

| Type | A | S | A | S | |
|---|---|---|---|---|---|
| Residential - Single Family | 79,348 | DU | 0 | 266,423,552 | 304,675 |
| Residential - Multi Family | 2,093 | DU | 0 | 3,911,117 | 7,245 |
| Commercial (Office) | 15,629.584 | 1000BSF | 0 | 15,629,584 | |
| Industrial | 103,981.036 | 1000BSF | 0 | 103,981,036 | |
| Open Space(parking non-asphalt | 30,708.000 | Acre | 0 | 0 | |
| Parks | 3,821.415 | Acre | 0 | 0 | |
| Preschool | 3,047 | Student | 0 | 335,876 | |
| Elementary School | 34,352 | Student | 0 | 3,788,708 | |
| *Private Charter* | *2,347* | *Student* | *0* | *258,678* | |
| *Elementary School* | *32,004* | *Student* | *0* | *3,530,030* | |
| Middle School | 11,005 | Student | 0 | 1,213,936 | |
| High School | 8,604 | Student | 0 | 948,839 | |
| | | | 0 | 396,232,647 | |

**For purposes of modeling, the the inputs for the Elementary School and Private/Charter School land uses are combined and entered under the Elementary School land use in CalEEMod.*

***Assumes new development would occur on existing area.*

| | |
|---|---|
| Project Location: | Los Angeles County |
| Climate Zone: | 9 |
| Operation Year | 2035 |
| Land Use Setting | Rural |
| Utility Company | SCE |
| Source Receptor Area: | |

**CalEEMod Land Use Inputs: Proposed Buildout - New Land Uses**

**Trip Generation:***

| | | |
|---|---|---|
| **Total Daily Vehicle Miles Traveled:** | 11,463,588 | miles |
| **Total Average Daily Trips:** | 514,386 | trip ends |
| **Average Trip Length:** | 22.29 | miles/trip end |

**VMT, ADT, and average trip length data provided by Fehr & Peers (2014)*

| Land Use Type | BSF | Proportioned | Trips |
|---|---|---|---|
| Residential - Single Family | 266,423,552 | 67.24% | 345,869 |
| Residential - Multi Family | 3,911,117 | 0.99% | 5,077 |
| Commercial (Office) | 15,629,584 | 3.94% | 20,290 |
| Industrial | 103,981,036 | 26.24% | 134,987 |
| Open Space(parking non-asphalt | 0 | 0.00% | 0 |
| Parks | 0 | 0.00% | 0 |
| Preschool | 335,876 | 0.08% | 436 |
| Private/Charter/Elementary | 3,788,708 | 0.96% | 4,918 |
| Middle School | 1,213,936 | 0.31% | 1,576 |
| High School | 948,839 | 0.24% | 1,232 |
| **TOTAL** | 396,232,647 | 100% | 514,386 |

**Residential - Single Family**

| | | | |
|---|---|---|---|
| 79,348 | dwelling units (DU) | | |
| 4.36 | trips/DU | *Daily VMT* | *Annual VMT* |
| 345,869 | Average Daily Trips (ADT)* | 7,708,022 | 2,805,719,856 |

**Residential - Multi Family**

| | | | |
|---|---|---|---|
| 2,093 | dwelling units (DU) | | |
| 2.43 | trips/DU | | |
| 5,077 | Average Daily Trips (ADT)* | 113,154 | 41,188,168 |

**Commercial**

| | | | |
|---|---|---|---|
| 15,629.58 | 1000bsf | | |
| 1.30 | trips/1000bsf | | |
| 20,290 | Average Daily Trips (ADT)* | 452,187 | 164,595,932 |

**Industrial**

| | | | |
|---|---|---|---|
| 103,981.04 | 1000bsf | | |
| 1.30 | trips/1000bsf | | |
| 134,987 | Average Daily Trips (ADT)* | 3,008,323 | 1,095,029,532 |

**Open Space**

| | | | |
|---|---|---|---|
| 30,708 | acre | | |
| 0 | trips/acre | | |
| 0 | Average Daily Trips (ADT)* | 0 | 0 |

**Parks**

| | | | |
|---|---|---|---|
| 3,821.41 | acre | | |
| 0 | trips/acre | | |
| 0 | Average Daily Trips (ADT)* | 0 | 0 |

**Preschool**

| | | | |
|---|---|---|---|
| 3,047 | students | | |
| 0.14 | trips/student | *Daily VMT* | *Annual VMT* |
| 436 | Average Daily Trips (ADT)* | 9,717 | 3,537,132 |

**Private/Charter School**

| | | | |
|---|---|---|---|
| 34,352 | students | | |
| 0.14 | trips/student | | |
| 4,918 | Average Daily Trips (ADT)* | 109,613 | 39,899,077 |

**Middle School**

| | | | |
|---|---|---|---|
| 11,005.41 | students | | |
| 0.14 | trips/student | | |
| 1,576 | Average Daily Trips (ADT)* | 35,121 | 12,784,022 |

**High School**

| | | | |
|---|---|---|---|
| 8,604 | students | | |
| 0.14 | trips/student | | |
| 1,232 | Average Daily Trips (ADT)* | 27,451 | 9,992,268 |

**Total Weekday ADTs:** 514,386 **Total Weekday VMT:** 11,463,588

**CalEEMod Land Use Inputs: Proposed Buildout - New Land Uses**

**Water Use**

| | | |
|---|---|---|
| *Total Wastewater:* | 23,705,920 | gallons per day |
| *Total Outdoor:* | 18,342,960 | gallons per day |
| *Total Water Demand:* | 42,048,880 | gallons per day |

| | |
|---|---|
| *Indoor Use:* | 56% |
| *Outdoor Use:* | 44% |

| Land Uses | CalEEMod Default Indoor Water Use | CalEEMod Default Outdoor Water Use | Total (gals/day) | Indoor Water Use Distribution (%) | Adjusted Indoor Distribution (%) | Outdoor Water Use Distribution (%) | Outdoor Water Use Distribution (%) | Indoor Water Use | Outdoor Water Use | Total Water Use |
|---|---|---|---|---|---|---|---|---|---|---|
| Residential - Single Family | 5,169,841,625.01 | 3,259,247,980.98 | 8,429,089,606 | 16.01% | 9.03% | 32.59% | 14.22% | 3,796,066 | 5,978,333 | 9,774,399 |
| Residential - Multi Family | 136,367,375.63 | 85,970,736.81 | 222,338,112 | 0.42% | 0.24% | 0.86% | 0.38% | 100,131 | 157,693 | 257,824 |
| Commercial (Office) | 2,777,907,387.64 | 1,702,588,398.88 | 4,480,495,787 | 8.60% | 4.85% | 17.03% | 7.43% | 2,039,737 | 3,123,003 | 5,162,740 |
| Industrial | 24,045,606,250 | 0 | 24,045,606,250 | 74.48% | 41.99% | 0.00% | 0.00% | 17,655,996 | 0 | 17,655,996 |
| Open Space(parking non-asphalt | 0.00 | 0.00 | 0 | 0.00% | 0.00% | 0.00% | 0.00% | 0 | 0 | 0 |
| Parks | 0 | 4,553,150,659.22 | 4,553,150,659 | 0.00% | 0.00% | 45.53% | 19.86% | 0 | 8,351,697 | 8,351,697 |
| Preschool | 7,386,659.28 | 18,994,266.72 | 26,380,926 | 0.02% | 0.01% | 0.19% | 0.08% | 5,424 | 34,841 | 40,264 |
| Elementary School | 83,277,492.48 | 214,142,123.52 | 297,419,616 | 0.26% | 0.15% | 2.14% | 0.93% | 61,148 | 392,794 | 453,942 |
| Middle School | 26,678,761.20 | 68,602,528.80 | 95,281,290 | 0.08% | 0.05% | 0.69% | 0.30% | 19,589 | 125,835 | 145,425 |
| High School | 37,900,275.84 | 97,457,852.16 | 135,358,128 | 0.12% | 0.07% | 0.97% | 0.43% | 27,829 | 178,764 | 206,593 |
| **TOTALs** | **32,284,965,827** | **10,000,154,547** | **42,285,120,374** | **100%** | **56%** | **1.0000** | 43.62% | **23,705,920** | **18,342,960** | **42,048,880** |
| | | | | | | | | 42,048,880 | | |

**For purposes of modeling, 60 percent of residential uses are assumed to be connected to sewer and the remaining 40 percent are connected to a septic system.*

**CalEEMod Land Use Inputs: Proposed Buildout - New Land Uses**

**Solid Waste***

| | | |
|---|---|---|
| *Total Solid Waste Generation:* | 1,403,640 | lbs/day |
| | 702 | tons/day |
| | 256,164 | tons/year |

| Land Uses | CalEEMod Default Solid Waste (tons/year) | Solid Waste Distribution (%) | Adjusted Solid Waste (tons/year) |
|---|---|---|---|
| Residential - Single Family | 124,916.75 | 44.60% | 114,249 |
| Residential - Multi Family | 962.78 | 0.34% | 881 |
| Commercial (Office) | 14,535.53 | 5.19% | 13,294 |
| Industrial | 128,936.44 | 46.03% | 117,925 |
| Open Space(parking non-asphalt | 0 | 0.00% | 0 |
| Parks | 328.64212 | 0.12% | 301 |
| Preschool | 556.08 | 0.20% | 509 |
| Elementary School | 6,269.24 | 2.24% | 5,734 |
| Middle School | 2,008.41 | 0.72% | 1,837 |
| High School | 1,570.23 | 0.56% | 1,436 |
| **TOTALs** | **280,084** | **100.00%** | **256,164** |

*Waste generation rates provided in Section 5.15.4 of Chapter 5.15, Utilities and Service Systmes, of the DEIR.

**Energy Use**

*Existing Buildings:* All existing buildings are assumed to meet the 2005 Building Energy Efficiency Standards.

*New Buildings:* New buildings would would meet the 2013 Building Energy Efficiency Standards. For modeling purposes, a 25 percent energy efficiency reduction is assumed for all buildings.

**CalEEMod Land Use Inputs: Proposed Buildout - Total (Existing + New Land Uses)**

| Type | A | S | A | S | |
|---|---|---|---|---|---|
| Residential - Single Family | 102,430 | DU | 501,899 | 343,926,761 | 393,542 |
| Residential - Multi Family | 3,750 | DU | 205 | 7,007,495 | 11,868 |
| Commercial (Office) | 23,281.926 | 1000BSF | 570,344 | 23,281,926 | |
| Industrial | 106,944.444 | 1000BSF | 6,153 | 106,944,444 | |
| Open Space(parking non-asphalt | 30,708 | Acre | 30,708 | 0 | |
| Parks | 19,315 | Acre | 19,315 | 0 | |
| Preschool | 3,973 | Student | 19 | 437,968 | |
| Private Charter | 3,061 | Student | 259 | 337,356 | |
| Elementary School | 41,726 | Student | 877 | 4,602,362 | |
| Middle School | 14,348 | Student | 302 | 1,582,681 | |
| High School | 11,218 | Student | 462 | 1,237,123 | |
| | | | 1,130,545 | 489,358,116 | |

| | |
|---|---|
| Project Location: | Los Angeles County |
| Climate Zone: | 9 |
| Operation Year | 2035 |
| Land Use Setting | Rural |
| Utility Company | SCE |
| Source Receptor Area: | |

**Trip Generation:***

| | | | |
|---|---|---|---|
| **Total Daily Vehicle Miles Traveled:** | 17,065,721 | miles | 17,065,721 |
| **Total Average Daily Trips:** | 765,760 | trip ends | 765,760 |
| **Average Trip Length:** | 22.3 | miles/trip end | |

**VMT, ADT, and average trip length data provided by Fehr & Peers (2014)*

| Land Use Type | BSF | Proportioned | Trips |
|---|---|---|---|
| Residential - Single Family | 343,926,761 | 70.28% | 538,186 |
| Residential - Multi Family | 7,007,495 | 1.43% | 10,966 |
| Commercial (Office) | 23,281,926 | 4.76% | 36,432 |
| Industrial | 106,944,444 | 21.85% | 167,349 |
| Open Space(parking non-asphalt | 0 | 0.00% | 0 |
| Parks | 0 | 0.00% | 0 |
| Preschool | 437,968 | 0.09% | 685 |
| Private Charter | 337,356 | 0.07% | 528 |
| Elementary School | 4,602,362 | 0.94% | 7,202 |
| Middle School | 1,582,681 | 0.32% | 2,477 |
| High School | 1,237,123 | 0.25% | 1,936 |
| **TOTAL** | 489,358,116 | 100% | 765,760 |

**Residential - Single Family**

| | | | |
|---|---|---|---|
| 102,430 | dwelling units (DU) | | |
| 5.2542 | trips/DU | *Daily VMT* | *Annual VMT* |
| 538,186 | Average Daily Trips (ADT)* | 11,993,994 | 4,365,813,706 |

**Residential - Multi Family**

| | | | |
|---|---|---|---|
| 3,750 | dwelling units (DU) | | |
| 2.9241 | trips/DU | | |
| 10,966 | Average Daily Trips (ADT)* | 244,377 | 88,953,298 |

**Commercial**

| | | | |
|---|---|---|---|
| 23,281.93 | 1000bsf | | |
| 1.56483 | trips/1000bsf | | |
| 36,432 | Average Daily Trips (ADT)* | 811,927 | 295,541,270 |

**Industrial**

| | | | |
|---|---|---|---|
| 106,944.44 | 1000bsf | | |
| 1.56483 | trips/1000bsf | | |
| 167,349 | Average Daily Trips (ADT)* | 3,729,547 | 1,357,555,073 |

**Open Space**

| | | | |
|---|---|---|---|
| 30,708 | acre | | |
| 0 | trips/acre | | |
| 0 | Average Daily Trips (ADT)* | 0 | 0 |

**Parks**

| | | | |
|---|---|---|---|
| 19,315.00 | acre | | |
| 0 | trips/acre | | |
| 0 | Average Daily Trips (ADT)* | 0 | 0 |

| | | | |
|---|---|---|---|
| **Total Weekday ADTs:** | 765,760 | 16,779,844 | 6,107,863,347 |

**Preschool**

| | | |
|---|---|---|
| 3,973 | students | |
| 0.1725 | trips/student | *Daily VMT* |
| 685 | Average Daily Trips (ADT)* | 15,274 |

**Private/Charter School**

| | | |
|---|---|---|
| 3,061 | students | |
| 0.1724 | trips/student | |
| 528 | Average Daily Trips (ADT)* | 11,765 |

**Elementary School**

| | | |
|---|---|---|
| 41,726.04 | students | |
| 0.17260 | trips/student | |
| 7,202 | Average Daily Trips (ADT)* | 160,501 |

**Middle School**

| | | |
|---|---|---|
| 14,348.41 | students | |
| 0.17261 | trips/student | |
| 2,477 | Average Daily Trips (ADT)* | 55,194 |

**High School**

| | | |
|---|---|---|
| 11,218 | students | |
| 0.1726 | trips/student | |
| 1,936 | Average Daily Trips (ADT)* | 43,143 |

285,877

**Water Use***

| | | |
|---|---|---|
| *Total Wastewater:* | 30,811,160 | gallons per day |
| *Total Water Demand:* | 57,568,220 | gallons per day |

**For purposes of modeling, 60 percent of residential uses are assumed to be connected to sewer and remaining 40 percent would utilize a septic system.*

**Solid Waste**

| | | |
|---|---|---|
| *Waste Generation Rate:* | 4.50 | pounds/resident/day |
| *Total Residents:* | 405,410.00 | residents |
| *Total Solid Waste Generation:* | 1,824,345.00 | lbs/day |
| | 912.17 | tons/day |

**Energy Use**

*Existing Buildings:* All existing buildings are assumed to meet the 2005 Building Energy Efficiency Standards.

*New Buildings:* New buildings would would meet the 2013 Building Energy Efficiency Standards. For modeling purposes, a 25 percent energy efficiency reduction is assumed for all buildings.

**C** **C EE** **D** **E**

**E**

| Default | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FleetMix | 0.490902 | 0.071303 | 0.171168 | 0.163251 | 0.061663 | 0.009724 | 0.004715 | 0.01155 | 0.00114 | 0.001047 | 0.007599 | 0.000714 | 0.005225 | 100% |
| Trips | 123,400 | 17,924 | 43,027 | 41,037 | 15,501 | 2,444 | 1,185 | 2,903 | 287 | 263 | 1,910 | 179 | 1,313 | 251,375 |
| Percent | 0.740972 | | | 0.163251 | | | | 0.095778 | | | | | | 100% |
| Proportion | 0.662511 | 0.096229 | 0.231005 | 1.000000 | 0.643812 | 0.101526 | 0.049228 | 0.120591 | 0.011903 | 0.010932 | 0.010255 | 0.007455 | 0.054553 | |
| Assumed Mix | 98.80% | | | 0.41% | | | | 0.79% | | | | | | 1 |
| adjusted with | | | | | | | | | | | | | | |
| Assumed | 0.654590 | 0.095079 | 0.228243 | 0.004087 | 0.005066 | 0.000799 | 0.000387 | 0.000949 | 0.000094 | 0.000086 | 0.010133 | 0.000059 | 0.000429 | 1 |
| Trips | 164,547 | 23,900 | 57,374 | 1,027 | 1,273 | 201 | 97 | 239 | 24 | 22 | 2,547 | 15 | 108 | 251,375 |
| | 0.654590 | 0.095079 | 0.228243 | 0.004087 | 0.005066 | 0.000799 | 0.000387 | 0.000949 | 0.000094 | 0.000086 | 0.010133 | 0.000059 | 0.000429 | 100.0% |
| | **. 545** | **. 5** | **.22 243** | **. 4** | **. 5** | **.** | **. 3** | **. 4** | **. 4** | **.** | **. 1 133** | **. 5** | **. 42** | **1 .** |
| Trips | 164,547 | 23,900 | 57,374 | 1,027 | 1,273 | 201 | 97 | 239 | 24 | 22 | 2,547 | 15 | 108 | 251,375 |

*Based on fleet mix data provided by Fehr & Peers.

**C C EE D**

**E**

| Default | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FleetMix | 0.445749 | 0.072536 | 0.182873 | 0.171458 | 0.077281 | 0.012178 | 0.005402 | 0.011929 | 0.001177 | 0.001207 | 0.008225 | 0.000613 | 0.009373 | 100% |
| Trips | 341,337 | 55,545 | 140,037 | 131,296 | 59,179 | 9,325 | 4,137 | 9,135 | 901 | 924 | 6,298 | 469 | 7,177 | 765,761 |
| Percent | 0.709383 | | | 0.171458 | | | | 0.11916 | | | | | | 100% |
| Proportion | 0.628362 | 0.102252 | 0.257792 | 1.000000 | 0.648548 | 0.102199 | 0.045334 | 0.100109 | 0.009877 | 0.010129 | 0.011595 | 0.005144 | 0.078659 | |
| Assumed Mix | 97.26% | | | 0.74% | | | | 2.00% | | | | | | 100.00% |
| adjusted with Assumed | 0.611152 | 0.099452 | 0.250731 | 0.007405 | 0.012959 | 0.002042 | 0.000906 | 0.002000 | 0.000197 | 0.000202 | 0.011277 | 0.000103 | 0.001572 | 1 |
| Trips | 467,996 | 76,156 | 192,000 | 5,671 | 9,924 | 1,564 | 694 | 1,532 | 151 | 155 | 8,636 | 79 | 1,204 | 765,760 |
| Calibrated for zero school buses | 0.611152 | 0.099452 | 0.250731 | 0.007405 | 0.012959 | 0.002042 | 0.000906 | 0.002000 | 0.000197 | 0.000202 | 0.011277 | 0.000103 | 0.001572 | 100.0% |
| | **. 11152** | **. 452** | **.25 31** | **. 4 5** | **. 12 5** | **. 2 42** | **.** | **. 2** | **. 1** | **. 2 2** | **. 112** | **. 1 3** | **. 15 2** | **1 .** |
| Trips | 467,996 | 76,156 | 192,000 | 5,671 | 9,924 | 1,564 | 694 | 1,532 | 151 | 155 | 8,636 | 79 | 1,204 | 765,760 |

*Based on fleet mix data provided by Fehr & Peers.

# Traffic Data

*Provided by Fehr & Peers

**AVP VMT Summary - 2012 Existing DRAFT**

| Trip Analysis | Internal Trips | External Trips | All Trips |
|---|---|---|---|
| Vehicle Miles Travelled (VMT) | 194,328 | 4,370,830 | 4,565,158 |
| Vehicle Trips (VT) | 28,258 | 223,117 | 251,375 |
| Average Trip Length (VMT/VT) | 6.9 | 19.6 | 18.2 |

**AVP VMT Summary - 2035 Baseline + Project DRAFT**

| Trip Analysis | Internal Trips | External Trips | All Trips |
|---|---|---|---|
| Vehicle Miles Travelled (VMT) | 1,952,474 | 15,113,247 | 17,065,721 |
| Vehicle Trips (VT) | 202,093 | 563,668 | 765,760 |
| Average Trip Length (VMT/VT) | 9.7 | 26.8 | 22.3 |

## Fleet Mix Data*

*Data provided by Fehr & Peers

**AVP Vehicle Trips - 2012 Existing DRAFT**

| Mode | SOV | HOV 2 | HOV 3+ | Light Trucks | Medium Trucks | Heavy Trucks | All Vehicles |
|---|---|---|---|---|---|---|---|
| External Trips | 155,249 | 29,383 | 34,343 | 1,286 | 917 | 1,938 | 223,117 |
| Internal Trips | 36,551 | 8,026 | 6,242 | 431 | 308 | 95 | 51,652 |
| **Subtotal** | **191,800** | **37,409** | **40,585** | **1,717** | **1,225** | **2,033** | **274,769** |
| *Internalization** | *44%* | *50%* | *46%* | *62%* | *64%* | *58%* | *45%* |
| Reduced Internal Trips | 20,515 | 4,045 | 3,382 | 166 | 110 | 40 | 28,258 |
| **Total Trips** | **175,764** | **33,428** | **37,725** | **1,452** | **1,027** | **1,978** | **251,375** |

**Fleet Mix: Existing**

| LDT | MT | HHT |
|---|---|---|
| 248,369 | 1,027 | 1,978 |
| **98.80%** | **0.41%** | **0.79%** |

**AVP Vehicle Trips - 2035 Baseline + Project DRAFT**

| Mode | SOV | HOV 2 | HOV 3+ | Light Trucks | Medium Trucks | Heavy Trucks | All Vehicles |
|---|---|---|---|---|---|---|---|
| External Trips | 359,744 | 73,636 | 107,528 | 5,695 | 3,524 | 13,540 | 563,668 |
| Internal Trips | 288,078 | 54,944 | 44,338 | 5,921 | 6,211 | 4,028 | 403,519 |
| **Subtotal** | **647,822** | **128,580** | **151,867** | **11,616** | **9,735** | **17,567** | **967,187** |
| *Internalization** | *47%* | *58%* | *55%* | *65%* | *65%* | *56%* | *50%* |
| Reduced Internal Trips | 152,979 | 23,088 | 20,068 | 2,049 | 2,147 | 1,762 | 202,093 |
| **Total Trips** | **512,723** | **96,724** | **127,597** | **7,744** | **5,671** | **15,302** | **765,761** |

**Fleet Mix: Future + Project**

| LDT | MT | HHT |
|---|---|---|
| 744,788 | 5,671 | 15,302 |
| **97.26%** | **0.74%** | **2.00%** |

*Internalized vehicle trips are not assigned to the model network. These trips are relatively short and remain on local streets, which are not detailed in the traffic model. The beginning and end of these trips occur within a single Traffic Analysis Zone (TAZ). Since they do not travel on study roadways, they are not included in VMT estimates and are removed from the final vehicle trip generation estimates.

# E

**A D C**

## 1. C

### 1.1

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 3,420.87 | 1000sqft | 2,070.00 | 3,420,870.00 | 0 |
| Government Office Building | 4,086.28 | 1000sqft | 570,046.00 | 4,086,283.00 | 0 |
| Day-Care Center | 926.00 | Student | 4.00 | 102,091.00 | 0 |
| Elementary School | 10,436.00 | Student | 265.00 | 1,151,010.00 | 0 |
| High School | 2,614.00 | Student | 108.00 | 288,284.00 | 0 |
| Junior High School | 3,343.00 | Student | 70.00 | 368,745.00 | 0 |
| General Light Industry | 2,963.41 | 1000sqft | 24,786.00 | 2,963,408.00 | 0 |
| Other Non-Asphalt Surfaces | 419,510.00 | Acre | 419,510.00 | 0.00 | 0 |
| Parking Lot | 17.90 | Acre | 17.90 | 0.00 | 0 |
| City Park | 15,493.58 | Acre | 15,493.58 | 99,405.00 | 0 |
| Golf Course | 395.96 | Acre | 399.00 | 45,784.00 | 0 |
| Apartments Low Rise | 1,657.00 | Dwelling Unit | 5,555.00 | 3,096,379.00 | 4623 |
| Single Family Housing | 23,082.00 | Dwelling Unit | 98,284.00 | 77,503,209.00 | 88867 |

### 1.2 O C

Urban **S** 2.2 **D** 33

**C** 9 **O** 2014

**C** Southern California Edison

| | | | | | |
|---|---|---|---|---|---|
| **CO2 I** | 630.89 | **C 4 I** | 0.029 | **N2O I** | 0.006 |

## 1.3 E C N D D

Project Characteristics -

Land Use - Based on information provided by the County. For modeling purposes, private/charter schools and elementary school land use information combined as one.

Construction Phase - No construction component for modeling.

Off-road Equipment - No construction component.

Off-road Equipment -

Vehicle Trips - Trip generation rate and average trip distance based on information provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Energy Use -

Water And Wastewater - See Sections 5.17.1 and 5.17.2 of the Draft EIR. Otherwise noted, modeling assumes 60% of existing land uses use septic systems.

Solid Waste - See Section 5.17.4 of the Draft EIR.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaCoating | Area_Nonresidential_Interior | 18788819 | 18788816 |
| tblConstructionPhase | NumDays | 10,000.00 | 10.00 |
| tblLandUse | LandUseSquareFeet | 4,086,280.00 | 4,086,283.00 |
| tblLandUse | LandUseSquareFeet | 52,340.15 | 102,091.00 |
| tblLandUse | LandUseSquareFeet | 872,484.77 | 1,151,010.00 |
| tblLandUse | LandUseSquareFeet | 346,775.80 | 288,284.00 |
| tblLandUse | LandUseSquareFeet | 393,008.71 | 368,745.00 |
| tblLandUse | LandUseSquareFeet | 2,963,410.00 | 2,963,408.00 |
| tblLandUse | LandUseSquareFeet | 18,273,855,600.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 779,724.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblLandUse | LandUseSquareFeet | 674,901,216.00 | 99,405.00 |
| tblLandUse | LandUseSquareFeet | 17,248,017.60 | 45,784.00 |
| tblLandUse | LandUseSquareFeet | 1,657,000.00 | 3,096,379.00 |
| tblLandUse | LandUseSquareFeet | 41,547,600.00 | 77,503,209.00 |
| tblLandUse | LotAcreage | 78.53 | 2,070.00 |
| tblLandUse | LotAcreage | 93.81 | 570,046.00 |
| tblLandUse | LotAcreage | 1.20 | 4.00 |
| tblLandUse | LotAcreage | 20.03 | 265.00 |
| tblLandUse | LotAcreage | 7.96 | 108.00 |
| tblLandUse | LotAcreage | 9.02 | 70.00 |
| tblLandUse | LotAcreage | 68.03 | 24,786.00 |
| tblLandUse | LotAcreage | 15,493.60 | 15,493.58 |
| tblLandUse | LotAcreage | 395.96 | 399.00 |
| tblLandUse | LotAcreage | 103.56 | 5,555.00 |
| tblLandUse | LotAcreage | 7,494.16 | 98,284.00 |
| tblLandUse | Population | 4,739.00 | 4,623.00 |
| tblLandUse | Population | 66,015.00 | 88,867.00 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblSolidWaste | SolidWasteGenerationRate | 762.22 | 1,110.15 |
| tblSolidWaste | SolidWasteGenerationRate | 1,332.45 | 1,940.68 |
| tblSolidWaste | SolidWasteGenerationRate | 169.00 | 246.14 |
| tblSolidWaste | SolidWasteGenerationRate | 1,904.57 | 2,773.96 |
| tblSolidWaste | SolidWasteGenerationRate | 3,674.63 | 5,352.01 |
| tblSolidWaste | SolidWasteGenerationRate | 3,181.41 | 4,633.65 |
| tblSolidWaste | SolidWasteGenerationRate | 368.24 | 536.33 |
| tblSolidWaste | SolidWasteGenerationRate | 3,800.24 | 5,534.96 |
| tblSolidWaste | SolidWasteGenerationRate | 477.06 | 694.83 |

| | | | |
|---|---|---|---|
| tblSolidWaste | SolidWasteGenerationRate | 610.10 | 888.60 |
| tblSolidWaste | SolidWasteGenerationRate | 36,435.47 | 53,067.36 |
| tblVehicleEF | HHD | 0.01 | 9.4900e-004 |
| tblVehicleEF | HHD | 0.01 | 9.4900e-004 |
| tblVehicleEF | HHD | 0.01 | 9.4900e-004 |
| tblVehicleEF | LDA | 0.49 | 0.65 |
| tblVehicleEF | LDA | 0.49 | 0.65 |
| tblVehicleEF | LDA | 0.49 | 0.65 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT2 | 0.17 | 0.23 |
| tblVehicleEF | LDT2 | 0.17 | 0.23 |
| tblVehicleEF | LDT2 | 0.17 | 0.23 |
| tblVehicleEF | LHD1 | 0.06 | 5.0660e-003 |
| tblVehicleEF | LHD1 | 0.06 | 5.0660e-003 |
| tblVehicleEF | LHD1 | 0.06 | 5.0660e-003 |
| tblVehicleEF | LHD2 | 9.7240e-003 | 7.9900e-004 |
| tblVehicleEF | LHD2 | 9.7240e-003 | 7.9900e-004 |
| tblVehicleEF | LHD2 | 9.7240e-003 | 7.9900e-004 |
| tblVehicleEF | MCY | 7.5990e-003 | 0.01 |
| tblVehicleEF | MCY | 7.5990e-003 | 0.01 |
| tblVehicleEF | MCY | 7.5990e-003 | 0.01 |
| tblVehicleEF | MDV | 0.16 | 4.0870e-003 |
| tblVehicleEF | MDV | 0.16 | 4.0870e-003 |
| tblVehicleEF | MDV | 0.16 | 4.0870e-003 |
| tblVehicleEF | MH | 5.2250e-003 | 4.2900e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | MH | 5.2250e-003 | 4.2900e-004 |
| tblVehicleEF | MH | 5.2250e-003 | 4.2900e-004 |
| tblVehicleEF | MHD | 4.7150e-003 | 3.8700e-004 |
| tblVehicleEF | MHD | 4.7150e-003 | 3.8700e-004 |
| tblVehicleEF | MHD | 4.7150e-003 | 3.8700e-004 |
| tblVehicleEF | OBUS | 1.1400e-003 | 9.4000e-005 |
| tblVehicleEF | OBUS | 1.1400e-003 | 9.4000e-005 |
| tblVehicleEF | OBUS | 1.1400e-003 | 9.4000e-005 |
| tblVehicleEF | SBUS | 7.1400e-004 | 5.9000e-005 |
| tblVehicleEF | SBUS | 7.1400e-004 | 5.9000e-005 |
| tblVehicleEF | SBUS | 7.1400e-004 | 5.9000e-005 |
| tblVehicleEF | UBUS | 1.0470e-003 | 8.6000e-005 |
| tblVehicleEF | UBUS | 1.0470e-003 | 8.6000e-005 |
| tblVehicleEF | UBUS | 1.0470e-003 | 8.6000e-005 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 82.30 | 100.00 |
| tblVehicleTrips | CC_TTP | 30.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 62.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 17.20 | 100.00 |
| tblVehicleTrips | CC_TTP | 22.20 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 12.70 | 0.00 |
| tblVehicleTrips | CW_TTP | 65.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 77.80 | 0.00 |
| tblVehicleTrips | CW_TTP | 72.80 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 28.00 | 0.00 |
| tblVehicleTrips | DV_TP | 58.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 39.00 | 0.00 |
| tblVehicleTrips | DV_TP | 34.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 18.16 |
| tblVehicleTrips | HW_TL | 10.80 | 18.16 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 14.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 4.00 | 0.00 |
| tblVehicleTrips | PB_TP | 9.00 | 0.00 |
| tblVehicleTrips | PB_TP | 16.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 66.00 | 100.00 |
| tblVehicleTrips | PR_TP | 28.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 77.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | PR_TP | 52.00 | 100.00 |
| tblVehicleTrips | PR_TP | 50.00 | 100.00 |
| tblVehicleTrips | PR_TP | 75.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | ST_TR | 7.16 | 5.04 |
| tblVehicleTrips | ST_TR | 1.59 | 0.02 |
| tblVehicleTrips | ST_TR | 0.39 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 1.32 | 2.70 |
| tblVehicleTrips | ST_TR | 2.37 | 2.70 |
| tblVehicleTrips | ST_TR | 5.82 | 0.31 |
| tblVehicleTrips | ST_TR | 0.00 | 2.70 |
| tblVehicleTrips | ST_TR | 0.61 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 10.08 | 9.06 |
| tblVehicleTrips | SU_TR | 6.07 | 5.04 |
| tblVehicleTrips | SU_TR | 1.59 | 0.02 |
| tblVehicleTrips | SU_TR | 0.37 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |
| tblVehicleTrips | SU_TR | 0.68 | 2.70 |
| tblVehicleTrips | SU_TR | 0.98 | 2.70 |
| tblVehicleTrips | SU_TR | 5.88 | 0.31 |
| tblVehicleTrips | SU_TR | 0.00 | 2.70 |
| tblVehicleTrips | SU_TR | 0.25 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |
| tblVehicleTrips | SU_TR | 8.77 | 9.06 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | WD_TR | 6.59 | 5.04 |
| tblVehicleTrips | WD_TR | 1.59 | 0.02 |
| tblVehicleTrips | WD_TR | 4.48 | 0.30 |
| tblVehicleTrips | WD_TR | 1.29 | 0.30 |
| tblVehicleTrips | WD_TR | 6.97 | 2.70 |
| tblVehicleTrips | WD_TR | 11.01 | 2.70 |
| tblVehicleTrips | WD_TR | 5.04 | 0.31 |
| tblVehicleTrips | WD_TR | 68.93 | 2.70 |
| tblVehicleTrips | WD_TR | 1.71 | 0.30 |
| tblVehicleTrips | WD_TR | 1.62 | 0.30 |
| tblVehicleTrips | WD_TR | 9.57 | 9.06 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |

| | | | |
|---|---|---|---|
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | IndoorWaterUseRate | 107,960,220.45 | 203,790.00 |
| tblWater | IndoorWaterUseRate | 2,244,846.24 | 4,237.00 |
| tblWater | IndoorWaterUseRate | 25,299,368.64 | 47,756.00 |
| tblWater | IndoorWaterUseRate | 685,288,562.50 | 1,293,580.00 |
| tblWater | IndoorWaterUseRate | 608,004,046.50 | 1,147,695.00 |
| tblWater | IndoorWaterUseRate | 811,779,101.15 | 1,532,349.00 |
| tblWater | IndoorWaterUseRate | 11,514,565.44 | 21,735.00 |
| tblWater | IndoorWaterUseRate | 8,104,234.32 | 15,298.00 |
| tblWater | IndoorWaterUseRate | 1,503,885,219.39 | 2,838,799.00 |
| tblWater | OutdoorWaterUseRate | 68,061,878.11 | 27,349.00 |
| tblWater | OutdoorWaterUseRate | 18,460,335,439.10 | 7,417,813.00 |
| tblWater | OutdoorWaterUseRate | 5,772,461.76 | 2,320.00 |
| tblWater | OutdoorWaterUseRate | 65,055,519.36 | 26,141.00 |
| tblWater | OutdoorWaterUseRate | 372,647,641.40 | 149,739.00 |
| tblWater | OutdoorWaterUseRate | 471,778,955.21 | 189,572.00 |
| tblWater | OutdoorWaterUseRate | 497,542,029.74 | 199,925.00 |
| tblWater | OutdoorWaterUseRate | 29,608,882.56 | 11,898.00 |
| tblWater | OutdoorWaterUseRate | 20,839,459.68 | 8,374.00 |
| tblWater | OutdoorWaterUseRate | 948,101,551.36 | 380,970.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |

| | | | |
|---|---|---|---|
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |

## 2. E S

### 2.1 O C D E

C

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2015 | 0.4293 | 4.8829 | 3.6249 | 5.5800e-003 | 0.0246 | 0.2404 | 0.2650 | 6.5400e-003 | 0.2211 | 0.2277 | 0.0000 | 580.3245 | 580.3245 | 0.1676 | 0.0000 | 583.8444 |
| **T** | **.42 3** | **4. 2** | **3. 24** | **5.5 3** | **. 24** | **.24 4** | **.2 5** | **.54 3** | **.2211** | **.22** | **.** | **5 .3245** | **5 .3245** | **.1** | **.** | **5 3. 444** |

**C**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2015 | 0.4293 | 4.8829 | 3.6249 | 5.5800e-003 | 0.0246 | 0.2404 | 0.2650 | 6.5400e-003 | 0.2211 | 0.2277 | 0.0000 | 580.3245 | 580.3245 | 0.1676 | 0.0000 | 583.8444 |
| **T** | **.42 3** | **4. 2** | **3. 24** | **5.5 3** | **. 24** | **.24 4** | **.2 5** | **.54 3** | **.2211** | **.22** | **.** | **5 .3245** | **5 .3245** | **.1** | **.** | **5 3. 444** |

| | **RO** | **NO** | **CO** | **SO2** | **1** | **E 1** | **1 T** | **2.5** | **E 2.5** | **2.5 T** | **CO2** | **N CO2** | **T CO2** | **C 4** | **N2** | **CO2** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **R** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** |

## 2.2 O O

**O**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40,696.9021 | 538.9300 | 48,780.2980 | 18.3289 | | 6,563.9193 | 6,563.9193 | | 6,563.7272 | 6,563.7272 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 638.2500 | 54.0413 | 1,009,113.8856 |
| Energy | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| Mobile | 1,556.2395 | 2,584.4257 | 25,133.6641 | 38.5268 | 3,470.5171 | 29.2175 | 3,499.7346 | 920.3873 | 26.6143 | 947.0016 | | 3,421,681.2202 | 3,421,681.2202 | 223.4027 | | 3,426,372.6769 |
| **T** | **42 2 1.1 5** | **3 3 5. 4 1** | **4 3 .54 4** | **5 .3 4** | **3 4 .51 1** | **12.5 1** | **1 3. 2 42** | **2 .3 3** | **. 11** | **53 . 1** | **44. 4** | **4 1 44 . 53** | **4 4 5. 551** | **.514** | **5 . 4 5** | **4 43 1 4. 3** |

## O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40,696.9021 | 538.9300 | 48,780.2980 | 18.3289 | | 6,563.9193 | 6,563.9193 | | 6,563.7272 | 6,563.7272 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 638.2500 | 54.0413 | 1,009,113.8856 |
| Energy | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| Mobile | 1,556.2395 | 2,584.4257 | 25,133.6641 | 38.5268 | 3,470.5171 | 29.2175 | 3,499.7346 | 920.3873 | 26.6143 | 947.0016 | | 3,421,681.2202 | 3,421,681.2202 | 223.4027 | | 3,426,372.6769 |
| **T** | **42 2 1.1 5** | **3 3 5. 4 1** | **4 3 .54 4** | **5 .3 4** | **3 4 .51 1** | **12.5 1** | **1 3. 2 42** | **2 .3 3** | **. 11** | **53 . 1** | **44. 4** | **4 1 44 . 53** | **4 4 5. 551** | **.514** | **5 . 4 5** | **4 43 1 4. 3** |

| | RO | NO | CO | SO2 | 1 | E 1 | 1 T | 2.5 | E 2.5 | 2.5 T | CO2 | N CO2 | T CO2 | C 4 | N2 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **R** | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |

## 4. O D

### 4.1

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 1,556.2395 | 2,584.4257 | 25,133.6641 | 38.5268 | 3,470.5171 | 29.2175 | 3,499.7346 | 920.3873 | 26.6143 | 947.0016 | | 3,421,681.2202 | 3,421,681.2202 | 223.4027 | | 3,426,372.6769 |
| Unmitigated | 1,556.2395 | 2,584.4257 | 25,133.6641 | 38.5268 | 3,470.5171 | 29.2175 | 3,499.7346 | 920.3873 | 26.6143 | 947.0016 | | 3,421,681.2202 | 3,421,681.2202 | 223.4027 | | 3,426,372.6769 |

### 4.2 T S I

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 8,351.28 | 8,351.28 | 8351.28 | 55,203,965 | 55,203,965 |
| City Park | 309.87 | 309.87 | 309.87 | 2,048,326 | 2,048,326 |
| Day-Care Center | 277.80 | 277.80 | 277.80 | 1,836,325 | 1,836,325 |
| Elementary School | 3,106.90 | 3,106.90 | 3106.90 | 20,537,365 | 20,537,365 |
| General Light Industry | 8,001.21 | 8,001.21 | 8001.21 | 52,889,899 | 52,889,899 |
| General Office Building | 9,236.35 | 9,236.35 | 9236.35 | 61,054,484 | 61,054,484 |
| Golf Course | 122.75 | 122.75 | 122.75 | 811,391 | 811,391 |
| Government Office Building | 11,032.96 | 11,032.96 | 11032.96 | 72,930,487 | 72,930,487 |
| High School | 784.20 | 784.20 | 784.20 | 5,183,750 | 5,183,750 |
| Junior High School | 1,002.90 | 1,002.90 | 1002.90 | 6,629,410 | 6,629,410 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 209,122.92 | 209,122.92 | 209122.92 | 1,382,352,691 | 1,382,352,691 |
| Total | 251,349.13 | 251,349.13 | 251,349.13 | 1,661,478,091 | 1,661,478,091 |

## 4.3 T T I

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| City Park | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Day-Care Center | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Elementary School | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Light Industry | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Office Building | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Golf Course | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Government Office Building | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| High School | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior High School | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Other Non-Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |

| LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.654590 | 0.095079 | 0.228243 | 0.004087 | 0.005066 | 0.000799 | 0.000387 | 0.000949 | 0.000094 | 0.000086 | 0.010133 | 0.000059 | 0.000429 |

## 5. E D

### 4.4

Historical Energy Use: Y

### 5.1 E

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| NaturalGas Unmitigated | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |

## 5.2 E N

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Day-Care Center | 3297.68 | 0.0356 | 0.3233 | 0.2716 | 1.9400e-003 | | 0.0246 | 0.0246 | | 0.0246 | 0.0246 | | 387.9623 | 387.9623 | 7.4400e-003 | 7.1100e-003 | 390.3233 |
| Elementary School | 37179.2 | 0.4010 | 3.6450 | 3.0618 | 0.0219 | | 0.2770 | 0.2770 | | 0.2770 | 0.2770 | | 4,374.0235 | 4,374.0235 | 0.0838 | 0.0802 | 4,400.6431 |
| General Light Industry | 160755 | 1.7336 | 15.7603 | 13.2386 | 0.0946 | | 1.1978 | 1.1978 | | 1.1978 | 1.1978 | | 18,912.3218 | 18,912.3218 | 0.3625 | 0.3467 | 19,027.4190 |
| General Office Building | 116591 | 1.2574 | 11.4305 | 9.6016 | 0.0686 | | 0.8687 | 0.8687 | | 0.8687 | 0.8687 | | 13,716.5585 | 13,716.5585 | 0.2629 | 0.2515 | 13,800.0352 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 139269 | 1.5019 | 13.6539 | 11.4693 | 0.0819 | | 1.0377 | 1.0377 | | 1.0377 | 1.0377 | | 16,384.6448 | 16,384.6448 | 0.3140 | 0.3004 | 16,484.3590 |
| High School | 9311.97 | 0.1004 | 0.9129 | 0.7669 | 5.4800e-003 | | 0.0694 | 0.0694 | | 0.0694 | 0.0694 | | 1,095.5257 | 1,095.5257 | 0.0210 | 0.0201 | 1,102.1929 |
| Junior High School | 11911 | 0.1285 | 1.1677 | 0.9809 | 7.0100e-003 | | 0.0888 | 0.0888 | | 0.0888 | 0.0888 | | 1,401.2904 | 1,401.2904 | 0.0269 | 0.0257 | 1,409.8185 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2.0528e+006 | 22.1381 | 189.1801 | 80.5022 | 1.2075 | | 15.2954 | 15.2954 | | 15.2954 | 15.2954 | | 241,506.4638 | 241,506.4638 | 4.6289 | 4.4276 | 242,976.2319 |
| Apartments Low Rise | 68575.4 | 0.7395 | 6.3197 | 2.6892 | 0.0403 | | 0.5110 | 0.5110 | | 0.5110 | 0.5110 | | 8,067.6967 | 8,067.6967 | 0.1546 | 0.1479 | 8,116.7953 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **T** | | **2 . 35** | **242.3 34** | **122.5 2** | **1.52 2** | | **1 .3 3** | **1 .3 3** | | **1 .3 3** | **1 .3 3** | | **3 5 4 .4 5** | **3 5 4 .4 5** | **5. 21** | **5. 2** | **3 . 1 2** |

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Day-Care Center | 3.29768 | 0.0356 | 0.3233 | 0.2716 | 1.9400e-003 | | 0.0246 | 0.0246 | | 0.0246 | 0.0246 | | 387.9623 | 387.9623 | 7.4400e-003 | 7.1100e-003 | 390.3233 |
| Elementary School | 37.1792 | 0.4010 | 3.6450 | 3.0618 | 0.0219 | | 0.2770 | 0.2770 | | 0.2770 | 0.2770 | | 4,374.0235 | 4,374.0235 | 0.0838 | 0.0802 | 4,400.6431 |
| General Light Industry | 160.755 | 1.7336 | 15.7603 | 13.2386 | 0.0946 | | 1.1978 | 1.1978 | | 1.1978 | 1.1978 | | 18,912.3218 | 18,912.3218 | 0.3625 | 0.3467 | 19,027.4190 |
| General Office Building | 116.591 | 1.2574 | 11.4305 | 9.6016 | 0.0686 | | 0.8687 | 0.8687 | | 0.8687 | 0.8687 | | 13,716.5585 | 13,716.5585 | 0.2629 | 0.2515 | 13,800.0352 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 139.269 | 1.5019 | 13.6539 | 11.4693 | 0.0819 | | 1.0377 | 1.0377 | | 1.0377 | 1.0377 | | 16,384.6448 | 16,384.6448 | 0.3140 | 0.3004 | 16,484.3590 |
| High School | 9.31197 | 0.1004 | 0.9129 | 0.7669 | 5.4800e-003 | | 0.0694 | 0.0694 | | 0.0694 | 0.0694 | | 1,095.5257 | 1,095.5257 | 0.0210 | 0.0201 | 1,102.1929 |
| Junior High School | 11.911 | 0.1285 | 1.1677 | 0.9809 | 7.0100e-003 | | 0.0888 | 0.0888 | | 0.0888 | 0.0888 | | 1,401.2904 | 1,401.2904 | 0.0269 | 0.0257 | 1,409.8185 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2052.8 | 22.1381 | 189.1801 | 80.5022 | 1.2075 | | 15.2954 | 15.2954 | | 15.2954 | 15.2954 | | 241,506.4638 | 241,506.4638 | 4.6289 | 4.4276 | 242,976.2319 |
| Apartments Low Rise | 68.5754 | 0.7395 | 6.3197 | 2.6892 | 0.0403 | | 0.5110 | 0.5110 | | 0.5110 | 0.5110 | | 8,067.6967 | 8,067.6967 | 0.1546 | 0.1479 | 8,116.7953 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **T** | | **2 . 35** | **242.3 34** | **122.5 2** | **1.52 2** | | **1 .3 3** | **1 .3 3** | | **1 .3 3** | **1 .3 3** | | **3 5 4 .4 5** | **3 5 4 .4 5** | **5. 21** | **5. 2** | **3 . 1 2** |

## . A D

### .1 A

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 40,696.9021 | 538.9300 | 48,780.2980 | 18.3289 | | 6,563.9193 | 6,563.9193 | | 6,563.7272 | 6,563.7272 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 638.2500 | 54.0413 | 1,009,113.8856 |
| Unmitigated | 40,696.9021 | 538.9300 | 48,780.2980 | 18.3289 | | 6,563.9193 | 6,563.9193 | | 6,563.7272 | 6,563.7272 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 638.2500 | 54.0413 | 1,009,113.8856 |

### .2 A S C

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 770.3961 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1,992.8850 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37,860.4410 | 513.6649 | 46,639.9972 | 18.2176 | | 6,552.6368 | 6,552.6368 | | 6,552.4447 | 6,552.4447 | 687,044.8466 | 288,136.5882 | 975,181.4348 | 634.0284 | 54.0413 | 1,005,248.8223 |
| Landscaping | 73.1799 | 25.2651 | 2,140.3007 | 0.1113 | | 11.2826 | 11.2826 | | 11.2826 | 11.2826 | | 3,776.4094 | 3,776.4094 | 4.2216 | | 3,865.0633 |
| **T** | **4 . 2 1** | **53 . 3** | **4 .2** | **1 .32** | | **5 3. 1 3** | **5 3. 1 3** | | **5 3. 2 2** | **5 3. 2 2** | **44. 4** | **2 1 12.** | **5 . 4 42** | **3 .25** | **54. 413** | **1 113. 5** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 770.3961 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1,992.8850 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37,860.4410 | 513.6649 | 46,639.9972 | 18.2176 | | 6,552.6368 | 6,552.6368 | | 6,552.4447 | 6,552.4447 | 687,044.8466 | 288,136.5882 | 975,181.4348 | 634.0284 | 54.0413 | 1,005,248.8223 |
| Landscaping | 73.1799 | 25.2651 | 2,140.3007 | 0.1113 | | 11.2826 | 11.2826 | | 11.2826 | 11.2826 | | 3,776.4094 | 3,776.4094 | 4.2216 | | 3,865.0633 |
| **T** | **4 . 2 1** | **53 . 3** | **4 .2** | **1 .32** | | **5 3. 1 3** | **5 3. 1 3** | | **5 3. 2 2** | **5 3. 2 2** | **44. 4** | **2 1 12.** | **5 . 4 42** | **3 .25** | **54. 413** | **1 113. 5** |

## . D

### .1

## . D

### .1

## . O O

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**1 .**

# E

## A D C S

## 1. C

### 1.1

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 3,420.87 | 1000sqft | 2,070.00 | 3,420,870.00 | 0 |
| Government Office Building | 4,086.28 | 1000sqft | 570,046.00 | 4,086,283.00 | 0 |
| Day-Care Center | 926.00 | Student | 4.00 | 102,091.00 | 0 |
| Elementary School | 10,436.00 | Student | 265.00 | 1,151,010.00 | 0 |
| High School | 2,614.00 | Student | 108.00 | 288,284.00 | 0 |
| Junior High School | 3,343.00 | Student | 70.00 | 368,745.00 | 0 |
| General Light Industry | 2,963.41 | 1000sqft | 24,786.00 | 2,963,408.00 | 0 |
| Other Non-Asphalt Surfaces | 419,510.00 | Acre | 419,510.00 | 0.00 | 0 |
| Parking Lot | 17.90 | Acre | 17.90 | 0.00 | 0 |
| City Park | 15,493.58 | Acre | 15,493.58 | 99,405.00 | 0 |
| Golf Course | 395.96 | Acre | 399.00 | 45,784.00 | 0 |
| Apartments Low Rise | 1,657.00 | Dwelling Unit | 5,555.00 | 3,096,379.00 | 4623 |
| Single Family Housing | 23,082.00 | Dwelling Unit | 98,284.00 | 77,503,209.00 | 88867 |

### 1.2 O C

Urban **S** 2.2 **D** 33

**C** 9 **O** 2014

**C** Southern California Edison

| | | | | | |
|---|---|---|---|---|---|
| **CO2 I** | 630.89 | **C 4 I** | 0.029 | **N2O I** | 0.006 |

## 1.3 E C N D D

Project Characteristics -

Land Use - Based on information provided by the County. For modeling purposes, private/charter schools and elementary school land use information combined as one.

Construction Phase - No construction component for modeling.

Off-road Equipment - No construction component.

Off-road Equipment -

Vehicle Trips - Trip generation rate and average trip distance based on information provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Energy Use -

Water And Wastewater - See Sections 5.17.1 and 5.17.2 of the Draft EIR. Otherwise noted, modeling assumes 60% of existing land uses use septic systems.

Solid Waste - See Section 5.17.4 of the Draft EIR.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaCoating | Area_Nonresidential_Interior | 18788819 | 18788816 |
| tblConstructionPhase | NumDays | 10,000.00 | 10.00 |
| tblLandUse | LandUseSquareFeet | 4,086,280.00 | 4,086,283.00 |
| tblLandUse | LandUseSquareFeet | 52,340.15 | 102,091.00 |
| tblLandUse | LandUseSquareFeet | 872,484.77 | 1,151,010.00 |
| tblLandUse | LandUseSquareFeet | 346,775.80 | 288,284.00 |
| tblLandUse | LandUseSquareFeet | 393,008.71 | 368,745.00 |
| tblLandUse | LandUseSquareFeet | 2,963,410.00 | 2,963,408.00 |
| tblLandUse | LandUseSquareFeet | 18,273,855,600.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 779,724.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblLandUse | LandUseSquareFeet | 674,901,216.00 | 99,405.00 |
| tblLandUse | LandUseSquareFeet | 17,248,017.60 | 45,784.00 |
| tblLandUse | LandUseSquareFeet | 1,657,000.00 | 3,096,379.00 |
| tblLandUse | LandUseSquareFeet | 41,547,600.00 | 77,503,209.00 |
| tblLandUse | LotAcreage | 78.53 | 2,070.00 |
| tblLandUse | LotAcreage | 93.81 | 570,046.00 |
| tblLandUse | LotAcreage | 1.20 | 4.00 |
| tblLandUse | LotAcreage | 20.03 | 265.00 |
| tblLandUse | LotAcreage | 7.96 | 108.00 |
| tblLandUse | LotAcreage | 9.02 | 70.00 |
| tblLandUse | LotAcreage | 68.03 | 24,786.00 |
| tblLandUse | LotAcreage | 15,493.60 | 15,493.58 |
| tblLandUse | LotAcreage | 395.96 | 399.00 |
| tblLandUse | LotAcreage | 103.56 | 5,555.00 |
| tblLandUse | LotAcreage | 7,494.16 | 98,284.00 |
| tblLandUse | Population | 4,739.00 | 4,623.00 |
| tblLandUse | Population | 66,015.00 | 88,867.00 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblSolidWaste | SolidWasteGenerationRate | 762.22 | 1,110.15 |
| tblSolidWaste | SolidWasteGenerationRate | 1,332.45 | 1,940.68 |
| tblSolidWaste | SolidWasteGenerationRate | 169.00 | 246.14 |
| tblSolidWaste | SolidWasteGenerationRate | 1,904.57 | 2,773.96 |
| tblSolidWaste | SolidWasteGenerationRate | 3,674.63 | 5,352.01 |
| tblSolidWaste | SolidWasteGenerationRate | 3,181.41 | 4,633.65 |
| tblSolidWaste | SolidWasteGenerationRate | 368.24 | 536.33 |
| tblSolidWaste | SolidWasteGenerationRate | 3,800.24 | 5,534.96 |
| tblSolidWaste | SolidWasteGenerationRate | 477.06 | 694.83 |

| | | | |
|---|---|---|---|
| tblSolidWaste | SolidWasteGenerationRate | 610.10 | 888.60 |
| tblSolidWaste | SolidWasteGenerationRate | 36,435.47 | 53,067.36 |
| tblVehicleEF | HHD | 0.01 | 9.4900e-004 |
| tblVehicleEF | HHD | 0.01 | 9.4900e-004 |
| tblVehicleEF | HHD | 0.01 | 9.4900e-004 |
| tblVehicleEF | LDA | 0.49 | 0.65 |
| tblVehicleEF | LDA | 0.49 | 0.65 |
| tblVehicleEF | LDA | 0.49 | 0.65 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT2 | 0.17 | 0.23 |
| tblVehicleEF | LDT2 | 0.17 | 0.23 |
| tblVehicleEF | LDT2 | 0.17 | 0.23 |
| tblVehicleEF | LHD1 | 0.06 | 5.0660e-003 |
| tblVehicleEF | LHD1 | 0.06 | 5.0660e-003 |
| tblVehicleEF | LHD1 | 0.06 | 5.0660e-003 |
| tblVehicleEF | LHD2 | 9.7240e-003 | 7.9900e-004 |
| tblVehicleEF | LHD2 | 9.7240e-003 | 7.9900e-004 |
| tblVehicleEF | LHD2 | 9.7240e-003 | 7.9900e-004 |
| tblVehicleEF | MCY | 7.5990e-003 | 0.01 |
| tblVehicleEF | MCY | 7.5990e-003 | 0.01 |
| tblVehicleEF | MCY | 7.5990e-003 | 0.01 |
| tblVehicleEF | MDV | 0.16 | 4.0870e-003 |
| tblVehicleEF | MDV | 0.16 | 4.0870e-003 |
| tblVehicleEF | MDV | 0.16 | 4.0870e-003 |
| tblVehicleEF | MH | 5.2250e-003 | 4.2900e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | MH | 5.2250e-003 | 4.2900e-004 |
| tblVehicleEF | MH | 5.2250e-003 | 4.2900e-004 |
| tblVehicleEF | MHD | 4.7150e-003 | 3.8700e-004 |
| tblVehicleEF | MHD | 4.7150e-003 | 3.8700e-004 |
| tblVehicleEF | MHD | 4.7150e-003 | 3.8700e-004 |
| tblVehicleEF | OBUS | 1.1400e-003 | 9.4000e-005 |
| tblVehicleEF | OBUS | 1.1400e-003 | 9.4000e-005 |
| tblVehicleEF | OBUS | 1.1400e-003 | 9.4000e-005 |
| tblVehicleEF | SBUS | 7.1400e-004 | 5.9000e-005 |
| tblVehicleEF | SBUS | 7.1400e-004 | 5.9000e-005 |
| tblVehicleEF | SBUS | 7.1400e-004 | 5.9000e-005 |
| tblVehicleEF | UBUS | 1.0470e-003 | 8.6000e-005 |
| tblVehicleEF | UBUS | 1.0470e-003 | 8.6000e-005 |
| tblVehicleEF | UBUS | 1.0470e-003 | 8.6000e-005 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 82.30 | 100.00 |
| tblVehicleTrips | CC_TTP | 30.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 62.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 17.20 | 100.00 |
| tblVehicleTrips | CC_TTP | 22.20 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 12.70 | 0.00 |
| tblVehicleTrips | CW_TTP | 65.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 77.80 | 0.00 |
| tblVehicleTrips | CW_TTP | 72.80 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 28.00 | 0.00 |
| tblVehicleTrips | DV_TP | 58.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 39.00 | 0.00 |
| tblVehicleTrips | DV_TP | 34.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 18.16 |
| tblVehicleTrips | HW_TL | 10.80 | 18.16 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 14.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 4.00 | 0.00 |
| tblVehicleTrips | PB_TP | 9.00 | 0.00 |
| tblVehicleTrips | PB_TP | 16.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 66.00 | 100.00 |
| tblVehicleTrips | PR_TP | 28.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 77.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | PR_TP | 52.00 | 100.00 |
| tblVehicleTrips | PR_TP | 50.00 | 100.00 |
| tblVehicleTrips | PR_TP | 75.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | ST_TR | 7.16 | 5.04 |
| tblVehicleTrips | ST_TR | 1.59 | 0.02 |
| tblVehicleTrips | ST_TR | 0.39 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 1.32 | 2.70 |
| tblVehicleTrips | ST_TR | 2.37 | 2.70 |
| tblVehicleTrips | ST_TR | 5.82 | 0.31 |
| tblVehicleTrips | ST_TR | 0.00 | 2.70 |
| tblVehicleTrips | ST_TR | 0.61 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 10.08 | 9.06 |
| tblVehicleTrips | SU_TR | 6.07 | 5.04 |
| tblVehicleTrips | SU_TR | 1.59 | 0.02 |
| tblVehicleTrips | SU_TR | 0.37 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |
| tblVehicleTrips | SU_TR | 0.68 | 2.70 |
| tblVehicleTrips | SU_TR | 0.98 | 2.70 |
| tblVehicleTrips | SU_TR | 5.88 | 0.31 |
| tblVehicleTrips | SU_TR | 0.00 | 2.70 |
| tblVehicleTrips | SU_TR | 0.25 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |
| tblVehicleTrips | SU_TR | 8.77 | 9.06 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | WD_TR | 6.59 | 5.04 |
| tblVehicleTrips | WD_TR | 1.59 | 0.02 |
| tblVehicleTrips | WD_TR | 4.48 | 0.30 |
| tblVehicleTrips | WD_TR | 1.29 | 0.30 |
| tblVehicleTrips | WD_TR | 6.97 | 2.70 |
| tblVehicleTrips | WD_TR | 11.01 | 2.70 |
| tblVehicleTrips | WD_TR | 5.04 | 0.31 |
| tblVehicleTrips | WD_TR | 68.93 | 2.70 |
| tblVehicleTrips | WD_TR | 1.71 | 0.30 |
| tblVehicleTrips | WD_TR | 1.62 | 0.30 |
| tblVehicleTrips | WD_TR | 9.57 | 9.06 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |

| | | | |
|---|---|---|---|
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | IndoorWaterUseRate | 107,960,220.45 | 203,790.00 |
| tblWater | IndoorWaterUseRate | 2,244,846.24 | 4,237.00 |
| tblWater | IndoorWaterUseRate | 25,299,368.64 | 47,756.00 |
| tblWater | IndoorWaterUseRate | 685,288,562.50 | 1,293,580.00 |
| tblWater | IndoorWaterUseRate | 608,004,046.50 | 1,147,695.00 |
| tblWater | IndoorWaterUseRate | 811,779,101.15 | 1,532,349.00 |
| tblWater | IndoorWaterUseRate | 11,514,565.44 | 21,735.00 |
| tblWater | IndoorWaterUseRate | 8,104,234.32 | 15,298.00 |
| tblWater | IndoorWaterUseRate | 1,503,885,219.39 | 2,838,799.00 |
| tblWater | OutdoorWaterUseRate | 68,061,878.11 | 27,349.00 |
| tblWater | OutdoorWaterUseRate | 18,460,335,439.10 | 7,417,813.00 |
| tblWater | OutdoorWaterUseRate | 5,772,461.76 | 2,320.00 |
| tblWater | OutdoorWaterUseRate | 65,055,519.36 | 26,141.00 |
| tblWater | OutdoorWaterUseRate | 372,647,641.40 | 149,739.00 |
| tblWater | OutdoorWaterUseRate | 471,778,955.21 | 189,572.00 |
| tblWater | OutdoorWaterUseRate | 497,542,029.74 | 199,925.00 |
| tblWater | OutdoorWaterUseRate | 29,608,882.56 | 11,898.00 |
| tblWater | OutdoorWaterUseRate | 20,839,459.68 | 8,374.00 |
| tblWater | OutdoorWaterUseRate | 948,101,551.36 | 380,970.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |

| | | | |
|---|---|---|---|
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |

## 2. E S

### 2.2 O O
O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40,696.9021 | 538.9300 | 48,780.2980 | 18.3289 | | 6,563.9193 | 6,563.9193 | | 6,563.7272 | 6,563.7272 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 638.2500 | 54.0413 | 1,009,113.8856 |
| Energy | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| Mobile | 1,709.1763 | 2,427.8643 | 30,793.4095 | 43.7400 | 3,470.5171 | 29.2084 | 3,499.7254 | 920.3873 | 26.6059 | 946.9931 | | 3,877,158.9984 | 3,877,158.9984 | 223.4006 | | 3,881,850.4102 |
| **T** | **42 434.1144** | **3 2 .1** | **.2 4** | **3.5 1** | **3 4 .51 1** | **12.4** | **1 3. 1 5** | **2 .3 3** | **. 3 4** | **53 .** | **44. 4** | **4 4 4 1 . 4 35** | **5 1 1 3. 33 1** | **.512** | **5 . 4 5** | **5 1 2. 114** |

O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40,696.9021 | 538.9300 | 48,780.2980 | 18.3289 | | 6,563.9193 | 6,563.9193 | | 6,563.7272 | 6,563.7272 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 638.2500 | 54.0413 | 1,009,113.8856 |
| Energy | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| Mobile | 1,709.1763 | 2,427.8643 | 30,793.4095 | 43.7400 | 3,470.5171 | 29.2084 | 3,499.7254 | 920.3873 | 26.6059 | 946.9931 | | 3,877,158.9984 | 3,877,158.9984 | 223.4006 | | 3,881,850.4102 |
| **T** | **42 434.1144** | **3 2 .1** | **.2 4** | **3.5 1** | **3 4 .51 1** | **12.4** | **1 3. 1 5** | **2 .3 3** | **. 3 4** | **53 .** | **44. 4** | **4 4 4 1 . 4 35** | **5 1 1 3. 33 1** | **.512** | **5 . 4 5** | **5 1 2. 114** |

| | RO | NO | CO | SO2 | 1 | E 1 | 1 T | 2.5 | E 2.5 | 2.5 T | CO2 | N CO2 | T CO2 | C 4 | N2 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **R** | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |

## 4. O D

### 4.1

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 1,709.1763 | 2,427.8643 | 30,793.4095 | 43.7400 | 3,470.5171 | 29.2084 | 3,499.7254 | 920.3873 | 26.6059 | 946.9931 | | 3,877,158.9984 | 3,877,158.9984 | 223.4006 | | 3,881,850.4102 |
| Unmitigated | 1,709.1763 | 2,427.8643 | 30,793.4095 | 43.7400 | 3,470.5171 | 29.2084 | 3,499.7254 | 920.3873 | 26.6059 | 946.9931 | | 3,877,158.9984 | 3,877,158.9984 | 223.4006 | | 3,881,850.4102 |

## 4.2 T S I

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 8,351.28 | 8,351.28 | 8351.28 | 55,203,965 | 55,203,965 |
| City Park | 309.87 | 309.87 | 309.87 | 2,048,326 | 2,048,326 |
| Day-Care Center | 277.80 | 277.80 | 277.80 | 1,836,325 | 1,836,325 |
| Elementary School | 3,106.90 | 3,106.90 | 3106.90 | 20,537,365 | 20,537,365 |
| General Light Industry | 8,001.21 | 8,001.21 | 8001.21 | 52,889,899 | 52,889,899 |
| General Office Building | 9,236.35 | 9,236.35 | 9236.35 | 61,054,484 | 61,054,484 |
| Golf Course | 122.75 | 122.75 | 122.75 | 811,391 | 811,391 |
| Government Office Building | 11,032.96 | 11,032.96 | 11032.96 | 72,930,487 | 72,930,487 |
| High School | 784.20 | 784.20 | 784.20 | 5,183,750 | 5,183,750 |
| Junior High School | 1,002.90 | 1,002.90 | 1002.90 | 6,629,410 | 6,629,410 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 209,122.92 | 209,122.92 | 209122.92 | 1,382,352,691 | 1,382,352,691 |
| Total | 251,349.13 | 251,349.13 | 251,349.13 | 1,661,478,091 | 1,661,478,091 |

## 4.3 T T I

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| City Park | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Day-Care Center | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Elementary School | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Light Industry | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Office Building | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Golf Course | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Government Office Building | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| High School | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior High School | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Other Non-Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |

| LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.654590 | 0.095079 | 0.228243 | 0.004087 | 0.005066 | 0.000799 | 0.000387 | 0.000949 | 0.000094 | 0.000086 | 0.010133 | 0.000059 | 0.000429 |

## 5. E D

### 4.4

Historical Energy Use: Y

### 5.1 E

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| NaturalGas Unmitigated | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |

**5.2 E N**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Day-Care Center | 3297.68 | 0.0356 | 0.3233 | 0.2716 | 1.9400e-003 | | 0.0246 | 0.0246 | | 0.0246 | 0.0246 | | 387.9623 | 387.9623 | 7.4400e-003 | 7.1100e-003 | 390.3233 |
| Elementary School | 37179.2 | 0.4010 | 3.6450 | 3.0618 | 0.0219 | | 0.2770 | 0.2770 | | 0.2770 | 0.2770 | | 4,374.0235 | 4,374.0235 | 0.0838 | 0.0802 | 4,400.6431 |
| General Light Industry | 160755 | 1.7336 | 15.7603 | 13.2386 | 0.0946 | | 1.1978 | 1.1978 | | 1.1978 | 1.1978 | | 18,912.3218 | 18,912.3218 | 0.3625 | 0.3467 | 19,027.4190 |
| General Office Building | 116591 | 1.2574 | 11.4305 | 9.6016 | 0.0686 | | 0.8687 | 0.8687 | | 0.8687 | 0.8687 | | 13,716.5585 | 13,716.5585 | 0.2629 | 0.2515 | 13,800.0352 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 139269 | 1.5019 | 13.6539 | 11.4693 | 0.0819 | | 1.0377 | 1.0377 | | 1.0377 | 1.0377 | | 16,384.6448 | 16,384.6448 | 0.3140 | 0.3004 | 16,484.3590 |
| High School | 9311.97 | 0.1004 | 0.9129 | 0.7669 | 5.4800e-003 | | 0.0694 | 0.0694 | | 0.0694 | 0.0694 | | 1,095.5257 | 1,095.5257 | 0.0210 | 0.0201 | 1,102.1929 |
| Junior High School | 11911 | 0.1285 | 1.1677 | 0.9809 | 7.0100e-003 | | 0.0888 | 0.0888 | | 0.0888 | 0.0888 | | 1,401.2904 | 1,401.2904 | 0.0269 | 0.0257 | 1,409.8185 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2.0528e+006 | 22.1381 | 189.1801 | 80.5022 | 1.2075 | | 15.2954 | 15.2954 | | 15.2954 | 15.2954 | | 241,506.4638 | 241,506.4638 | 4.6289 | 4.4276 | 242,976.2319 |
| Apartments Low Rise | 68575.4 | 0.7395 | 6.3197 | 2.6892 | 0.0403 | | 0.5110 | 0.5110 | | 0.5110 | 0.5110 | | 8,067.6967 | 8,067.6967 | 0.1546 | 0.1479 | 8,116.7953 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **T** | | **2 . 35** | **242.3 34** | **122.5 2** | **1.52 2** | | **1 .3 3** | **1 .3 3** | | **1 .3 3** | **1 .3 3** | | **3 5 4 .4 5** | **3 5 4 .4 5** | **5. 21** | **5. 2** | **3 . 1 2** |

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Day-Care Center | 3.29768 | 0.0356 | 0.3233 | 0.2716 | 1.9400e-003 | | 0.0246 | 0.0246 | | 0.0246 | 0.0246 | | 387.9623 | 387.9623 | 7.4400e-003 | 7.1100e-003 | 390.3233 |
| Elementary School | 37.1792 | 0.4010 | 3.6450 | 3.0618 | 0.0219 | | 0.2770 | 0.2770 | | 0.2770 | 0.2770 | | 4,374.0235 | 4,374.0235 | 0.0838 | 0.0802 | 4,400.6431 |
| General Light Industry | 160.755 | 1.7336 | 15.7603 | 13.2386 | 0.0946 | | 1.1978 | 1.1978 | | 1.1978 | 1.1978 | | 18,912.3218 | 18,912.3218 | 0.3625 | 0.3467 | 19,027.4190 |
| General Office Building | 116.591 | 1.2574 | 11.4305 | 9.6016 | 0.0686 | | 0.8687 | 0.8687 | | 0.8687 | 0.8687 | | 13,716.5585 | 13,716.5585 | 0.2629 | 0.2515 | 13,800.0352 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 139.269 | 1.5019 | 13.6539 | 11.4693 | 0.0819 | | 1.0377 | 1.0377 | | 1.0377 | 1.0377 | | 16,384.6448 | 16,384.6448 | 0.3140 | 0.3004 | 16,484.3590 |
| High School | 9.31197 | 0.1004 | 0.9129 | 0.7669 | 5.4800e-003 | | 0.0694 | 0.0694 | | 0.0694 | 0.0694 | | 1,095.5257 | 1,095.5257 | 0.0210 | 0.0201 | 1,102.1929 |
| Junior High School | 11.911 | 0.1285 | 1.1677 | 0.9809 | 7.0100e-003 | | 0.0888 | 0.0888 | | 0.0888 | 0.0888 | | 1,401.2904 | 1,401.2904 | 0.0269 | 0.0257 | 1,409.8185 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2052.8 | 22.1381 | 189.1801 | 80.5022 | 1.2075 | | 15.2954 | 15.2954 | | 15.2954 | 15.2954 | | 241,506.4638 | 241,506.4638 | 4.6289 | 4.4276 | 242,976.2319 |
| Apartments Low Rise | 68.5754 | 0.7395 | 6.3197 | 2.6892 | 0.0403 | | 0.5110 | 0.5110 | | 0.5110 | 0.5110 | | 8,067.6967 | 8,067.6967 | 0.1546 | 0.1479 | 8,116.7953 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **T** | | **2 . 35** | **242.3 34** | **122.5 2** | **1.52 2** | | **1 .3 3** | **1 .3 3** | | **1 .3 3** | **1 .3 3** | | **3 5 4 .4 5** | **3 5 4 .4 5** | **5. 21** | **5. 2** | **3 . 1 2** |

## . A D

### .1 A

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 40,696.9021 | 538.9300 | 48,780.2980 | 18.3289 | | 6,563.9193 | 6,563.9193 | | 6,563.7272 | 6,563.7272 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 638.2500 | 54.0413 | 1,009,113.8856 |
| Unmitigated | 40,696.9021 | 538.9300 | 48,780.2980 | 18.3289 | | 6,563.9193 | 6,563.9193 | | 6,563.7272 | 6,563.7272 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 638.2500 | 54.0413 | 1,009,113.8856 |

### .2 A S C

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 770.3961 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1,992.8850 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37,860.4410 | 513.6649 | 46,639.9972 | 18.2176 | | 6,552.6368 | 6,552.6368 | | 6,552.4447 | 6,552.4447 | 687,044.8466 | 288,136.5882 | 975,181.4348 | 634.0284 | 54.0413 | 1,005,248.8223 |
| Landscaping | 73.1799 | 25.2651 | 2,140.3007 | 0.1113 | | 11.2826 | 11.2826 | | 11.2826 | 11.2826 | | 3,776.4094 | 3,776.4094 | 4.2216 | | 3,865.0633 |
| **T** | **4 . 2 1** | **53 . 3** | **4 .2** | **1 .32** | | **5 3. 1 3** | **5 3. 1 3** | | **5 3. 2 2** | **5 3. 2 2** | **44. 4** | **2 1 12.** | **5 . 4 42** | **3 .25** | **54. 413** | **1 113. 5** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 770.3961 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1,992.8850 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37,860.4410 | 513.6649 | 46,639.9972 | 18.2176 | | 6,552.6368 | 6,552.6368 | | 6,552.4447 | 6,552.4447 | 687,044.8466 | 288,136.5882 | 975,181.4348 | 634.0284 | 54.0413 | 1,005,248.8223 |
| Landscaping | 73.1799 | 25.2651 | 2,140.3007 | 0.1113 | | 11.2826 | 11.2826 | | 11.2826 | 11.2826 | | 3,776.4094 | 3,776.4094 | 4.2216 | | 3,865.0633 |
| **T** | **4 . 2 1** | **53 . 3** | **4 .2** | **1 .32** | | **5 3. 1 3** | **5 3. 1 3** | | **5 3. 2 2** | **5 3. 2 2** | **44. 4** | **2 1 12.** | **5 . 4 42** | **3 .25** | **54. 413** | **1 113. 5** |

## . D

### .1

## . D

### .1

## . O O

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**1 .**

# E

## A D C A

## 1. C

### 1.1

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 3,420.87 | 1000sqft | 2,070.00 | 3,420,870.00 | 0 |
| Government Office Building | 4,086.28 | 1000sqft | 570,046.00 | 4,086,283.00 | 0 |
| Day-Care Center | 926.00 | Student | 4.00 | 102,091.00 | 0 |
| Elementary School | 10,436.00 | Student | 265.00 | 1,151,010.00 | 0 |
| High School | 2,614.00 | Student | 108.00 | 288,284.00 | 0 |
| Junior High School | 3,343.00 | Student | 70.00 | 368,745.00 | 0 |
| General Light Industry | 2,963.41 | 1000sqft | 24,786.00 | 2,963,408.00 | 0 |
| Other Non-Asphalt Surfaces | 419,510.00 | Acre | 419,510.00 | 0.00 | 0 |
| Parking Lot | 17.90 | Acre | 17.90 | 0.00 | 0 |
| City Park | 15,493.58 | Acre | 15,493.58 | 99,405.00 | 0 |
| Golf Course | 395.96 | Acre | 399.00 | 45,784.00 | 0 |
| Apartments Low Rise | 1,657.00 | Dwelling Unit | 5,555.00 | 3,096,379.00 | 4623 |
| Single Family Housing | 23,082.00 | Dwelling Unit | 98,284.00 | 77,503,209.00 | 88867 |

### 1.2 O C

Urban **S** 2.2 **D** 33

**C** 9 **O** 2014

**C** Southern California Edison

| | | | | | |
|---|---|---|---|---|---|
| **CO2 I** | 630.89 | **C 4 I** | 0.029 | **N2O I** | 0.006 |

## 1.3 E C N D D

Project Characteristics -

Land Use - Based on information provided by the County. For modeling purposes, private/charter schools and elementary school land use information combined as one.

Construction Phase - No construction component for modeling.

Off-road Equipment - No construction component.

Off-road Equipment -

Vehicle Trips - Trip generation rate and average trip distance based on information provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Energy Use -

Water And Wastewater - See Sections 5.17.1 and 5.17.2 of the Draft EIR. Otherwise noted, modeling assumes 60% of existing land uses use septic systems.

Solid Waste - See Section 5.17.4 of the Draft EIR.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaCoating | Area_Nonresidential_Interior | 18788819 | 18788816 |
| tblConstructionPhase | NumDays | 10,000.00 | 10.00 |
| tblLandUse | LandUseSquareFeet | 4,086,280.00 | 4,086,283.00 |
| tblLandUse | LandUseSquareFeet | 52,340.15 | 102,091.00 |
| tblLandUse | LandUseSquareFeet | 872,484.77 | 1,151,010.00 |
| tblLandUse | LandUseSquareFeet | 346,775.80 | 288,284.00 |
| tblLandUse | LandUseSquareFeet | 393,008.71 | 368,745.00 |
| tblLandUse | LandUseSquareFeet | 2,963,410.00 | 2,963,408.00 |
| tblLandUse | LandUseSquareFeet | 18,273,855,600.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 779,724.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblLandUse | LandUseSquareFeet | 674,901,216.00 | 99,405.00 |
| tblLandUse | LandUseSquareFeet | 17,248,017.60 | 45,784.00 |
| tblLandUse | LandUseSquareFeet | 1,657,000.00 | 3,096,379.00 |
| tblLandUse | LandUseSquareFeet | 41,547,600.00 | 77,503,209.00 |
| tblLandUse | LotAcreage | 78.53 | 2,070.00 |
| tblLandUse | LotAcreage | 93.81 | 570,046.00 |
| tblLandUse | LotAcreage | 1.20 | 4.00 |
| tblLandUse | LotAcreage | 20.03 | 265.00 |
| tblLandUse | LotAcreage | 7.96 | 108.00 |
| tblLandUse | LotAcreage | 9.02 | 70.00 |
| tblLandUse | LotAcreage | 68.03 | 24,786.00 |
| tblLandUse | LotAcreage | 15,493.60 | 15,493.58 |
| tblLandUse | LotAcreage | 395.96 | 399.00 |
| tblLandUse | LotAcreage | 103.56 | 5,555.00 |
| tblLandUse | LotAcreage | 7,494.16 | 98,284.00 |
| tblLandUse | Population | 4,739.00 | 4,623.00 |
| tblLandUse | Population | 66,015.00 | 88,867.00 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblSolidWaste | SolidWasteGenerationRate | 762.22 | 1,110.15 |
| tblSolidWaste | SolidWasteGenerationRate | 1,332.45 | 1,940.68 |
| tblSolidWaste | SolidWasteGenerationRate | 169.00 | 246.14 |
| tblSolidWaste | SolidWasteGenerationRate | 1,904.57 | 2,773.96 |
| tblSolidWaste | SolidWasteGenerationRate | 3,674.63 | 5,352.01 |
| tblSolidWaste | SolidWasteGenerationRate | 3,181.41 | 4,633.65 |
| tblSolidWaste | SolidWasteGenerationRate | 368.24 | 536.33 |
| tblSolidWaste | SolidWasteGenerationRate | 3,800.24 | 5,534.96 |
| tblSolidWaste | SolidWasteGenerationRate | 477.06 | 694.83 |

| | | | |
|---|---|---|---|
| tblSolidWaste | SolidWasteGenerationRate | 610.10 | 888.60 |
| tblSolidWaste | SolidWasteGenerationRate | 36,435.47 | 53,067.36 |
| tblVehicleEF | HHD | 0.01 | 9.4900e-004 |
| tblVehicleEF | HHD | 0.01 | 9.4900e-004 |
| tblVehicleEF | HHD | 0.01 | 9.4900e-004 |
| tblVehicleEF | LDA | 0.49 | 0.65 |
| tblVehicleEF | LDA | 0.49 | 0.65 |
| tblVehicleEF | LDA | 0.49 | 0.65 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT2 | 0.17 | 0.23 |
| tblVehicleEF | LDT2 | 0.17 | 0.23 |
| tblVehicleEF | LDT2 | 0.17 | 0.23 |
| tblVehicleEF | LHD1 | 0.06 | 5.0660e-003 |
| tblVehicleEF | LHD1 | 0.06 | 5.0660e-003 |
| tblVehicleEF | LHD1 | 0.06 | 5.0660e-003 |
| tblVehicleEF | LHD2 | 9.7240e-003 | 7.9900e-004 |
| tblVehicleEF | LHD2 | 9.7240e-003 | 7.9900e-004 |
| tblVehicleEF | LHD2 | 9.7240e-003 | 7.9900e-004 |
| tblVehicleEF | MCY | 7.5990e-003 | 0.01 |
| tblVehicleEF | MCY | 7.5990e-003 | 0.01 |
| tblVehicleEF | MCY | 7.5990e-003 | 0.01 |
| tblVehicleEF | MDV | 0.16 | 4.0870e-003 |
| tblVehicleEF | MDV | 0.16 | 4.0870e-003 |
| tblVehicleEF | MDV | 0.16 | 4.0870e-003 |
| tblVehicleEF | MH | 5.2250e-003 | 4.2900e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | MH | 5.2250e-003 | 4.2900e-004 |
| tblVehicleEF | MH | 5.2250e-003 | 4.2900e-004 |
| tblVehicleEF | MHD | 4.7150e-003 | 3.8700e-004 |
| tblVehicleEF | MHD | 4.7150e-003 | 3.8700e-004 |
| tblVehicleEF | MHD | 4.7150e-003 | 3.8700e-004 |
| tblVehicleEF | OBUS | 1.1400e-003 | 9.4000e-005 |
| tblVehicleEF | OBUS | 1.1400e-003 | 9.4000e-005 |
| tblVehicleEF | OBUS | 1.1400e-003 | 9.4000e-005 |
| tblVehicleEF | SBUS | 7.1400e-004 | 5.9000e-005 |
| tblVehicleEF | SBUS | 7.1400e-004 | 5.9000e-005 |
| tblVehicleEF | SBUS | 7.1400e-004 | 5.9000e-005 |
| tblVehicleEF | UBUS | 1.0470e-003 | 8.6000e-005 |
| tblVehicleEF | UBUS | 1.0470e-003 | 8.6000e-005 |
| tblVehicleEF | UBUS | 1.0470e-003 | 8.6000e-005 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TL | 7.30 | 18.16 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 82.30 | 100.00 |
| tblVehicleTrips | CC_TTP | 30.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 62.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 17.20 | 100.00 |
| tblVehicleTrips | CC_TTP | 22.20 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 12.70 | 0.00 |
| tblVehicleTrips | CW_TTP | 65.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 77.80 | 0.00 |
| tblVehicleTrips | CW_TTP | 72.80 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 28.00 | 0.00 |
| tblVehicleTrips | DV_TP | 58.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 39.00 | 0.00 |
| tblVehicleTrips | DV_TP | 34.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 18.16 |
| tblVehicleTrips | HW_TL | 10.80 | 18.16 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 14.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 4.00 | 0.00 |
| tblVehicleTrips | PB_TP | 9.00 | 0.00 |
| tblVehicleTrips | PB_TP | 16.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 66.00 | 100.00 |
| tblVehicleTrips | PR_TP | 28.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 77.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | PR_TP | 52.00 | 100.00 |
| tblVehicleTrips | PR_TP | 50.00 | 100.00 |
| tblVehicleTrips | PR_TP | 75.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | ST_TR | 7.16 | 5.04 |
| tblVehicleTrips | ST_TR | 1.59 | 0.02 |
| tblVehicleTrips | ST_TR | 0.39 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 1.32 | 2.70 |
| tblVehicleTrips | ST_TR | 2.37 | 2.70 |
| tblVehicleTrips | ST_TR | 5.82 | 0.31 |
| tblVehicleTrips | ST_TR | 0.00 | 2.70 |
| tblVehicleTrips | ST_TR | 0.61 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 10.08 | 9.06 |
| tblVehicleTrips | SU_TR | 6.07 | 5.04 |
| tblVehicleTrips | SU_TR | 1.59 | 0.02 |
| tblVehicleTrips | SU_TR | 0.37 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |
| tblVehicleTrips | SU_TR | 0.68 | 2.70 |
| tblVehicleTrips | SU_TR | 0.98 | 2.70 |
| tblVehicleTrips | SU_TR | 5.88 | 0.31 |
| tblVehicleTrips | SU_TR | 0.00 | 2.70 |
| tblVehicleTrips | SU_TR | 0.25 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |
| tblVehicleTrips | SU_TR | 8.77 | 9.06 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | WD_TR | 6.59 | 5.04 |
| tblVehicleTrips | WD_TR | 1.59 | 0.02 |
| tblVehicleTrips | WD_TR | 4.48 | 0.30 |
| tblVehicleTrips | WD_TR | 1.29 | 0.30 |
| tblVehicleTrips | WD_TR | 6.97 | 2.70 |
| tblVehicleTrips | WD_TR | 11.01 | 2.70 |
| tblVehicleTrips | WD_TR | 5.04 | 0.31 |
| tblVehicleTrips | WD_TR | 68.93 | 2.70 |
| tblVehicleTrips | WD_TR | 1.71 | 0.30 |
| tblVehicleTrips | WD_TR | 1.62 | 0.30 |
| tblVehicleTrips | WD_TR | 9.57 | 9.06 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |

| | | | |
|---|---|---|---|
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | IndoorWaterUseRate | 107,960,220.45 | 203,790.00 |
| tblWater | IndoorWaterUseRate | 2,244,846.24 | 4,237.00 |
| tblWater | IndoorWaterUseRate | 25,299,368.64 | 47,756.00 |
| tblWater | IndoorWaterUseRate | 685,288,562.50 | 1,293,580.00 |
| tblWater | IndoorWaterUseRate | 608,004,046.50 | 1,147,695.00 |
| tblWater | IndoorWaterUseRate | 811,779,101.15 | 1,532,349.00 |
| tblWater | IndoorWaterUseRate | 11,514,565.44 | 21,735.00 |
| tblWater | IndoorWaterUseRate | 8,104,234.32 | 15,298.00 |
| tblWater | IndoorWaterUseRate | 1,503,885,219.39 | 2,838,799.00 |
| tblWater | OutdoorWaterUseRate | 68,061,878.11 | 27,349.00 |
| tblWater | OutdoorWaterUseRate | 18,460,335,439.10 | 7,417,813.00 |
| tblWater | OutdoorWaterUseRate | 5,772,461.76 | 2,320.00 |
| tblWater | OutdoorWaterUseRate | 65,055,519.36 | 26,141.00 |
| tblWater | OutdoorWaterUseRate | 372,647,641.40 | 149,739.00 |
| tblWater | OutdoorWaterUseRate | 471,778,955.21 | 189,572.00 |
| tblWater | OutdoorWaterUseRate | 497,542,029.74 | 199,925.00 |
| tblWater | OutdoorWaterUseRate | 29,608,882.56 | 11,898.00 |
| tblWater | OutdoorWaterUseRate | 20,839,459.68 | 8,374.00 |
| tblWater | OutdoorWaterUseRate | 948,101,551.36 | 380,970.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |

| | | | |
|---|---|---|---|
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |

## 2. E S

### 2.2 O O
### O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 2,063.1631 | 23.3341 | 2,104.8670 | 0.7569 | | 269.6735 | 269.6735 | | 269.6657 | 269.6657 | 25,554.3406 | 11,025.4488 | 36,579.7895 | 23.9271 | 2.0100 | 37,705.3714 |
| Energy | 5.1166 | 44.2368 | 22.3712 | 0.2791 | | 3.5351 | 3.5351 | | 3.5351 | 3.5351 | 0.0000 | 148,988.5592 | 148,988.5592 | 5.4915 | 1.8637 | 149,681.6268 |
| Mobile | 282.4199 | 495.3369 | 4,908.8372 | 7.2228 | 619.2215 | 5.3103 | 624.5318 | 164.4638 | 4.8372 | 169.3009 | 0.0000 | 581,561.5691 | 581,561.5691 | 36.8414 | 0.0000 | 582,335.2386 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 15,585.3762 | 0.0000 | 15,585.3762 | 921.0693 | 0.0000 | 34,927.8324 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.2801 | 53.2265 | 54.5066 | 0.7988 | 5.9700e-003 | 73.1338 |
| **T** | **2 35 . 5** | **5 2.** | **3 . 5 4** | **.25** | **1 .2215** | **2 .51** | **. 4 4** | **1 4.4 3** | **2 . 3** | **442.5 1** | **41 14 .** | **41 2 . 3** | **2 . 5** | **.12 1** | **3.** | **4 23.2 2** |

O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 2,063.1631 | 23.3341 | 2,104.8670 | 0.7569 | | 269.6735 | 269.6735 | | 269.6657 | 269.6657 | 25,554.3406 | 11,025.4488 | 36,579.7895 | 23.9271 | 2.0100 | 37,705.3714 |
| Energy | 5.1166 | 44.2368 | 22.3712 | 0.2791 | | 3.5351 | 3.5351 | | 3.5351 | 3.5351 | 0.0000 | 148,988.5592 | 148,988.5592 | 5.4915 | 1.8637 | 149,681.6268 |
| Mobile | 282.4199 | 495.3369 | 4,908.8372 | 7.2228 | 619.2215 | 5.3103 | 624.5318 | 164.4638 | 4.8372 | 169.3009 | 0.0000 | 581,561.5691 | 581,561.5691 | 36.8414 | 0.0000 | 582,335.2386 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 15,585.3762 | 0.0000 | 15,585.3762 | 921.0693 | 0.0000 | 34,927.8324 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.2801 | 53.2265 | 54.5066 | 0.7988 | 5.9700e-003 | 73.1317 |
| **T** | **2 35 . 5** | **5 2.** | **3 . 5 4** | **.25** | **1 .2215** | **2 .51** | **. 4 4** | **1 4.4 3** | **2 . 3** | **442.5 1** | **41 14 .** | **41 2 . 3** | **2 . 5** | **.12 1** | **3.** | **4 23.2** |

| | RO | NO | CO | SO2 | 1 | E 1 | 1 T | 2.5 | E 2.5 | 2.5 T | CO2 | N CO2 | T CO2 | C 4 | N2 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **R** | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |

## 4. O D

### 4.1

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 282.4199 | 495.3369 | 4,908.8372 | 7.2228 | 619.2215 | 5.3103 | 624.5318 | 164.4638 | 4.8372 | 169.3009 | 0.0000 | 581,561.5691 | 581,561.5691 | 36.8414 | 0.0000 | 582,335.2386 |
| Unmitigated | 282.4199 | 495.3369 | 4,908.8372 | 7.2228 | 619.2215 | 5.3103 | 624.5318 | 164.4638 | 4.8372 | 169.3009 | 0.0000 | 581,561.5691 | 581,561.5691 | 36.8414 | 0.0000 | 582,335.2386 |

## 4.2 T S I

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 8,351.28 | 8,351.28 | 8351.28 | 55,203,965 | 55,203,965 |
| City Park | 309.87 | 309.87 | 309.87 | 2,048,326 | 2,048,326 |
| Day-Care Center | 277.80 | 277.80 | 277.80 | 1,836,325 | 1,836,325 |
| Elementary School | 3,106.90 | 3,106.90 | 3106.90 | 20,537,365 | 20,537,365 |
| General Light Industry | 8,001.21 | 8,001.21 | 8001.21 | 52,889,899 | 52,889,899 |
| General Office Building | 9,236.35 | 9,236.35 | 9236.35 | 61,054,484 | 61,054,484 |
| Golf Course | 122.75 | 122.75 | 122.75 | 811,391 | 811,391 |
| Government Office Building | 11,032.96 | 11,032.96 | 11032.96 | 72,930,487 | 72,930,487 |
| High School | 784.20 | 784.20 | 784.20 | 5,183,750 | 5,183,750 |
| Junior High School | 1,002.90 | 1,002.90 | 1002.90 | 6,629,410 | 6,629,410 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 209,122.92 | 209,122.92 | 209122.92 | 1,382,352,691 | 1,382,352,691 |
| Total | 251,349.13 | 251,349.13 | 251,349.13 | 1,661,478,091 | 1,661,478,091 |

## 4.3 T T I

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| City Park | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Day-Care Center | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Elementary School | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Light Industry | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Office Building | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Golf Course | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Government Office Building | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| High School | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior High School | 0.00 | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Other Non-Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 18.16 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |

| LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.654590 | 0.095079 | 0.228243 | 0.004087 | 0.005066 | 0.000799 | 0.000387 | 0.000949 | 0.000094 | 0.000086 | 0.010133 | 0.000059 | 0.000429 |

## 5. E D

### 4.4

Historical Energy Use: Y

### 5.1 E

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 98,352.2431 | 98,352.2431 | 4.5209 | 0.9354 | 98,737.1465 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 98,352.2431 | 98,352.2431 | 4.5209 | 0.9354 | 98,737.1465 |
| NaturalGas Mitigated | 5.1166 | 44.2368 | 22.3712 | 0.2791 | | 3.5351 | 3.5351 | | 3.5351 | 3.5351 | 0.0000 | 50,636.3161 | 50,636.3161 | 0.9705 | 0.9283 | 50,944.4803 |
| NaturalGas Unmitigated | 5.1166 | 44.2368 | 22.3712 | 0.2791 | | 3.5351 | 3.5351 | | 3.5351 | 3.5351 | 0.0000 | 50,636.3161 | 50,636.3161 | 0.9705 | 0.9283 | 50,944.4803 |

### 5.2 E N

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Day-Care Center | 1.20365e+ | 6.4900e- | 0.0590 | 0.0496 | 3.5000e- | | 4.4800e- | 4.4800e- | | 4.4800e- | 4.4800e- | 0.0000 | 64.2315 | 64.2315 | 1.2300e- | 1.1800e- | 64.6224 |
| Elementary School | 1.35704e+007 | 0.0732 | 0.6652 | 0.5588 | 3.9900e-003 | | 0.0506 | 0.0506 | | 0.0506 | 0.0506 | 0.0000 | 724.1686 | 724.1686 | 0.0139 | 0.0133 | 728.5758 |
| General Light Industry | 5.86755e+007 | 0.3164 | 2.8763 | 2.4161 | 0.0173 | | 0.2186 | 0.2186 | | 0.2186 | 0.2186 | 0.0000 | 3,131.1470 | 3,131.1470 | 0.0600 | 0.0574 | 3,150.2026 |
| General Office Building | 4.25556e+007 | 0.2295 | 2.0861 | 1.7523 | 0.0125 | | 0.1585 | 0.1585 | | 0.1585 | 0.1585 | 0.0000 | 2,270.9301 | 2,270.9301 | 0.0435 | 0.0416 | 2,284.7506 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 5.08334e+007 | 0.2741 | 2.4918 | 2.0931 | 0.0150 | | 0.1894 | 0.1894 | | 0.1894 | 0.1894 | 0.0000 | 2,712.6617 | 2,712.6617 | 0.0520 | 0.0497 | 2,729.1705 |
| High School | 3.39887e+ | 0.0183 | 0.1666 | 0.1400 | 1.0000e- | | 0.0127 | 0.0127 | | 0.0127 | 0.0127 | 0.0000 | 181.3766 | 181.3766 | 3.4800e- | 3.3300e- | 182.4804 |
| Junior High School | 4.3475e+006 | 0.0234 | 0.2131 | 0.1790 | 1.2800e-003 | | 0.0162 | 0.0162 | | 0.0162 | 0.0162 | 0.0000 | 231.9994 | 231.9994 | 4.4500e-003 | 4.2500e-003 | 233.4113 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Apartments Low Rise | 2.503e+007 | 0.1350 | 1.1533 | 0.4908 | 7.3600e-003 | | 0.0933 | 0.0933 | | 0.0933 | 0.0933 | 0.0000 | 1,335.6977 | 1,335.6977 | 0.0256 | 0.0245 | 1,343.8265 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 7.49274e+008 | 4.0402 | 34.5254 | 14.6916 | 0.2204 | | 2.7914 | 2.7914 | | 2.7914 | 2.7914 | 0.0000 | 39,984.1036 | 39,984.1036 | 0.7664 | 0.7330 | 40,227.4402 |
| **T** | | **5.11** | **44.23** | **22.3 12** | **.2 1** | | **3.5351** | **3.5351** | | **3.5351** | **3.5351** | **.** | **5 3 .31 1** | **5 3 .31 1** | **. 5** | **. 2 3** | **5 44.4 3** |

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Day-Care Center | 1.20365e+006 | 6.4900e-003 | 0.0590 | 0.0496 | 3.5000e-004 | | 4.4800e-003 | 4.4800e-003 | | 4.4800e-003 | 4.4800e-003 | 0.0000 | 64.2315 | 64.2315 | 1.2300e-003 | 1.1800e-003 | 64.6224 |
| Elementary School | 1.35704e+007 | 0.0732 | 0.6652 | 0.5588 | 3.9900e-003 | | 0.0506 | 0.0506 | | 0.0506 | 0.0506 | 0.0000 | 724.1686 | 724.1686 | 0.0139 | 0.0133 | 728.5758 |
| General Light Industry | 5.86755e+007 | 0.3164 | 2.8763 | 2.4161 | 0.0173 | | 0.2186 | 0.2186 | | 0.2186 | 0.2186 | 0.0000 | 3,131.1470 | 3,131.1470 | 0.0600 | 0.0574 | 3,150.2026 |
| General Office Building | 4.25556e+007 | 0.2295 | 2.0861 | 1.7523 | 0.0125 | | 0.1585 | 0.1585 | | 0.1585 | 0.1585 | 0.0000 | 2,270.9301 | 2,270.9301 | 0.0435 | 0.0416 | 2,284.7506 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 5.08334e+007 | 0.2741 | 2.4918 | 2.0931 | 0.0150 | | 0.1894 | 0.1894 | | 0.1894 | 0.1894 | 0.0000 | 2,712.6617 | 2,712.6617 | 0.0520 | 0.0497 | 2,729.1705 |
| High School | 3.39887e+ | 0.0183 | 0.1666 | 0.1400 | 1.0000e- | | 0.0127 | 0.0127 | | 0.0127 | 0.0127 | 0.0000 | 181.3766 | 181.3766 | 3.4800e- | 3.3300e- | 182.4804 |
| Junior High School | 4.3475e+006 | 0.0234 | 0.2131 | 0.1790 | 1.2800e-003 | | 0.0162 | 0.0162 | | 0.0162 | 0.0162 | 0.0000 | 231.9994 | 231.9994 | 4.4500e-003 | 4.2500e-003 | 233.4113 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 7.49274e+008 | 4.0402 | 34.5254 | 14.6916 | 0.2204 | | 2.7914 | 2.7914 | | 2.7914 | 2.7914 | 0.0000 | 39,984.1036 | 39,984.1036 | 0.7664 | 0.7330 | 40,227.4402 |
| Apartments Low Rise | 2.503e+007 | 0.1350 | 1.1533 | 0.4908 | 7.3600e-003 | | 0.0933 | 0.0933 | | 0.0933 | 0.0933 | 0.0000 | 1,335.6977 | 1,335.6977 | 0.0256 | 0.0245 | 1,343.8265 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **T** | | **5.11** | **44.23** | **22.3 12** | **.2 1** | | **3.5351** | **3.5351** | | **3.5351** | **3.5351** | **.** | **5 3 .31 1** | **5 3 .31 1** | **. 5** | **. 2 3** | **5 44.4 3** |

## 5.3 E E

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 6.17662e+006 | 1,767.5432 | 0.0813 | 0.0168 | 1,774.4605 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 722804 | 206.8427 | 9.5100e-003 | 1.9700e-003 | 207.6521 |
| Elementary School | 8.14915e+006 | 2,332.0171 | 0.1072 | 0.0222 | 2,341.1435 |
| General Light Industry | 3.71611e+007 | 10,634.2868 | 0.4888 | 0.1011 | 10,675.9043 |
| General Office Building | 5.21341e+007 | 14,919.0415 | 0.6858 | 0.1419 | 14,977.4274 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 6.2275e+007 | 17,821.0296 | 0.8192 | 0.1695 | 17,890.7726 |
| High School | 2.04105e+006 | 584.0811 | 0.0269 | 5.5500e-003 | 586.3670 |
| Junior High School | 2.61071e+006 | 747.1001 | 0.0343 | 7.1100e-003 | 750.0239 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 1.72418e+008 | 49,340.3010 | 2.2680 | 0.4692 | 49,533.3952 |
| **T** | | **352.2431** | **4.521** | **. 354** | **3 .145** |

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 6.17662e+006 | 1,767.5432 | 0.0813 | 0.0168 | 1,774.4605 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 722804 | 206.8427 | 9.5100e-003 | 1.9700e-003 | 207.6521 |
| Elementary School | 8.14915e+006 | 2,332.0171 | 0.1072 | 0.0222 | 2,341.1435 |
| General Light Industry | 3.71611e+007 | 10,634.2868 | 0.4888 | 0.1011 | 10,675.9043 |
| General Office Building | 5.21341e+007 | 14,919.0415 | 0.6858 | 0.1419 | 14,977.4274 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 6.2275e+007 | 17,821.0296 | 0.8192 | 0.1695 | 17,890.7726 |
| High School | 2.04105e+006 | 584.0811 | 0.0269 | 5.5500e-003 | 586.3670 |
| Junior High School | 2.61071e+006 | 747.1001 | 0.0343 | 7.1100e-003 | 750.0239 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 1.72418e+008 | 49,340.3010 | 2.2680 | 0.4692 | 49,533.3952 |
| **T** | | **352.2431** | **4.521** | **. 354** | **3 .145** |

## . A D

### .1 A

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 2,063.1631 | 23.3341 | 2,104.8670 | 0.7569 | | 269.6735 | 269.6735 | | 269.6657 | 269.6657 | 25,554.3406 | 11,025.4488 | 36,579.7895 | 23.9271 | 2.0100 | 37,705.3714 |
| Unmitigated | 2,063.1631 | 23.3341 | 2,104.8670 | 0.7569 | | 269.6735 | 269.6735 | | 269.6657 | 269.6657 | 25,554.3406 | 11,025.4488 | 36,579.7895 | 23.9271 | 2.0100 | 37,705.3714 |

### .2 A S C

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 140.5973 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 363.7015 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 1,552.2781 | 21.0603 | 1,912.2399 | 0.7469 | | 268.6581 | 268.6581 | | 268.6502 | 268.6502 | 25,554.3406 | 10,717.1178 | 36,271.4584 | 23.5824 | 2.0100 | 37,389.8021 |
| Landscaping | 6.5862 | 2.2739 | 192.6271 | 0.0100 | | 1.0154 | 1.0154 | | 1.0154 | 1.0154 | 0.0000 | 308.3311 | 308.3311 | 0.3447 | 0.0000 | 315.5694 |
| **T** | **2 3.1 31** | **23.3341** | **2 1 4.** | **. 5** | | **2 . 35** | **2 . 35** | | **2 . 5** | **2 . 5** | **25 554.34** | **11 25.44** | **3 5 . 5** | **23. 2 1** | **2. 1** | **3 5.3 14** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 140.5973 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 363.7015 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 1,552.2781 | 21.0603 | 1,912.2399 | 0.7469 | | 268.6581 | 268.6581 | | 268.6502 | 268.6502 | 25,554.3406 | 10,717.1178 | 36,271.4584 | 23.5824 | 2.0100 | 37,389.8021 |
| Landscaping | 6.5862 | 2.2739 | 192.6271 | 0.0100 | | 1.0154 | 1.0154 | | 1.0154 | 1.0154 | 0.0000 | 308.3311 | 308.3311 | 0.3447 | 0.0000 | 315.5694 |
| **T** | **2 3.1 31** | **23.3341** | **2 1 4.** | **. 5** | | **2 . 35** | **2 . 35** | | **2 . 5** | **2 . 5** | **25 554.34** | **11 25.44** | **3 5 . 5** | **23. 2 1** | **2. 1** | **3 5.3 14** |

## . D

### .1

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 54.5066 | 0.7988 | 5.9700e-003 | 73.1317 |
| Unmitigated | 54.5066 | 0.7988 | 5.9700e-003 | 73.1338 |

**.2**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 0.20379 / 0.027349 | 0.8752 | 0.0279 | 1.6000e-004 | 1.5124 |
| City Park | 0 / 7.41781 | 23.5836 | 1.0800e-003 | 2.2000e-004 | 23.6759 |
| Day-Care Center | 0.004237 / 0.00232 | 0.0238 | 5.8000e-004 | 0.0000 | 0.0370 |
| Elementary School | 0.047756 / 0.026141 | 0.2678 | 6.5400e-003 | 4.0000e-005 | 0.4174 |
| General Light Industry | 1.29358 / 0 | 5.2778 | 1.8000e-003 | 1.0400e-003 | 5.6383 |
| General Office Building | 1.14769 / 0.149739 | 4.9150 | 0.1572 | 9.3000e-004 | 8.5035 |
| Golf Course | 0 / 0.189572 | 0.6027 | 3.0000e-005 | 1.0000e-005 | 0.6051 |
| Government Office Building | 1.53235 / 0.199925 | 6.5623 | 0.2099 | 1.2400e-003 | 11.3535 |
| High School | 0.021735 / 0.011898 | 0.1219 | 2.9800e-003 | 2.0000e-005 | 0.1900 |
| Junior High School | 0.015298 / 0.008374 | 0.0858 | 2.1000e-003 | 1.0000e-005 | 0.1337 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2.8388 / 0.38097 | 12.1909 | 0.3888 | 2.3000e-003 | 21.0671 |
| **T** | | **54.5** | **.** | **5. 3** | **3.133** |

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 0.20379 / 0.027349 | 0.8752 | 0.0279 | 1.6000e-004 | 1.5123 |
| City Park | 0 / 7.41781 | 23.5836 | 1.0800e-003 | 2.2000e-004 | 23.6759 |
| Day-Care Center | 0.004237 / 0.00232 | 0.0238 | 5.8000e-004 | 0.0000 | 0.0370 |
| Elementary School | 0.047756 / 0.026141 | 0.2678 | 6.5400e-003 | 4.0000e-005 | 0.4174 |
| General Light Industry | 1.29358 / 0 | 5.2778 | 1.7900e-003 | 1.0400e-003 | 5.6375 |
| General Office Building | 1.14769 / 0.149739 | 4.9150 | 0.1572 | 9.3000e-004 | 8.5033 |
| Golf Course | 0 / 0.189572 | 0.6027 | 3.0000e-005 | 1.0000e-005 | 0.6051 |
| Government Office Building | 1.53235 / 0.199925 | 6.5623 | 0.2099 | 1.2400e-003 | 11.3532 |
| High School | 0.021735 / 0.011898 | 0.1219 | 2.9800e-003 | 2.0000e-005 | 0.1900 |
| Junior High School | 0.015298 / 0.008374 | 0.0858 | 2.1000e-003 | 1.0000e-005 | 0.1337 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2.8388 / 0.38097 | 12.1909 | 0.3888 | 2.2900e-003 | 21.0665 |
| **T** | | **54.5** | **.** | **5. 3** | **3.131** |

## . D

### .1

**C**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Unmitigated | 15,585.3762 | 921.0693 | 0.0000 | 34,927.8324 |
| Mitigated | 15,585.3762 | 921.0693 | 0.0000 | 34,927.8324 |

### .2

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 1110.15 | 225.3504 | 13.3178 | 0.0000 | 505.0248 |
| City Park | 1940.68 | 393.9405 | 23.2812 | 0.0000 | 882.8461 |
| Day-Care Center | 246.14 | 49.9642 | 2.9528 | 0.0000 | 111.9730 |
| Elementary School | 2773.96 | 563.0888 | 33.2776 | 0.0000 | 1,261.9183 |
| General Light Industry | 5352.01 | 1,086.4097 | 64.2050 | 0.0000 | 2,434.7141 |
| General Office Building | 4633.65 | 940.5891 | 55.5872 | 0.0000 | 2,107.9207 |
| Golf Course | 536.33 | 108.8701 | 6.4340 | 0.0000 | 243.9850 |
| Government Office Building | 5534.96 | 1,123.5469 | 66.3997 | 0.0000 | 2,517.9409 |
| High School | 694.83 | 141.0442 | 8.3355 | 0.0000 | 316.0892 |
| Junior High School | 888.6 | 180.3778 | 10.6600 | 0.0000 | 404.2382 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 53067.4 | 10,772.1945 | 636.6185 | 0.0000 | 24,141.1821 |
| **T** | | **15 5 5.3 1** | **21. 4** | **.** | **34 2 . 3 24** |

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 1110.15 | 225.3504 | 13.3178 | 0.0000 | 505.0248 |
| City Park | 1940.68 | 393.9405 | 23.2812 | 0.0000 | 882.8461 |
| Day-Care Center | 246.14 | 49.9642 | 2.9528 | 0.0000 | 111.9730 |
| Elementary School | 2773.96 | 563.0888 | 33.2776 | 0.0000 | 1,261.9183 |
| General Light Industry | 5352.01 | 1,086.4097 | 64.2050 | 0.0000 | 2,434.7141 |
| General Office Building | 4633.65 | 940.5891 | 55.5872 | 0.0000 | 2,107.9207 |
| Golf Course | 536.33 | 108.8701 | 6.4340 | 0.0000 | 243.9850 |
| Government Office Building | 5534.96 | 1,123.5469 | 66.3997 | 0.0000 | 2,517.9409 |
| High School | 694.83 | 141.0442 | 8.3355 | 0.0000 | 316.0892 |
| Junior High School | 888.6 | 180.3778 | 10.6600 | 0.0000 | 404.2382 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 53067.4 | 10,772.1945 | 636.6185 | 0.0000 | 24,141.1821 |
| **T** | | **15 5 5.3 1** | **21. 4** | **.** | **34 2 . 3 24** |

**. O O**

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

1 .

# E A D C R O R S

| Category | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | | | | | | | | | | | | |
| Architectural Coating | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Electricity | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Natural Gas | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Water Indoor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.00 |
| Water Outdoor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## O

Project Setting:

| Mitigation | Category | Measure | % Reduction | Input Value 1 | Input Value 2 | Input Value 3 |
|---|---|---|---|---|---|---|
| No | Land Use | Increase Density | 0.00 | | | |
| No | Land Use | Increase Diversity | 0.13 | 0.37 | | |
| No | Land Use | Improve Walkability Design | 0.00 | | | |
| No | Land Use | Improve Destination Accessibility | 0.00 | | | |
| No | Land Use | Increase Transit Accessibility | 0.25 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| No | Land Use | Integrate Below Market Rate Housing | 0.00 | | | |
| | Land Use | Land Use SubTotal | 0.00 | | | |
| No | Neighborhood Enhancements | Improve Pedestrian Network | | | | |
| No | Neighborhood Enhancements | Provide Traffic Calming Measures | | | | |
| No | Neighborhood Enhancements | Implement NEV Network | 0.00 | | | |
| | Neighborhood Enhancements | Neighborhood Enhancements Subtotal | 0.00 | | | |
| No | Parking Policy Pricing | Limit Parking Supply | 0.00 | | | |
| No | Parking Policy Pricing | Unbundle Parking Costs | 0.00 | | | |
| No | Parking Policy Pricing | On-street Market Pricing | 0.00 | | | |
| | Parking Policy Pricing | Parking Policy Pricing Subtotal | 0.00 | | | |
| No | Transit Improvements | Provide BRT System | 0.00 | | | |
| No | Transit Improvements | Expand Transit Network | 0.00 | | | |
| No | Transit Improvements | Increase Transit Frequency | 0.00 | | | |
| | Transit Improvements | Transit Improvements Subtotal | 0.00 | | | |
| | | Land Use and Site Enhancement Subtotal | 0.00 | | | |
| No | Commute | Implement Trip Reduction Program | | | | |
| No | Commute | Transit Subsidy | | | | |
| No | Commute | Implement Employee Parking "Cash Out" | | | | |
| No | Commute | Workplace Parking Charge | | | | |
| No | Commute | Encourage Telecommuting and Alternative Work Schedules | 0.00 | | | |
| No | Commute | Market Commute Trip Reduction Option | 0.00 | | | |
| No | Commute | Employee Vanpool/Shuttle | 0.00 | | 2.00 | |
| No | Commute | Provide Ride Sharing Program | | | | |
| | Commute | Commute Subtotal | 0.00 | | | |
| No | School Trip | Implement School Bus Program | 0.00 | | | |
| | | Total VMT Reduction | 0.00 | | | |

**A**

| Measure Implemented | Mitigation Measure | Input Value |
|---|---|---|
| No | Only Natural Gas Hearth | |
| No | No Hearth | |
| No | Use Low VOC Cleaning Supplies | |
| No | Use Low VOC Paint (Residential Interior) | 250.00 |
| No | Use Low VOC Paint (Residential Exterior) | 250.00 |
| No | Use Low VOC Paint (Non-residential Interior) | 250.00 |
| No | Use Low VOC Paint (Non-residential Exterior) | 250.00 |
| No | % Electric Lawnmower | |
| No | % Electric Leafblower | |
| No | % Electric Chainsaw | |

**E**

| Measure Implemented | Mitigation Measure | Input Value 1 | Input Value 2 |
|---|---|---|---|
| No | Exceed Title 24 | | |
| No | Install High Efficiency Lighting | | |
| No | On-site Renewable | | |

| Appliance Type | Land Use Subtype | % Improvement |
|---|---|---|
| ClothWasher | | 30.00 |
| DishWasher | | 15.00 |
| Fan | | 50.00 |
| Refrigerator | | 15.00 |

| Measure Implemented | Mitigation Measure | Input Value 1 | Input Value 2 |
|---|---|---|---|
| No | Apply Water Conservation on Strategy | | |
| No | Use Reclaimed Water | | |
| No | Use Grey Water | | |
| No | Install low-flow bathroom faucet | 32.00 | |
| No | Install low-flow Kitchen faucet | 18.00 | |
| No | Install low-flow Toilet | 20.00 | |
| No | Install low-flow Shower | 20.00 | |
| No | Turf Reduction | | |
| No | Use Water Efficient Irrigation Systems | 6.10 | |
| No | Water Efficient Landscape | | |

**S**

| Mitigation Measures | Input Value |
|---|---|
| Institute Recycling and Composting Services<br>Percent Reduction in Waste Disposed | |

# _E

**A D C**

## 1. C

### 1.1

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 3,420.87 | 1000sqft | 2,070.00 | 3,420,870.00 | 0 |
| Government Office Building | 4,086.28 | 1000sqft | 570,046.00 | 4,086,283.00 | 0 |
| Day-Care Center | 926.00 | Student | 4.00 | 102,091.00 | 0 |
| Elementary School | 10,436.00 | Student | 265.00 | 1,151,010.00 | 0 |
| High School | 2,614.00 | Student | 108.00 | 288,284.00 | 0 |
| Junior High School | 3,343.00 | Student | 70.00 | 368,745.00 | 0 |
| General Light Industry | 2,963.41 | 1000sqft | 24,786.00 | 2,963,408.00 | 0 |
| Other Non-Asphalt Surfaces | 419,510.00 | Acre | 419,510.00 | 0.00 | 0 |
| Parking Lot | 17.90 | Acre | 17.90 | 0.00 | 0 |
| City Park | 15,493.58 | Acre | 15,493.58 | 99,405.00 | 0 |
| Golf Course | 395.96 | Acre | 399.00 | 45,784.00 | 0 |
| Apartments Low Rise | 1,657.00 | Dwelling Unit | 5,555.00 | 3,096,379.00 | 4623 |
| Single Family Housing | 23,082.00 | Dwelling Unit | 98,284.00 | 77,503,209.00 | 88867 |

### 1.2 O C

Urban **S** 2.2 **D** 33

**C** 9 **O** 2035

**C** Southern California Edison

| | | | | | |
|---|---|---|---|---|---|
| **CO2 I** | 630.89 | **C 4 I** | 0.029 | **N2O I** | 0.006 |

## 1.3 E C N D D

Project Characteristics -

Land Use - Based on information provided by the County. For modeling purposes, private/charter schools and elementary school land use information combined as one.

Construction Phase - No construction component for modeling.

Off-road Equipment - No construction component.

Off-road Equipment -

Vehicle Trips - Trip generation rate and average trip distance based on information provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Energy Use -

Water And Wastewater - See Sections 5.17.1 and 5.17.2 of the Draft EIR. Otherwise noted, modeling assumes 60% of existing land uses use septic systems.

Solid Waste - See Section 5.17.4 of the Draft EIR.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaCoating | Area_Nonresidential_Interior | 18788819 | 18788816 |
| tblConstructionPhase | NumDays | 10,000.00 | 10.00 |
| tblLandUse | LandUseSquareFeet | 4,086,280.00 | 4,086,283.00 |
| tblLandUse | LandUseSquareFeet | 52,340.15 | 102,091.00 |
| tblLandUse | LandUseSquareFeet | 872,484.77 | 1,151,010.00 |
| tblLandUse | LandUseSquareFeet | 346,775.80 | 288,284.00 |
| tblLandUse | LandUseSquareFeet | 393,008.71 | 368,745.00 |
| tblLandUse | LandUseSquareFeet | 2,963,410.00 | 2,963,408.00 |
| tblLandUse | LandUseSquareFeet | 18,273,855,600.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 779,724.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblLandUse | LandUseSquareFeet | 674,901,216.00 | 99,405.00 |
| tblLandUse | LandUseSquareFeet | 17,248,017.60 | 45,784.00 |
| tblLandUse | LandUseSquareFeet | 1,657,000.00 | 3,096,379.00 |
| tblLandUse | LandUseSquareFeet | 41,547,600.00 | 77,503,209.00 |
| tblLandUse | LotAcreage | 78.53 | 2,070.00 |
| tblLandUse | LotAcreage | 93.81 | 570,046.00 |
| tblLandUse | LotAcreage | 1.20 | 4.00 |
| tblLandUse | LotAcreage | 20.03 | 265.00 |
| tblLandUse | LotAcreage | 7.96 | 108.00 |
| tblLandUse | LotAcreage | 9.02 | 70.00 |
| tblLandUse | LotAcreage | 68.03 | 24,786.00 |
| tblLandUse | LotAcreage | 15,493.60 | 15,493.58 |
| tblLandUse | LotAcreage | 395.96 | 399.00 |
| tblLandUse | LotAcreage | 103.56 | 5,555.00 |
| tblLandUse | LotAcreage | 7,494.16 | 98,284.00 |
| tblLandUse | Population | 4,739.00 | 4,623.00 |
| tblLandUse | Population | 66,015.00 | 88,867.00 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblProjectCharacteristics | OperationalYear | 2014 | 2035 |
| tblSolidWaste | SolidWasteGenerationRate | 762.22 | 1,110.15 |
| tblSolidWaste | SolidWasteGenerationRate | 1,332.45 | 1,940.68 |
| tblSolidWaste | SolidWasteGenerationRate | 169.00 | 246.14 |
| tblSolidWaste | SolidWasteGenerationRate | 1,904.57 | 2,773.96 |
| tblSolidWaste | SolidWasteGenerationRate | 3,674.63 | 5,352.01 |
| tblSolidWaste | SolidWasteGenerationRate | 3,181.41 | 4,633.65 |
| tblSolidWaste | SolidWasteGenerationRate | 368.24 | 536.33 |
| tblSolidWaste | SolidWasteGenerationRate | 3,800.24 | 5,534.96 |

| | | | |
|---|---|---|---|
| tblSolidWaste | SolidWasteGenerationRate | 477.06 | 694.83 |
| tblSolidWaste | SolidWasteGenerationRate | 610.10 | 888.60 |
| tblSolidWaste | SolidWasteGenerationRate | 36,435.47 | 53,067.36 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 82.30 | 100.00 |
| tblVehicleTrips | CC_TTP | 30.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 62.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 17.20 | 100.00 |
| tblVehicleTrips | CC_TTP | 22.20 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 12.70 | 0.00 |
| tblVehicleTrips | CW_TTP | 65.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 77.80 | 0.00 |
| tblVehicleTrips | CW_TTP | 72.80 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 28.00 | 0.00 |
| tblVehicleTrips | DV_TP | 58.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 39.00 | 0.00 |
| tblVehicleTrips | DV_TP | 34.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 14.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 4.00 | 0.00 |
| tblVehicleTrips | PB_TP | 9.00 | 0.00 |
| tblVehicleTrips | PB_TP | 16.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 66.00 | 100.00 |
| tblVehicleTrips | PR_TP | 28.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | PR_TP | 77.00 | 100.00 |
| tblVehicleTrips | PR_TP | 52.00 | 100.00 |
| tblVehicleTrips | PR_TP | 50.00 | 100.00 |
| tblVehicleTrips | PR_TP | 75.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | ST_TR | 7.16 | 5.04 |
| tblVehicleTrips | ST_TR | 1.59 | 0.02 |
| tblVehicleTrips | ST_TR | 0.39 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 1.32 | 2.70 |
| tblVehicleTrips | ST_TR | 2.37 | 2.70 |
| tblVehicleTrips | ST_TR | 5.82 | 0.31 |
| tblVehicleTrips | ST_TR | 0.00 | 2.70 |
| tblVehicleTrips | ST_TR | 0.61 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 10.08 | 9.06 |
| tblVehicleTrips | SU_TR | 6.07 | 5.04 |
| tblVehicleTrips | SU_TR | 1.59 | 0.02 |
| tblVehicleTrips | SU_TR | 0.37 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |
| tblVehicleTrips | SU_TR | 0.68 | 2.70 |
| tblVehicleTrips | SU_TR | 0.98 | 2.70 |
| tblVehicleTrips | SU_TR | 5.88 | 0.31 |
| tblVehicleTrips | SU_TR | 0.00 | 2.70 |
| tblVehicleTrips | SU_TR | 0.25 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 8.77 | 9.06 |
| tblVehicleTrips | WD_TR | 6.59 | 5.04 |
| tblVehicleTrips | WD_TR | 1.59 | 0.02 |
| tblVehicleTrips | WD_TR | 4.48 | 0.30 |
| tblVehicleTrips | WD_TR | 1.29 | 0.30 |
| tblVehicleTrips | WD_TR | 6.97 | 2.70 |
| tblVehicleTrips | WD_TR | 11.01 | 2.70 |
| tblVehicleTrips | WD_TR | 5.04 | 0.31 |
| tblVehicleTrips | WD_TR | 68.93 | 2.70 |
| tblVehicleTrips | WD_TR | 1.71 | 0.30 |
| tblVehicleTrips | WD_TR | 1.62 | 0.30 |
| tblVehicleTrips | WD_TR | 9.57 | 9.06 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |

| | | | |
|---|---|---|---|
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | IndoorWaterUseRate | 107,960,220.45 | 203,790.00 |
| tblWater | IndoorWaterUseRate | 2,244,846.24 | 4,237.00 |
| tblWater | IndoorWaterUseRate | 25,299,368.64 | 47,756.00 |
| tblWater | IndoorWaterUseRate | 685,288,562.50 | 1,293,580.00 |
| tblWater | IndoorWaterUseRate | 608,004,046.50 | 1,147,695.00 |
| tblWater | IndoorWaterUseRate | 811,779,101.15 | 1,532,349.00 |
| tblWater | IndoorWaterUseRate | 11,514,565.44 | 21,735.00 |
| tblWater | IndoorWaterUseRate | 8,104,234.32 | 15,298.00 |
| tblWater | IndoorWaterUseRate | 1,503,885,219.39 | 2,838,799.00 |
| tblWater | OutdoorWaterUseRate | 68,061,878.11 | 27,349.00 |
| tblWater | OutdoorWaterUseRate | 18,460,335,439.10 | 7,417,813.00 |
| tblWater | OutdoorWaterUseRate | 5,772,461.76 | 2,320.00 |
| tblWater | OutdoorWaterUseRate | 65,055,519.36 | 26,141.00 |
| tblWater | OutdoorWaterUseRate | 372,647,641.40 | 149,739.00 |
| tblWater | OutdoorWaterUseRate | 471,778,955.21 | 189,572.00 |
| tblWater | OutdoorWaterUseRate | 497,542,029.74 | 199,925.00 |
| tblWater | OutdoorWaterUseRate | 29,608,882.56 | 11,898.00 |
| tblWater | OutdoorWaterUseRate | 20,839,459.68 | 8,374.00 |
| tblWater | OutdoorWaterUseRate | 948,101,551.36 | 380,970.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |

| | | | |
|---|---|---|---|
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |

## 2. E S

### 2.2 O O

O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40,688.8338 | 537.5519 | 48,720.8461 | 18.3289 | | 6,564.1219 | 6,564.1219 | | 6,563.9298 | 6,563.9298 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 637.7880 | 54.0413 | 1,009,104.1830 |
| Energy | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| Mobile | 776.1835 | 1,284.9955 | 12,798.0196 | 49.9979 | 4,264.6218 | 35.6680 | 4,300.2898 | 1,131.6074 | 33.0543 | 1,164.6617 | | 3,176,049.4352 | 3,176,049.4352 | 143.2989 | | 3,179,058.7113 |
| **T** | **41 4 3. 53 2** | **2 4. 4** | **1 41.44** | **. 5** | **4 2 4. 21** | **1 .1 2** | **1 3. 2** | **1 131. 4** | **1 .354 4** | **4 . 1** | **44. 4** | **3 3 . 2 2** | **4 4 53.** | **. 4** | **5 . 4 5** | **4 4 5 . 125** |

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| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40,688.8338 | 537.5519 | 48,720.8461 | 18.3289 | | 6,564.1219 | 6,564.1219 | | 6,563.9298 | 6,563.9298 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 637.7880 | 54.0413 | 1,009,104.1830 |
| Energy | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| Mobile | 776.1835 | 1,284.9955 | 12,798.0196 | 49.9979 | 4,264.6218 | 35.6680 | 4,300.2898 | 1,131.6074 | 33.0543 | 1,164.6617 | | 3,176,049.4352 | 3,176,049.4352 | 143.2989 | | 3,179,058.7113 |
| **T** | **41 4 3. 53 2** | **2 4. 4** | **1 41.44** | **. 5** | **4 2 4. 21** | **1 .1 2** | **1 3. 2** | **1 131. 4** | **1 .354 4** | **4 . 1** | **44. 4** | **3 3 . 2 2** | **4 4 53.** | **. 4** | **5 . 4 5** | **4 4 5 . 125** |

| | RO | NO | CO | SO2 | 1 | E 1 | 1 T | 2.5 | E 2.5 | 2.5 T | CO2 | N CO2 | T CO2 | C 4 | N2 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **R** | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |

## 4. O D

### 4.1

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 776.1835 | 1,284.9955 | 12,798.0196 | 49.9979 | 4,264.6218 | 35.6680 | 4,300.2898 | 1,131.6074 | 33.0543 | 1,164.6617 | | 3,176,049.4352 | 3,176,049.4352 | 143.2989 | | 3,179,058.7113 |
| Unmitigated | 776.1835 | 1,284.9955 | 12,798.0196 | 49.9979 | 4,264.6218 | 35.6680 | 4,300.2898 | 1,131.6074 | 33.0543 | 1,164.6617 | | 3,176,049.4352 | 3,176,049.4352 | 143.2989 | | 3,179,058.7113 |

## 4.2 T S I

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 8,351.28 | 8,351.28 | 8351.28 | 67,758,611 | 67,758,611 |
| City Park | 309.87 | 309.87 | 309.87 | 2,514,162 | 2,514,162 |
| Day-Care Center | 277.80 | 277.80 | 277.80 | 2,253,947 | 2,253,947 |
| Elementary School | 3,130.80 | 3,130.80 | 3130.80 | 25,401,934 | 25,401,934 |
| General Light Industry | 8,001.21 | 8,001.21 | 8001.21 | 64,918,273 | 64,918,273 |
| General Office Building | 9,236.35 | 9,236.35 | 9236.35 | 74,939,672 | 74,939,672 |
| Golf Course | 122.75 | 122.75 | 122.75 | 995,920 | 995,920 |
| Government Office Building | 11,032.96 | 11,032.96 | 11032.96 | 89,516,550 | 89,516,550 |
| High School | 784.20 | 784.20 | 784.20 | 6,362,654 | 6,362,654 |
| Junior High School | 1,002.90 | 1,002.90 | 1002.90 | 8,137,089 | 8,137,089 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 209,122.92 | 209,122.92 | 209122.92 | 1,696,731,359 | 1,696,731,359 |
| Total | 251,373.03 | 251,373.03 | 251,373.03 | 2,039,530,171 | 2,039,530,171 |

## 4.3 T T I

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| City Park | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Day-Care Center | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Elementary School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Light Industry | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Office Building | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Golf Course | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Government Office Building | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Other Non-Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |

| LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.611152 | 0.099452 | 0.250731 | 0.007405 | 0.012959 | 0.002042 | 0.000906 | 0.002000 | 0.000197 | 0.000202 | 0.011277 | 0.000103 | 0.001572 |

## 5. E D

### 4.4

Historical Energy Use: Y

### 5.1 E

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| NaturalGas Unmitigated | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |

## 5.2 E N

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Day-Care Center | 3297.68 | 0.0356 | 0.3233 | 0.2716 | 1.9400e-003 | | 0.0246 | 0.0246 | | 0.0246 | 0.0246 | | 387.9623 | 387.9623 | 7.4400e-003 | 7.1100e-003 | 390.3233 |
| Elementary School | 37179.2 | 0.4010 | 3.6450 | 3.0618 | 0.0219 | | 0.2770 | 0.2770 | | 0.2770 | 0.2770 | | 4,374.0235 | 4,374.0235 | 0.0838 | 0.0802 | 4,400.6431 |
| General Light Industry | 160755 | 1.7336 | 15.7603 | 13.2386 | 0.0946 | | 1.1978 | 1.1978 | | 1.1978 | 1.1978 | | 18,912.3218 | 18,912.3218 | 0.3625 | 0.3467 | 19,027.4190 |
| General Office Building | 116591 | 1.2574 | 11.4305 | 9.6016 | 0.0686 | | 0.8687 | 0.8687 | | 0.8687 | 0.8687 | | 13,716.5585 | 13,716.5585 | 0.2629 | 0.2515 | 13,800.0352 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 139269 | 1.5019 | 13.6539 | 11.4693 | 0.0819 | | 1.0377 | 1.0377 | | 1.0377 | 1.0377 | | 16,384.6448 | 16,384.6448 | 0.3140 | 0.3004 | 16,484.3590 |
| High School | 9311.97 | 0.1004 | 0.9129 | 0.7669 | 5.4800e-003 | | 0.0694 | 0.0694 | | 0.0694 | 0.0694 | | 1,095.5257 | 1,095.5257 | 0.0210 | 0.0201 | 1,102.1929 |
| Junior High School | 11911 | 0.1285 | 1.1677 | 0.9809 | 7.0100e-003 | | 0.0888 | 0.0888 | | 0.0888 | 0.0888 | | 1,401.2904 | 1,401.2904 | 0.0269 | 0.0257 | 1,409.8185 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2.0528e+006 | 22.1381 | 189.1801 | 80.5022 | 1.2075 | | 15.2954 | 15.2954 | | 15.2954 | 15.2954 | | 241,506.4638 | 241,506.4638 | 4.6289 | 4.4276 | 242,976.2319 |
| Apartments Low Rise | 68575.4 | 0.7395 | 6.3197 | 2.6892 | 0.0403 | | 0.5110 | 0.5110 | | 0.5110 | 0.5110 | | 8,067.6967 | 8,067.6967 | 0.1546 | 0.1479 | 8,116.7953 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **T** | | **2 . 35** | **242.3 34** | **122.5 2** | **1.52 2** | | **1 .3 3** | **1 .3 3** | | **1 .3 3** | **1 .3 3** | | **3 5 4 .4 5** | **3 5 4 .4 5** | **5. 21** | **5. 2** | **3 . 1 2** |

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Day-Care Center | 3.29768 | 0.0356 | 0.3233 | 0.2716 | 1.9400e-003 | | 0.0246 | 0.0246 | | 0.0246 | 0.0246 | | 387.9623 | 387.9623 | 7.4400e-003 | 7.1100e-003 | 390.3233 |
| Elementary School | 37.1792 | 0.4010 | 3.6450 | 3.0618 | 0.0219 | | 0.2770 | 0.2770 | | 0.2770 | 0.2770 | | 4,374.0235 | 4,374.0235 | 0.0838 | 0.0802 | 4,400.6431 |
| General Light Industry | 160.755 | 1.7336 | 15.7603 | 13.2386 | 0.0946 | | 1.1978 | 1.1978 | | 1.1978 | 1.1978 | | 18,912.3218 | 18,912.3218 | 0.3625 | 0.3467 | 19,027.4190 |
| General Office Building | 116.591 | 1.2574 | 11.4305 | 9.6016 | 0.0686 | | 0.8687 | 0.8687 | | 0.8687 | 0.8687 | | 13,716.5585 | 13,716.5585 | 0.2629 | 0.2515 | 13,800.0352 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 139.269 | 1.5019 | 13.6539 | 11.4693 | 0.0819 | | 1.0377 | 1.0377 | | 1.0377 | 1.0377 | | 16,384.6448 | 16,384.6448 | 0.3140 | 0.3004 | 16,484.3590 |
| High School | 9.31197 | 0.1004 | 0.9129 | 0.7669 | 5.4800e-003 | | 0.0694 | 0.0694 | | 0.0694 | 0.0694 | | 1,095.5257 | 1,095.5257 | 0.0210 | 0.0201 | 1,102.1929 |
| Junior High School | 11.911 | 0.1285 | 1.1677 | 0.9809 | 7.0100e-003 | | 0.0888 | 0.0888 | | 0.0888 | 0.0888 | | 1,401.2904 | 1,401.2904 | 0.0269 | 0.0257 | 1,409.8185 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2052.8 | 22.1381 | 189.1801 | 80.5022 | 1.2075 | | 15.2954 | 15.2954 | | 15.2954 | 15.2954 | | 241,506.4638 | 241,506.4638 | 4.6289 | 4.4276 | 242,976.2319 |
| Apartments Low Rise | 68.5754 | 0.7395 | 6.3197 | 2.6892 | 0.0403 | | 0.5110 | 0.5110 | | 0.5110 | 0.5110 | | 8,067.6967 | 8,067.6967 | 0.1546 | 0.1479 | 8,116.7953 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **T** | | **2 . 35** | **242.3 34** | **122.5 2** | **1.52 2** | | **1 .3 3** | **1 .3 3** | | **1 .3 3** | **1 .3 3** | | **3 5 4 .4 5** | **3 5 4 .4 5** | **5. 21** | **5. 2** | **3 . 1 2** |

## . A D

### .1 A

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 40,688.8338 | 537.5519 | 48,720.8461 | 18.3289 | | 6,564.1219 | 6,564.1219 | | 6,563.9298 | 6,563.9298 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 637.7880 | 54.0413 | 1,009,104.1830 |
| Unmitigated | 40,688.8338 | 537.5519 | 48,720.8461 | 18.3289 | | 6,564.1219 | 6,564.1219 | | 6,563.9298 | 6,563.9298 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 637.7880 | 54.0413 | 1,009,104.1830 |

### .2 A S C

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 770.3961 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1,992.8850 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37,860.4410 | 513.6649 | 46,639.9972 | 18.2176 | | 6,552.6368 | 6,552.6368 | | 6,552.4447 | 6,552.4447 | 687,044.8466 | 288,136.5882 | 975,181.4348 | 634.0284 | 54.0413 | 1,005,248.8223 |
| Landscaping | 65.1117 | 23.8870 | 2,080.8489 | 0.1113 | | 11.4851 | 11.4851 | | 11.4851 | 11.4851 | | 3,776.4094 | 3,776.4094 | 3.7596 | | 3,855.3607 |
| **T** | **4 . 33** | **53 .551** | **4 2 . 4 1** | **1 .32** | | **5 4.121** | **5 4.121** | | **5 3. 2** | **5 3. 2** | **44. 4** | **2 1 12.** | **5 . 4 42** | **3 .** | **54. 413** | **1 1 4. 1 3** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 770.3961 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1,992.8850 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37,860.4410 | 513.6649 | 46,639.9972 | 18.2176 | | 6,552.6368 | 6,552.6368 | | 6,552.4447 | 6,552.4447 | 687,044.8466 | 288,136.5882 | 975,181.4348 | 634.0284 | 54.0413 | 1,005,248.8223 |
| Landscaping | 65.1117 | 23.8870 | 2,080.8489 | 0.1113 | | 11.4851 | 11.4851 | | 11.4851 | 11.4851 | | 3,776.4094 | 3,776.4094 | 3.7596 | | 3,855.3607 |
| **T** | **4 . 33** | **53 .551** | **4 2 . 4 1** | **1 .32** | | **5 4.121** | **5 4.121** | | **5 3. 2** | **5 3. 2** | **44. 4** | **2 1 12.** | **5 . 4 42** | **3 .** | **54. 413** | **1 1 4. 1 3** |

## . D

### .1

## . D

### .1

## . O O

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**1 .**

# _E

**A D C S**

## 1. C

### 1.1

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 3,420.87 | 1000sqft | 2,070.00 | 3,420,870.00 | 0 |
| Government Office Building | 4,086.28 | 1000sqft | 570,046.00 | 4,086,283.00 | 0 |
| Day-Care Center | 926.00 | Student | 4.00 | 102,091.00 | 0 |
| Elementary School | 10,436.00 | Student | 265.00 | 1,151,010.00 | 0 |
| High School | 2,614.00 | Student | 108.00 | 288,284.00 | 0 |
| Junior High School | 3,343.00 | Student | 70.00 | 368,745.00 | 0 |
| General Light Industry | 2,963.41 | 1000sqft | 24,786.00 | 2,963,408.00 | 0 |
| Other Non-Asphalt Surfaces | 419,510.00 | Acre | 419,510.00 | 0.00 | 0 |
| Parking Lot | 17.90 | Acre | 17.90 | 0.00 | 0 |
| City Park | 15,493.58 | Acre | 15,493.58 | 99,405.00 | 0 |
| Golf Course | 395.96 | Acre | 399.00 | 45,784.00 | 0 |
| Apartments Low Rise | 1,657.00 | Dwelling Unit | 5,555.00 | 3,096,379.00 | 4623 |
| Single Family Housing | 23,082.00 | Dwelling Unit | 98,284.00 | 77,503,209.00 | 88867 |

### 1.2 O C

Urban **S** 2.2 **D** 33

**C** 9 **O** 2035

**C** Southern California Edison

| | | | | | |
|---|---|---|---|---|---|
| **CO2 I** | 630.89 | **C 4 I** | 0.029 | **N2O I** | 0.006 |

## 1.3 E C N D D

Project Characteristics -

Land Use - Based on information provided by the County. For modeling purposes, private/charter schools and elementary school land use information combined as one.

Construction Phase - No construction component for modeling.

Off-road Equipment - No construction component.

Off-road Equipment -

Vehicle Trips - Trip generation rate and average trip distance based on information provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Energy Use -

Water And Wastewater - See Sections 5.17.1 and 5.17.2 of the Draft EIR. Otherwise noted, modeling assumes 60% of existing land uses use septic systems.

Solid Waste - See Section 5.17.4 of the Draft EIR.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaCoating | Area_Nonresidential_Interior | 18788819 | 18788816 |
| tblConstructionPhase | NumDays | 10,000.00 | 10.00 |
| tblLandUse | LandUseSquareFeet | 4,086,280.00 | 4,086,283.00 |
| tblLandUse | LandUseSquareFeet | 52,340.15 | 102,091.00 |
| tblLandUse | LandUseSquareFeet | 872,484.77 | 1,151,010.00 |
| tblLandUse | LandUseSquareFeet | 346,775.80 | 288,284.00 |
| tblLandUse | LandUseSquareFeet | 393,008.71 | 368,745.00 |
| tblLandUse | LandUseSquareFeet | 2,963,410.00 | 2,963,408.00 |
| tblLandUse | LandUseSquareFeet | 18,273,855,600.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 779,724.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblLandUse | LandUseSquareFeet | 674,901,216.00 | 99,405.00 |
| tblLandUse | LandUseSquareFeet | 17,248,017.60 | 45,784.00 |
| tblLandUse | LandUseSquareFeet | 1,657,000.00 | 3,096,379.00 |
| tblLandUse | LandUseSquareFeet | 41,547,600.00 | 77,503,209.00 |
| tblLandUse | LotAcreage | 78.53 | 2,070.00 |
| tblLandUse | LotAcreage | 93.81 | 570,046.00 |
| tblLandUse | LotAcreage | 1.20 | 4.00 |
| tblLandUse | LotAcreage | 20.03 | 265.00 |
| tblLandUse | LotAcreage | 7.96 | 108.00 |
| tblLandUse | LotAcreage | 9.02 | 70.00 |
| tblLandUse | LotAcreage | 68.03 | 24,786.00 |
| tblLandUse | LotAcreage | 15,493.60 | 15,493.58 |
| tblLandUse | LotAcreage | 395.96 | 399.00 |
| tblLandUse | LotAcreage | 103.56 | 5,555.00 |
| tblLandUse | LotAcreage | 7,494.16 | 98,284.00 |
| tblLandUse | Population | 4,739.00 | 4,623.00 |
| tblLandUse | Population | 66,015.00 | 88,867.00 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblProjectCharacteristics | OperationalYear | 2014 | 2035 |
| tblSolidWaste | SolidWasteGenerationRate | 762.22 | 1,110.15 |
| tblSolidWaste | SolidWasteGenerationRate | 1,332.45 | 1,940.68 |
| tblSolidWaste | SolidWasteGenerationRate | 169.00 | 246.14 |
| tblSolidWaste | SolidWasteGenerationRate | 1,904.57 | 2,773.96 |
| tblSolidWaste | SolidWasteGenerationRate | 3,674.63 | 5,352.01 |
| tblSolidWaste | SolidWasteGenerationRate | 3,181.41 | 4,633.65 |
| tblSolidWaste | SolidWasteGenerationRate | 368.24 | 536.33 |
| tblSolidWaste | SolidWasteGenerationRate | 3,800.24 | 5,534.96 |

| | | | |
|---|---|---|---|
| tblSolidWaste | SolidWasteGenerationRate | 477.06 | 694.83 |
| tblSolidWaste | SolidWasteGenerationRate | 610.10 | 888.60 |
| tblSolidWaste | SolidWasteGenerationRate | 36,435.47 | 53,067.36 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 82.30 | 100.00 |
| tblVehicleTrips | CC_TTP | 30.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 62.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 17.20 | 100.00 |
| tblVehicleTrips | CC_TTP | 22.20 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 12.70 | 0.00 |
| tblVehicleTrips | CW_TTP | 65.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 77.80 | 0.00 |
| tblVehicleTrips | CW_TTP | 72.80 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 28.00 | 0.00 |
| tblVehicleTrips | DV_TP | 58.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 39.00 | 0.00 |
| tblVehicleTrips | DV_TP | 34.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 14.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 4.00 | 0.00 |
| tblVehicleTrips | PB_TP | 9.00 | 0.00 |
| tblVehicleTrips | PB_TP | 16.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 66.00 | 100.00 |
| tblVehicleTrips | PR_TP | 28.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | PR_TP | 77.00 | 100.00 |
| tblVehicleTrips | PR_TP | 52.00 | 100.00 |
| tblVehicleTrips | PR_TP | 50.00 | 100.00 |
| tblVehicleTrips | PR_TP | 75.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | ST_TR | 7.16 | 5.04 |
| tblVehicleTrips | ST_TR | 1.59 | 0.02 |
| tblVehicleTrips | ST_TR | 0.39 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 1.32 | 2.70 |
| tblVehicleTrips | ST_TR | 2.37 | 2.70 |
| tblVehicleTrips | ST_TR | 5.82 | 0.31 |
| tblVehicleTrips | ST_TR | 0.00 | 2.70 |
| tblVehicleTrips | ST_TR | 0.61 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 10.08 | 9.06 |
| tblVehicleTrips | SU_TR | 6.07 | 5.04 |
| tblVehicleTrips | SU_TR | 1.59 | 0.02 |
| tblVehicleTrips | SU_TR | 0.37 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |
| tblVehicleTrips | SU_TR | 0.68 | 2.70 |
| tblVehicleTrips | SU_TR | 0.98 | 2.70 |
| tblVehicleTrips | SU_TR | 5.88 | 0.31 |
| tblVehicleTrips | SU_TR | 0.00 | 2.70 |
| tblVehicleTrips | SU_TR | 0.25 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 8.77 | 9.06 |
| tblVehicleTrips | WD_TR | 6.59 | 5.04 |
| tblVehicleTrips | WD_TR | 1.59 | 0.02 |
| tblVehicleTrips | WD_TR | 4.48 | 0.30 |
| tblVehicleTrips | WD_TR | 1.29 | 0.30 |
| tblVehicleTrips | WD_TR | 6.97 | 2.70 |
| tblVehicleTrips | WD_TR | 11.01 | 2.70 |
| tblVehicleTrips | WD_TR | 5.04 | 0.31 |
| tblVehicleTrips | WD_TR | 68.93 | 2.70 |
| tblVehicleTrips | WD_TR | 1.71 | 0.30 |
| tblVehicleTrips | WD_TR | 1.62 | 0.30 |
| tblVehicleTrips | WD_TR | 9.57 | 9.06 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |

| | | | |
|---|---|---|---|
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | IndoorWaterUseRate | 107,960,220.45 | 203,790.00 |
| tblWater | IndoorWaterUseRate | 2,244,846.24 | 4,237.00 |
| tblWater | IndoorWaterUseRate | 25,299,368.64 | 47,756.00 |
| tblWater | IndoorWaterUseRate | 685,288,562.50 | 1,293,580.00 |
| tblWater | IndoorWaterUseRate | 608,004,046.50 | 1,147,695.00 |
| tblWater | IndoorWaterUseRate | 811,779,101.15 | 1,532,349.00 |
| tblWater | IndoorWaterUseRate | 11,514,565.44 | 21,735.00 |
| tblWater | IndoorWaterUseRate | 8,104,234.32 | 15,298.00 |
| tblWater | IndoorWaterUseRate | 1,503,885,219.39 | 2,838,799.00 |
| tblWater | OutdoorWaterUseRate | 68,061,878.11 | 27,349.00 |
| tblWater | OutdoorWaterUseRate | 18,460,335,439.10 | 7,417,813.00 |
| tblWater | OutdoorWaterUseRate | 5,772,461.76 | 2,320.00 |
| tblWater | OutdoorWaterUseRate | 65,055,519.36 | 26,141.00 |
| tblWater | OutdoorWaterUseRate | 372,647,641.40 | 149,739.00 |
| tblWater | OutdoorWaterUseRate | 471,778,955.21 | 189,572.00 |
| tblWater | OutdoorWaterUseRate | 497,542,029.74 | 199,925.00 |
| tblWater | OutdoorWaterUseRate | 29,608,882.56 | 11,898.00 |
| tblWater | OutdoorWaterUseRate | 20,839,459.68 | 8,374.00 |
| tblWater | OutdoorWaterUseRate | 948,101,551.36 | 380,970.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |

| | | | |
|---|---|---|---|
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |

## 2. E S

### 2.2 O O
### O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40,688.8338 | 537.5519 | 48,720.8461 | 18.3289 | | 6,564.1219 | 6,564.1219 | | 6,563.9298 | 6,563.9298 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 637.7880 | 54.0413 | 1,009,104.1830 |
| Energy | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| Mobile | 838.4670 | 1,215.4091 | 15,907.3456 | 56.6657 | 4,264.6218 | 35.6623 | 4,300.2841 | 1,131.6074 | 33.0491 | 1,164.6565 | | 3,590,005.1545 | 3,590,005.1545 | 143.2935 | | 3,593,014.3178 |
| **T** | **41 555.33** | **1 5.3543** | **4 5 . 3** | **.523** | **4 2 4. 21** | **1 .154 5** | **1 3. 3** | **1 131. 4** | **1 .34 2** | **4 . 5 5** | **44. 4** | **4 1 4. 3 5** | **4 4 . 4 1** | **. 435** | **5 . 4 5** | **4 2 . 31** |

O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40,688.8338 | 537.5519 | 48,720.8461 | 18.3289 | | 6,564.1219 | 6,564.1219 | | 6,563.9298 | 6,563.9298 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 637.7880 | 54.0413 | 1,009,104.1830 |
| Energy | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| Mobile | 838.4670 | 1,215.4091 | 15,907.3456 | 56.6657 | 4,264.6218 | 35.6623 | 4,300.2841 | 1,131.6074 | 33.0491 | 1,164.6565 | | 3,590,005.1545 | 3,590,005.1545 | 143.2935 | | 3,593,014.3178 |
| **T** | **41 555.33** | **1 5.3543** | **4 5 . 3** | **.523** | **4 2 4. 21** | **1 .154 5** | **1 3. 3** | **1 131. 4** | **1 .34 2** | **4 . 5 5** | **44. 4** | **4 1 4. 3 5** | **4 4 . 4 1** | **. 435** | **5 . 4 5** | **4 2 . 31** |

| | RO | NO | CO | SO2 | 1 | E 1 | 1 T | 2.5 | E 2.5 | 2.5 T | CO2 | N CO2 | T CO2 | C 4 | N2 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **R** | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |

## 4. O D

### 4.1

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 838.4670 | 1,215.4091 | 15,907.3456 | 56.6657 | 4,264.6218 | 35.6623 | 4,300.2841 | 1,131.6074 | 33.0491 | 1,164.6565 | | 3,590,005.1545 | 3,590,005.1545 | 143.2935 | | 3,593,014.3178 |
| Unmitigated | 838.4670 | 1,215.4091 | 15,907.3456 | 56.6657 | 4,264.6218 | 35.6623 | 4,300.2841 | 1,131.6074 | 33.0491 | 1,164.6565 | | 3,590,005.1545 | 3,590,005.1545 | 143.2935 | | 3,593,014.3178 |

## 4.2 T S I

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 8,351.28 | 8,351.28 | 8351.28 | 67,758,611 | 67,758,611 |
| City Park | 309.87 | 309.87 | 309.87 | 2,514,162 | 2,514,162 |
| Day-Care Center | 277.80 | 277.80 | 277.80 | 2,253,947 | 2,253,947 |
| Elementary School | 3,130.80 | 3,130.80 | 3130.80 | 25,401,934 | 25,401,934 |
| General Light Industry | 8,001.21 | 8,001.21 | 8001.21 | 64,918,273 | 64,918,273 |
| General Office Building | 9,236.35 | 9,236.35 | 9236.35 | 74,939,672 | 74,939,672 |
| Golf Course | 122.75 | 122.75 | 122.75 | 995,920 | 995,920 |
| Government Office Building | 11,032.96 | 11,032.96 | 11032.96 | 89,516,550 | 89,516,550 |
| High School | 784.20 | 784.20 | 784.20 | 6,362,654 | 6,362,654 |
| Junior High School | 1,002.90 | 1,002.90 | 1002.90 | 8,137,089 | 8,137,089 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 209,122.92 | 209,122.92 | 209122.92 | 1,696,731,359 | 1,696,731,359 |
| Total | 251,373.03 | 251,373.03 | 251,373.03 | 2,039,530,171 | 2,039,530,171 |

## 4.3 T T I

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| City Park | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Day-Care Center | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Elementary School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Light Industry | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Office Building | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Golf Course | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Government Office Building | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Other Non-Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |

| LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.611152 | 0.099452 | 0.250731 | 0.007405 | 0.012959 | 0.002042 | 0.000906 | 0.002000 | 0.000197 | 0.000202 | 0.011277 | 0.000103 | 0.001572 |

## 5. E D

### 4.4

Historical Energy Use: Y

### 5.1 E

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |
| NaturalGas Unmitigated | 28.0359 | 242.3934 | 122.5820 | 1.5292 | | 19.3703 | 19.3703 | | 19.3703 | 19.3703 | | 305,846.4875 | 305,846.4875 | 5.8621 | 5.6072 | 307,707.8182 |

## 5.2 E N

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Day-Care Center | 3297.68 | 0.0356 | 0.3233 | 0.2716 | 1.9400e-003 | | 0.0246 | 0.0246 | | 0.0246 | 0.0246 | | 387.9623 | 387.9623 | 7.4400e-003 | 7.1100e-003 | 390.3233 |
| Elementary School | 37179.2 | 0.4010 | 3.6450 | 3.0618 | 0.0219 | | 0.2770 | 0.2770 | | 0.2770 | 0.2770 | | 4,374.0235 | 4,374.0235 | 0.0838 | 0.0802 | 4,400.6431 |
| General Light Industry | 160755 | 1.7336 | 15.7603 | 13.2386 | 0.0946 | | 1.1978 | 1.1978 | | 1.1978 | 1.1978 | | 18,912.3218 | 18,912.3218 | 0.3625 | 0.3467 | 19,027.4190 |
| General Office Building | 116591 | 1.2574 | 11.4305 | 9.6016 | 0.0686 | | 0.8687 | 0.8687 | | 0.8687 | 0.8687 | | 13,716.5585 | 13,716.5585 | 0.2629 | 0.2515 | 13,800.0352 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 139269 | 1.5019 | 13.6539 | 11.4693 | 0.0819 | | 1.0377 | 1.0377 | | 1.0377 | 1.0377 | | 16,384.6448 | 16,384.6448 | 0.3140 | 0.3004 | 16,484.3590 |
| High School | 9311.97 | 0.1004 | 0.9129 | 0.7669 | 5.4800e-003 | | 0.0694 | 0.0694 | | 0.0694 | 0.0694 | | 1,095.5257 | 1,095.5257 | 0.0210 | 0.0201 | 1,102.1929 |
| Junior High School | 11911 | 0.1285 | 1.1677 | 0.9809 | 7.0100e-003 | | 0.0888 | 0.0888 | | 0.0888 | 0.0888 | | 1,401.2904 | 1,401.2904 | 0.0269 | 0.0257 | 1,409.8185 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2.0528e+006 | 22.1381 | 189.1801 | 80.5022 | 1.2075 | | 15.2954 | 15.2954 | | 15.2954 | 15.2954 | | 241,506.4638 | 241,506.4638 | 4.6289 | 4.4276 | 242,976.2319 |
| Apartments Low Rise | 68575.4 | 0.7395 | 6.3197 | 2.6892 | 0.0403 | | 0.5110 | 0.5110 | | 0.5110 | 0.5110 | | 8,067.6967 | 8,067.6967 | 0.1546 | 0.1479 | 8,116.7953 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **T** | | **2 . 35** | **242.3 34** | **122.5 2** | **1.52 2** | | **1 .3 3** | **1 .3 3** | | **1 .3 3** | **1 .3 3** | | **3 5 4 .4 5** | **3 5 4 .4 5** | **5. 21** | **5. 2** | **3 . 1 2** |

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Day-Care Center | 3.29768 | 0.0356 | 0.3233 | 0.2716 | 1.9400e-003 | | 0.0246 | 0.0246 | | 0.0246 | 0.0246 | | 387.9623 | 387.9623 | 7.4400e-003 | 7.1100e-003 | 390.3233 |
| Elementary School | 37.1792 | 0.4010 | 3.6450 | 3.0618 | 0.0219 | | 0.2770 | 0.2770 | | 0.2770 | 0.2770 | | 4,374.0235 | 4,374.0235 | 0.0838 | 0.0802 | 4,400.6431 |
| General Light Industry | 160.755 | 1.7336 | 15.7603 | 13.2386 | 0.0946 | | 1.1978 | 1.1978 | | 1.1978 | 1.1978 | | 18,912.3218 | 18,912.3218 | 0.3625 | 0.3467 | 19,027.4190 |
| General Office Building | 116.591 | 1.2574 | 11.4305 | 9.6016 | 0.0686 | | 0.8687 | 0.8687 | | 0.8687 | 0.8687 | | 13,716.5585 | 13,716.5585 | 0.2629 | 0.2515 | 13,800.0352 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 139.269 | 1.5019 | 13.6539 | 11.4693 | 0.0819 | | 1.0377 | 1.0377 | | 1.0377 | 1.0377 | | 16,384.6448 | 16,384.6448 | 0.3140 | 0.3004 | 16,484.3590 |
| High School | 9.31197 | 0.1004 | 0.9129 | 0.7669 | 5.4800e-003 | | 0.0694 | 0.0694 | | 0.0694 | 0.0694 | | 1,095.5257 | 1,095.5257 | 0.0210 | 0.0201 | 1,102.1929 |
| Junior High School | 11.911 | 0.1285 | 1.1677 | 0.9809 | 7.0100e-003 | | 0.0888 | 0.0888 | | 0.0888 | 0.0888 | | 1,401.2904 | 1,401.2904 | 0.0269 | 0.0257 | 1,409.8185 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2052.8 | 22.1381 | 189.1801 | 80.5022 | 1.2075 | | 15.2954 | 15.2954 | | 15.2954 | 15.2954 | | 241,506.4638 | 241,506.4638 | 4.6289 | 4.4276 | 242,976.2319 |
| Apartments Low Rise | 68.5754 | 0.7395 | 6.3197 | 2.6892 | 0.0403 | | 0.5110 | 0.5110 | | 0.5110 | 0.5110 | | 8,067.6967 | 8,067.6967 | 0.1546 | 0.1479 | 8,116.7953 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **T** | | **2 . 35** | **242.3 34** | **122.5 2** | **1.52 2** | | **1 .3 3** | **1 .3 3** | | **1 .3 3** | **1 .3 3** | | **3 5 4 .4 5** | **3 5 4 .4 5** | **5. 21** | **5. 2** | **3 . 1 2** |

## . A D

### .1 A

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 40,688.8338 | 537.5519 | 48,720.8461 | 18.3289 | | 6,564.1219 | 6,564.1219 | | 6,563.9298 | 6,563.9298 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 637.7880 | 54.0413 | 1,009,104.1830 |
| Unmitigated | 40,688.8338 | 537.5519 | 48,720.8461 | 18.3289 | | 6,564.1219 | 6,564.1219 | | 6,563.9298 | 6,563.9298 | 687,044.8466 | 291,912.9976 | 978,957.8442 | 637.7880 | 54.0413 | 1,009,104.1830 |

### .2 A S C

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 770.3961 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1,992.8850 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37,860.4410 | 513.6649 | 46,639.9972 | 18.2176 | | 6,552.6368 | 6,552.6368 | | 6,552.4447 | 6,552.4447 | 687,044.8466 | 288,136.5882 | 975,181.4348 | 634.0284 | 54.0413 | 1,005,248.8223 |
| Landscaping | 65.1117 | 23.8870 | 2,080.8489 | 0.1113 | | 11.4851 | 11.4851 | | 11.4851 | 11.4851 | | 3,776.4094 | 3,776.4094 | 3.7596 | | 3,855.3607 |
| **T** | **4 . 33** | **53 .551** | **4 2 . 4 1** | **1 .32** | | **5 4.121** | **5 4.121** | | **5 3. 2** | **5 3. 2** | **44. 4** | **2 1 12.** | **5 . 4 42** | **3 .** | **54. 413** | **1 1 4. 1 3** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 770.3961 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1,992.8850 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37,860.4410 | 513.6649 | 46,639.9972 | 18.2176 | | 6,552.6368 | 6,552.6368 | | 6,552.4447 | 6,552.4447 | 687,044.8466 | 288,136.5882 | 975,181.4348 | 634.0284 | 54.0413 | 1,005,248.8223 |
| Landscaping | 65.1117 | 23.8870 | 2,080.8489 | 0.1113 | | 11.4851 | 11.4851 | | 11.4851 | 11.4851 | | 3,776.4094 | 3,776.4094 | 3.7596 | | 3,855.3607 |
| **T** | **4 . 33** | **53 .551** | **4 2 . 4 1** | **1 .32** | | **5 4.121** | **5 4.121** | | **5 3. 2** | **5 3. 2** | **44. 4** | **2 1 12.** | **5 . 4 42** | **3 .** | **54. 413** | **1 1 4. 1 3** |

## . D

### .1

## . D

### .1

## . O O

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**1 .**

# _E

**A D C A**

## 1. C

### 1.1

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 3,420.87 | 1000sqft | 2,070.00 | 3,420,870.00 | 0 |
| Government Office Building | 4,086.28 | 1000sqft | 570,046.00 | 4,086,283.00 | 0 |
| Day-Care Center | 926.00 | Student | 4.00 | 102,091.00 | 0 |
| Elementary School | 10,436.00 | Student | 265.00 | 1,151,010.00 | 0 |
| High School | 2,614.00 | Student | 108.00 | 288,284.00 | 0 |
| Junior High School | 3,343.00 | Student | 70.00 | 368,745.00 | 0 |
| General Light Industry | 2,963.41 | 1000sqft | 24,786.00 | 2,963,408.00 | 0 |
| Other Non-Asphalt Surfaces | 419,510.00 | Acre | 419,510.00 | 0.00 | 0 |
| Parking Lot | 17.90 | Acre | 17.90 | 0.00 | 0 |
| City Park | 15,493.58 | Acre | 15,493.58 | 99,405.00 | 0 |
| Golf Course | 395.96 | Acre | 399.00 | 45,784.00 | 0 |
| Apartments Low Rise | 1,657.00 | Dwelling Unit | 5,555.00 | 3,096,379.00 | 4623 |
| Single Family Housing | 23,082.00 | Dwelling Unit | 98,284.00 | 77,503,209.00 | 88867 |

### 1.2 O C

Urban **S** 2.2 **D** 33

**C** 9 **O** 2035

**C** Southern California Edison

| | | | | | |
|---|---|---|---|---|---|
| **CO2 I** | 630.89 | **C 4 I** | 0.029 | **N2O I** | 0.006 |

## 1.3 E C N D D

Project Characteristics -

Land Use - Based on information provided by the County. For modeling purposes, private/charter schools and elementary school land use information combined as one.

Construction Phase - No construction component for modeling.

Off-road Equipment - No construction component.

Off-road Equipment -

Vehicle Trips - Trip generation rate and average trip distance based on information provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Energy Use -

Water And Wastewater - See Sections 5.17.1 and 5.17.2 of the Draft EIR. Otherwise noted, modeling assumes 60% of existing land uses use septic systems.

Solid Waste - See Section 5.17.4 of the Draft EIR.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaCoating | Area_Nonresidential_Interior | 18788819 | 18788816 |
| tblConstructionPhase | NumDays | 10,000.00 | 10.00 |
| tblLandUse | LandUseSquareFeet | 4,086,280.00 | 4,086,283.00 |
| tblLandUse | LandUseSquareFeet | 52,340.15 | 102,091.00 |
| tblLandUse | LandUseSquareFeet | 872,484.77 | 1,151,010.00 |
| tblLandUse | LandUseSquareFeet | 346,775.80 | 288,284.00 |
| tblLandUse | LandUseSquareFeet | 393,008.71 | 368,745.00 |
| tblLandUse | LandUseSquareFeet | 2,963,410.00 | 2,963,408.00 |
| tblLandUse | LandUseSquareFeet | 18,273,855,600.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 779,724.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblLandUse | LandUseSquareFeet | 674,901,216.00 | 99,405.00 |
| tblLandUse | LandUseSquareFeet | 17,248,017.60 | 45,784.00 |
| tblLandUse | LandUseSquareFeet | 1,657,000.00 | 3,096,379.00 |
| tblLandUse | LandUseSquareFeet | 41,547,600.00 | 77,503,209.00 |
| tblLandUse | LotAcreage | 78.53 | 2,070.00 |
| tblLandUse | LotAcreage | 93.81 | 570,046.00 |
| tblLandUse | LotAcreage | 1.20 | 4.00 |
| tblLandUse | LotAcreage | 20.03 | 265.00 |
| tblLandUse | LotAcreage | 7.96 | 108.00 |
| tblLandUse | LotAcreage | 9.02 | 70.00 |
| tblLandUse | LotAcreage | 68.03 | 24,786.00 |
| tblLandUse | LotAcreage | 15,493.60 | 15,493.58 |
| tblLandUse | LotAcreage | 395.96 | 399.00 |
| tblLandUse | LotAcreage | 103.56 | 5,555.00 |
| tblLandUse | LotAcreage | 7,494.16 | 98,284.00 |
| tblLandUse | Population | 4,739.00 | 4,623.00 |
| tblLandUse | Population | 66,015.00 | 88,867.00 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblProjectCharacteristics | OperationalYear | 2014 | 2035 |
| tblSolidWaste | SolidWasteGenerationRate | 762.22 | 1,110.15 |
| tblSolidWaste | SolidWasteGenerationRate | 1,332.45 | 1,940.68 |
| tblSolidWaste | SolidWasteGenerationRate | 169.00 | 246.14 |
| tblSolidWaste | SolidWasteGenerationRate | 1,904.57 | 2,773.96 |
| tblSolidWaste | SolidWasteGenerationRate | 3,674.63 | 5,352.01 |
| tblSolidWaste | SolidWasteGenerationRate | 3,181.41 | 4,633.65 |
| tblSolidWaste | SolidWasteGenerationRate | 368.24 | 536.33 |
| tblSolidWaste | SolidWasteGenerationRate | 3,800.24 | 5,534.96 |

| | | | |
|---|---|---|---|
| tblSolidWaste | SolidWasteGenerationRate | 477.06 | 694.83 |
| tblSolidWaste | SolidWasteGenerationRate | 610.10 | 888.60 |
| tblSolidWaste | SolidWasteGenerationRate | 36,435.47 | 53,067.36 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 82.30 | 100.00 |
| tblVehicleTrips | CC_TTP | 30.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 62.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 17.20 | 100.00 |
| tblVehicleTrips | CC_TTP | 22.20 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 12.70 | 0.00 |
| tblVehicleTrips | CW_TTP | 65.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 77.80 | 0.00 |
| tblVehicleTrips | CW_TTP | 72.80 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 28.00 | 0.00 |
| tblVehicleTrips | DV_TP | 58.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 39.00 | 0.00 |
| tblVehicleTrips | DV_TP | 34.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 14.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 4.00 | 0.00 |
| tblVehicleTrips | PB_TP | 9.00 | 0.00 |
| tblVehicleTrips | PB_TP | 16.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 66.00 | 100.00 |
| tblVehicleTrips | PR_TP | 28.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | PR_TP | 77.00 | 100.00 |
| tblVehicleTrips | PR_TP | 52.00 | 100.00 |
| tblVehicleTrips | PR_TP | 50.00 | 100.00 |
| tblVehicleTrips | PR_TP | 75.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | ST_TR | 7.16 | 5.04 |
| tblVehicleTrips | ST_TR | 1.59 | 0.02 |
| tblVehicleTrips | ST_TR | 0.39 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 1.32 | 2.70 |
| tblVehicleTrips | ST_TR | 2.37 | 2.70 |
| tblVehicleTrips | ST_TR | 5.82 | 0.31 |
| tblVehicleTrips | ST_TR | 0.00 | 2.70 |
| tblVehicleTrips | ST_TR | 0.61 | 0.30 |
| tblVehicleTrips | ST_TR | 0.00 | 0.30 |
| tblVehicleTrips | ST_TR | 10.08 | 9.06 |
| tblVehicleTrips | SU_TR | 6.07 | 5.04 |
| tblVehicleTrips | SU_TR | 1.59 | 0.02 |
| tblVehicleTrips | SU_TR | 0.37 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |
| tblVehicleTrips | SU_TR | 0.68 | 2.70 |
| tblVehicleTrips | SU_TR | 0.98 | 2.70 |
| tblVehicleTrips | SU_TR | 5.88 | 0.31 |
| tblVehicleTrips | SU_TR | 0.00 | 2.70 |
| tblVehicleTrips | SU_TR | 0.25 | 0.30 |
| tblVehicleTrips | SU_TR | 0.00 | 0.30 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 8.77 | 9.06 |
| tblVehicleTrips | WD_TR | 6.59 | 5.04 |
| tblVehicleTrips | WD_TR | 1.59 | 0.02 |
| tblVehicleTrips | WD_TR | 4.48 | 0.30 |
| tblVehicleTrips | WD_TR | 1.29 | 0.30 |
| tblVehicleTrips | WD_TR | 6.97 | 2.70 |
| tblVehicleTrips | WD_TR | 11.01 | 2.70 |
| tblVehicleTrips | WD_TR | 5.04 | 0.31 |
| tblVehicleTrips | WD_TR | 68.93 | 2.70 |
| tblVehicleTrips | WD_TR | 1.71 | 0.30 |
| tblVehicleTrips | WD_TR | 1.62 | 0.30 |
| tblVehicleTrips | WD_TR | 9.57 | 9.06 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AerobicPercent | 87.46 | 40.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |

| | | | |
|---|---|---|---|
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | IndoorWaterUseRate | 107,960,220.45 | 203,790.00 |
| tblWater | IndoorWaterUseRate | 2,244,846.24 | 4,237.00 |
| tblWater | IndoorWaterUseRate | 25,299,368.64 | 47,756.00 |
| tblWater | IndoorWaterUseRate | 685,288,562.50 | 1,293,580.00 |
| tblWater | IndoorWaterUseRate | 608,004,046.50 | 1,147,695.00 |
| tblWater | IndoorWaterUseRate | 811,779,101.15 | 1,532,349.00 |
| tblWater | IndoorWaterUseRate | 11,514,565.44 | 21,735.00 |
| tblWater | IndoorWaterUseRate | 8,104,234.32 | 15,298.00 |
| tblWater | IndoorWaterUseRate | 1,503,885,219.39 | 2,838,799.00 |
| tblWater | OutdoorWaterUseRate | 68,061,878.11 | 27,349.00 |
| tblWater | OutdoorWaterUseRate | 18,460,335,439.10 | 7,417,813.00 |
| tblWater | OutdoorWaterUseRate | 5,772,461.76 | 2,320.00 |
| tblWater | OutdoorWaterUseRate | 65,055,519.36 | 26,141.00 |
| tblWater | OutdoorWaterUseRate | 372,647,641.40 | 149,739.00 |
| tblWater | OutdoorWaterUseRate | 471,778,955.21 | 189,572.00 |
| tblWater | OutdoorWaterUseRate | 497,542,029.74 | 199,925.00 |
| tblWater | OutdoorWaterUseRate | 29,608,882.56 | 11,898.00 |
| tblWater | OutdoorWaterUseRate | 20,839,459.68 | 8,374.00 |
| tblWater | OutdoorWaterUseRate | 948,101,551.36 | 380,970.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |

| | | | |
|---|---|---|---|
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |
| tblWater | SepticTankPercent | 10.33 | 60.00 |

## 2. E S

### 2.2 O O O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 2,062.4369 | 23.2101 | 2,099.5163 | 0.7569 | | 269.6918 | 269.6918 | | 269.6839 | 269.6839 | 25,554.3406 | 11,025.4488 | 36,579.7895 | 23.8894 | 2.0100 | 37,704.5793 |
| Energy | 5.1166 | 44.2368 | 22.3712 | 0.2791 | | 3.5351 | 3.5351 | | 3.5351 | 3.5351 | 0.0000 | 148,988.5592 | 148,988.5592 | 5.4915 | 1.8637 | 149,681.6268 |
| Mobile | 140.0947 | 246.1815 | 2,492.8909 | 9.3693 | 760.9242 | 6.4833 | 767.4074 | 202.2126 | 6.0082 | 208.2207 | 0.0000 | 539,492.4524 | 539,492.4524 | 23.6311 | 0.0000 | 539,988.7050 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 15,585.3762 | 0.0000 | 15,585.3762 | 921.0693 | 0.0000 | 34,927.8324 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.2801 | 53.2265 | 54.5066 | 0.7988 | 5.9700e-003 | 73.1338 |
| **T** | **2 2 . 4 2** | **313. 2 4** | **4 14. 4** | **1 .4 53** | **. 242** | **2 . 1 1** | **1 4 . 34 3** | **2 2.212** | **2 .22 1** | **4 1.43** | **41 14 .** | **55 .** | **4 . 3** | **4. 1** | **3.** | **2 3 5. 2** |

O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 2,062.4369 | 23.2101 | 2,099.5163 | 0.7569 | | 269.6918 | 269.6918 | | 269.6839 | 269.6839 | 25,554.3406 | 11,025.4488 | 36,579.7895 | 23.8894 | 2.0100 | 37,704.5793 |
| Energy | 5.1166 | 44.2368 | 22.3712 | 0.2791 | | 3.5351 | 3.5351 | | 3.5351 | 3.5351 | 0.0000 | 148,988.5592 | 148,988.5592 | 5.4915 | 1.8637 | 149,681.6268 |
| Mobile | 140.0947 | 246.1815 | 2,492.8909 | 9.3693 | 760.9242 | 6.4833 | 767.4074 | 202.2126 | 6.0082 | 208.2207 | 0.0000 | 539,492.4524 | 539,492.4524 | 23.6311 | 0.0000 | 539,988.7050 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 15,585.3762 | 0.0000 | 15,585.3762 | 921.0693 | 0.0000 | 34,927.8324 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.2801 | 53.2265 | 54.5066 | 0.7988 | 5.9700e-003 | 73.1317 |
| **T** | **2 2 . 4 2** | **313. 2 4** | **4 14. 4** | **1 .4 53** | **. 242** | **2 . 1 1** | **1 4 . 34 3** | **2 2.212** | **2 .22 1** | **4 1.43** | **41 14 .** | **55 .** | **4 . 3** | **4. 1** | **3.** | **2 3 5. 51** |

| | RO | NO | CO | SO2 | 1 | E 1 | 1 T | 2.5 | E 2.5 | 2.5 T | CO2 | N CO2 | T CO2 | C 4 | N2 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **R** | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |

## 4. O D

### 4.1

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 140.0947 | 246.1815 | 2,492.8909 | 9.3693 | 760.9242 | 6.4833 | 767.4074 | 202.2126 | 6.0082 | 208.2207 | 0.0000 | 539,492.4524 | 539,492.4524 | 23.6311 | 0.0000 | 539,988.7050 |
| Unmitigated | 140.0947 | 246.1815 | 2,492.8909 | 9.3693 | 760.9242 | 6.4833 | 767.4074 | 202.2126 | 6.0082 | 208.2207 | 0.0000 | 539,492.4524 | 539,492.4524 | 23.6311 | 0.0000 | 539,988.7050 |

## 4.2 T S I

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 8,351.28 | 8,351.28 | 8351.28 | 67,758,611 | 67,758,611 |
| City Park | 309.87 | 309.87 | 309.87 | 2,514,162 | 2,514,162 |
| Day-Care Center | 277.80 | 277.80 | 277.80 | 2,253,947 | 2,253,947 |
| Elementary School | 3,130.80 | 3,130.80 | 3130.80 | 25,401,934 | 25,401,934 |
| General Light Industry | 8,001.21 | 8,001.21 | 8001.21 | 64,918,273 | 64,918,273 |
| General Office Building | 9,236.35 | 9,236.35 | 9236.35 | 74,939,672 | 74,939,672 |
| Golf Course | 122.75 | 122.75 | 122.75 | 995,920 | 995,920 |
| Government Office Building | 11,032.96 | 11,032.96 | 11032.96 | 89,516,550 | 89,516,550 |
| High School | 784.20 | 784.20 | 784.20 | 6,362,654 | 6,362,654 |
| Junior High School | 1,002.90 | 1,002.90 | 1002.90 | 8,137,089 | 8,137,089 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 209,122.92 | 209,122.92 | 209122.92 | 1,696,731,359 | 1,696,731,359 |
| Total | 251,373.03 | 251,373.03 | 251,373.03 | 2,039,530,171 | 2,039,530,171 |

## 4.3 T T I

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| City Park | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Day-Care Center | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Elementary School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Light Industry | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Office Building | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Golf Course | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Government Office Building | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Other Non-Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |

| LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.611152 | 0.099452 | 0.250731 | 0.007405 | 0.012959 | 0.002042 | 0.000906 | 0.002000 | 0.000197 | 0.000202 | 0.011277 | 0.000103 | 0.001572 |

## 5. E D

### 4.4

Historical Energy Use: Y

### 5.1 E

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 98,352.2431 | 98,352.2431 | 4.5209 | 0.9354 | 98,737.1465 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 98,352.2431 | 98,352.2431 | 4.5209 | 0.9354 | 98,737.1465 |
| NaturalGas Mitigated | 5.1166 | 44.2368 | 22.3712 | 0.2791 | | 3.5351 | 3.5351 | | 3.5351 | 3.5351 | 0.0000 | 50,636.3161 | 50,636.3161 | 0.9705 | 0.9283 | 50,944.4803 |
| NaturalGas Unmitigated | 5.1166 | 44.2368 | 22.3712 | 0.2791 | | 3.5351 | 3.5351 | | 3.5351 | 3.5351 | 0.0000 | 50,636.3161 | 50,636.3161 | 0.9705 | 0.9283 | 50,944.4803 |

## 5.2 E N

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Day-Care Center | 1.20365e+006 | 6.4900e-003 | 0.0590 | 0.0496 | 3.5000e-004 | | 4.4800e-003 | 4.4800e-003 | | 4.4800e-003 | 4.4800e-003 | 0.0000 | 64.2315 | 64.2315 | 1.2300e-003 | 1.1800e-003 | 64.6224 |
| Elementary School | 1.35704e+007 | 0.0732 | 0.6652 | 0.5588 | 3.9900e-003 | | 0.0506 | 0.0506 | | 0.0506 | 0.0506 | 0.0000 | 724.1686 | 724.1686 | 0.0139 | 0.0133 | 728.5758 |
| General Light Industry | 5.86755e+007 | 0.3164 | 2.8763 | 2.4161 | 0.0173 | | 0.2186 | 0.2186 | | 0.2186 | 0.2186 | 0.0000 | 3,131.1470 | 3,131.1470 | 0.0600 | 0.0574 | 3,150.2026 |
| General Office Building | 4.25556e+007 | 0.2295 | 2.0861 | 1.7523 | 0.0125 | | 0.1585 | 0.1585 | | 0.1585 | 0.1585 | 0.0000 | 2,270.9301 | 2,270.9301 | 0.0435 | 0.0416 | 2,284.7506 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 5.08334e+007 | 0.2741 | 2.4918 | 2.0931 | 0.0150 | | 0.1894 | 0.1894 | | 0.1894 | 0.1894 | 0.0000 | 2,712.6617 | 2,712.6617 | 0.0520 | 0.0497 | 2,729.1705 |
| High School | 3.39887e+006 | 0.0183 | 0.1666 | 0.1400 | 1.0000e-003 | | 0.0127 | 0.0127 | | 0.0127 | 0.0127 | 0.0000 | 181.3766 | 181.3766 | 3.4800e-003 | 3.3300e-003 | 182.4804 |
| Junior High School | 4.3475e+006 | 0.0234 | 0.2131 | 0.1790 | 1.2800e-003 | | 0.0162 | 0.0162 | | 0.0162 | 0.0162 | 0.0000 | 231.9994 | 231.9994 | 4.4500e-003 | 4.2500e-003 | 233.4113 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Apartments Low Rise | 2.503e+007 | 0.1350 | 1.1533 | 0.4908 | 7.3600e-003 | | 0.0933 | 0.0933 | | 0.0933 | 0.0933 | 0.0000 | 1,335.6977 | 1,335.6977 | 0.0256 | 0.0245 | 1,343.8265 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 7.49274e+008 | 4.0402 | 34.5254 | 14.6916 | 0.2204 | | 2.7914 | 2.7914 | | 2.7914 | 2.7914 | 0.0000 | 39,984.1036 | 39,984.1036 | 0.7664 | 0.7330 | 40,227.4402 |
| **T** | | **5.11** | **44.23** | **22.3 12** | **.2 1** | | **3.5351** | **3.5351** | | **3.5351** | **3.5351** | **.** | **5 3 .31 1** | **5 3 .31 1** | **. 5** | **. 2 3** | **5 44.4 3** |

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Day-Care Center | 1.20365e+006 | 6.4900e-003 | 0.0590 | 0.0496 | 3.5000e-004 | | 4.4800e-003 | 4.4800e-003 | | 4.4800e-003 | 4.4800e-003 | 0.0000 | 64.2315 | 64.2315 | 1.2300e-003 | 1.1800e-003 | 64.6224 |
| Elementary School | 1.35704e+007 | 0.0732 | 0.6652 | 0.5588 | 3.9900e-003 | | 0.0506 | 0.0506 | | 0.0506 | 0.0506 | 0.0000 | 724.1686 | 724.1686 | 0.0139 | 0.0133 | 728.5758 |
| General Light Industry | 5.86755e+007 | 0.3164 | 2.8763 | 2.4161 | 0.0173 | | 0.2186 | 0.2186 | | 0.2186 | 0.2186 | 0.0000 | 3,131.1470 | 3,131.1470 | 0.0600 | 0.0574 | 3,150.2026 |
| General Office Building | 4.25556e+007 | 0.2295 | 2.0861 | 1.7523 | 0.0125 | | 0.1585 | 0.1585 | | 0.1585 | 0.1585 | 0.0000 | 2,270.9301 | 2,270.9301 | 0.0435 | 0.0416 | 2,284.7506 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 5.08334e+007 | 0.2741 | 2.4918 | 2.0931 | 0.0150 | | 0.1894 | 0.1894 | | 0.1894 | 0.1894 | 0.0000 | 2,712.6617 | 2,712.6617 | 0.0520 | 0.0497 | 2,729.1705 |
| High School | 3.39887e+006 | 0.0183 | 0.1666 | 0.1400 | 1.0000e-003 | | 0.0127 | 0.0127 | | 0.0127 | 0.0127 | 0.0000 | 181.3766 | 181.3766 | 3.4800e-003 | 3.3300e-003 | 182.4804 |
| Junior High School | 4.3475e+006 | 0.0234 | 0.2131 | 0.1790 | 1.2800e-003 | | 0.0162 | 0.0162 | | 0.0162 | 0.0162 | 0.0000 | 231.9994 | 231.9994 | 4.4500e-003 | 4.2500e-003 | 233.4113 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 7.49274e+008 | 4.0402 | 34.5254 | 14.6916 | 0.2204 | | 2.7914 | 2.7914 | | 2.7914 | 2.7914 | 0.0000 | 39,984.1036 | 39,984.1036 | 0.7664 | 0.7330 | 40,227.4402 |
| Apartments Low Rise | 2.503e+007 | 0.1350 | 1.1533 | 0.4908 | 7.3600e-003 | | 0.0933 | 0.0933 | | 0.0933 | 0.0933 | 0.0000 | 1,335.6977 | 1,335.6977 | 0.0256 | 0.0245 | 1,343.8265 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **T** | | **5.11** | **44.23** | **22.3 12** | **.2 1** | | **3.5351** | **3.5351** | | **3.5351** | **3.5351** | **.** | **5 3 .31 1** | **5 3 .31 1** | **. 5** | **. 2 3** | **5 44.4 3** |

## 5.3 E E

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 6.17662e+006 | 1,767.5432 | 0.0813 | 0.0168 | 1,774.4605 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 722804 | 206.8427 | 9.5100e-003 | 1.9700e-003 | 207.6521 |
| Elementary School | 8.14915e+006 | 2,332.0171 | 0.1072 | 0.0222 | 2,341.1435 |
| General Light Industry | 3.71611e+007 | 10,634.2868 | 0.4888 | 0.1011 | 10,675.9043 |
| General Office Building | 5.21341e+007 | 14,919.0415 | 0.6858 | 0.1419 | 14,977.4274 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 6.2275e+007 | 17,821.0296 | 0.8192 | 0.1695 | 17,890.7726 |
| High School | 2.04105e+006 | 584.0811 | 0.0269 | 5.5500e-003 | 586.3670 |
| Junior High School | 2.61071e+006 | 747.1001 | 0.0343 | 7.1100e-003 | 750.0239 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 1.72418e+008 | 49,340.3010 | 2.2680 | 0.4692 | 49,533.3952 |
| **T** | | **352.2431** | **4.521** | **. 354** | **3 .145** |

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 6.17662e+006 | 1,767.5432 | 0.0813 | 0.0168 | 1,774.4605 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 722804 | 206.8427 | 9.5100e-003 | 1.9700e-003 | 207.6521 |
| Elementary School | 8.14915e+006 | 2,332.0171 | 0.1072 | 0.0222 | 2,341.1435 |
| General Light Industry | 3.71611e+007 | 10,634.2868 | 0.4888 | 0.1011 | 10,675.9043 |
| General Office Building | 5.21341e+007 | 14,919.0415 | 0.6858 | 0.1419 | 14,977.4274 |
| Golf Course | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Government Office Building | 6.2275e+007 | 17,821.0296 | 0.8192 | 0.1695 | 17,890.7726 |
| High School | 2.04105e+006 | 584.0811 | 0.0269 | 5.5500e-003 | 586.3670 |
| Junior High School | 2.61071e+006 | 747.1001 | 0.0343 | 7.1100e-003 | 750.0239 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 1.72418e+008 | 49,340.3010 | 2.2680 | 0.4692 | 49,533.3952 |
| **T** | | **352.2431** | **4.521** | **. 354** | **3 .145** |

## . A D

### .1 A

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 2,062.4369 | 23.2101 | 2,099.5163 | 0.7569 | | 269.6918 | 269.6918 | | 269.6839 | 269.6839 | 25,554.3406 | 11,025.4488 | 36,579.7895 | 23.8894 | 2.0100 | 37,704.5793 |
| Unmitigated | 2,062.4369 | 23.2101 | 2,099.5163 | 0.7569 | | 269.6918 | 269.6918 | | 269.6839 | 269.6839 | 25,554.3406 | 11,025.4488 | 36,579.7895 | 23.8894 | 2.0100 | 37,704.5793 |

### .2 A S C

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 140.5973 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 363.7015 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 1,552.2781 | 21.0603 | 1,912.2399 | 0.7469 | | 268.6581 | 268.6581 | | 268.6502 | 268.6502 | 25,554.3406 | 10,717.1178 | 36,271.4584 | 23.5824 | 2.0100 | 37,389.8021 |
| Landscaping | 5.8601 | 2.1498 | 187.2764 | 0.0100 | | 1.0337 | 1.0337 | | 1.0337 | 1.0337 | 0.0000 | 308.3311 | 308.3311 | 0.3070 | 0.0000 | 314.7772 |
| **T** | **2 2.43** | **23.21 1** | **2 .51 3** | **. 5** | | **2 . 1** | **2 . 1** | | **2 . 3** | **2 . 3** | **25 554.34** | **11 25.44** | **3 5 . 5** | **23. 4** | **2. 1** | **3 4.5 3** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 140.5973 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 363.7015 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 1,552.2781 | 21.0603 | 1,912.2399 | 0.7469 | | 268.6581 | 268.6581 | | 268.6502 | 268.6502 | 25,554.3406 | 10,717.1178 | 36,271.4584 | 23.5824 | 2.0100 | 37,389.8021 |
| Landscaping | 5.8601 | 2.1498 | 187.2764 | 0.0100 | | 1.0337 | 1.0337 | | 1.0337 | 1.0337 | 0.0000 | 308.3311 | 308.3311 | 0.3070 | 0.0000 | 314.7772 |
| **T** | **2 2.43** | **23.21 1** | **2 .51 3** | **. 5** | | **2 . 1** | **2 . 1** | | **2 . 3** | **2 . 3** | **25 554.34** | **11 25.44** | **3 5 . 5** | **23. 4** | **2. 1** | **3 4.5 3** |

## . D

### .1

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 54.5066 | 0.7988 | 5.9700e-003 | 73.1317 |
| Unmitigated | 54.5066 | 0.7988 | 5.9700e-003 | 73.1338 |

**.2**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 0.20379 / 0.027349 | 0.8752 | 0.0279 | 1.6000e-004 | 1.5124 |
| City Park | 0 / 7.41781 | 23.5836 | 1.0800e-003 | 2.2000e-004 | 23.6759 |
| Day-Care Center | 0.004237 / 0.00232 | 0.0238 | 5.8000e-004 | 0.0000 | 0.0370 |
| Elementary School | 0.047756 / 0.026141 | 0.2678 | 6.5400e-003 | 4.0000e-005 | 0.4174 |
| General Light Industry | 1.29358 / 0 | 5.2778 | 1.8000e-003 | 1.0400e-003 | 5.6383 |
| General Office Building | 1.14769 / 0.149739 | 4.9150 | 0.1572 | 9.3000e-004 | 8.5035 |
| Golf Course | 0 / 0.189572 | 0.6027 | 3.0000e-005 | 1.0000e-005 | 0.6051 |
| Government Office Building | 1.53235 / 0.199925 | 6.5623 | 0.2099 | 1.2400e-003 | 11.3535 |
| High School | 0.021735 / 0.011898 | 0.1219 | 2.9800e-003 | 2.0000e-005 | 0.1900 |
| Junior High School | 0.015298 / 0.008374 | 0.0858 | 2.1000e-003 | 1.0000e-005 | 0.1337 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2.8388 / 0.38097 | 12.1909 | 0.3888 | 2.3000e-003 | 21.0671 |
| **T** | | **54.5** | **.** | **5. 3** | **3.133** |

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 0.20379 / 0.027349 | 0.8752 | 0.0279 | 1.6000e-004 | 1.5123 |
| City Park | 0 / 7.41781 | 23.5836 | 1.0800e-003 | 2.2000e-004 | 23.6759 |
| Day-Care Center | 0.004237 / 0.00232 | 0.0238 | 5.8000e-004 | 0.0000 | 0.0370 |
| Elementary School | 0.047756 / 0.026141 | 0.2678 | 6.5400e-003 | 4.0000e-005 | 0.4174 |
| General Light Industry | 1.29358 / 0 | 5.2778 | 1.7900e-003 | 1.0400e-003 | 5.6375 |
| General Office Building | 1.14769 / 0.149739 | 4.9150 | 0.1572 | 9.3000e-004 | 8.5033 |
| Golf Course | 0 / 0.189572 | 0.6027 | 3.0000e-005 | 1.0000e-005 | 0.6051 |
| Government Office Building | 1.53235 / 0.199925 | 6.5623 | 0.2099 | 1.2400e-003 | 11.3532 |
| High School | 0.021735 / 0.011898 | 0.1219 | 2.9800e-003 | 2.0000e-005 | 0.1900 |
| Junior High School | 0.015298 / 0.008374 | 0.0858 | 2.1000e-003 | 1.0000e-005 | 0.1337 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2.8388 / 0.38097 | 12.1909 | 0.3888 | 2.2900e-003 | 21.0665 |
| **T** | | **54.5** | **.** | **5. 3** | **3.131** |

## . D

### .1

**C**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Unmitigated | 15,585.3762 | 921.0693 | 0.0000 | 34,927.8324 |
| Mitigated | 15,585.3762 | 921.0693 | 0.0000 | 34,927.8324 |

### .2

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 1110.15 | 225.3504 | 13.3178 | 0.0000 | 505.0248 |
| City Park | 1940.68 | 393.9405 | 23.2812 | 0.0000 | 882.8461 |
| Day-Care Center | 246.14 | 49.9642 | 2.9528 | 0.0000 | 111.9730 |
| Elementary School | 2773.96 | 563.0888 | 33.2776 | 0.0000 | 1,261.9183 |
| General Light Industry | 5352.01 | 1,086.4097 | 64.2050 | 0.0000 | 2,434.7141 |
| General Office Building | 4633.65 | 940.5891 | 55.5872 | 0.0000 | 2,107.9207 |
| Golf Course | 536.33 | 108.8701 | 6.4340 | 0.0000 | 243.9850 |
| Government Office Building | 5534.96 | 1,123.5469 | 66.3997 | 0.0000 | 2,517.9409 |
| High School | 694.83 | 141.0442 | 8.3355 | 0.0000 | 316.0892 |
| Junior High School | 888.6 | 180.3778 | 10.6600 | 0.0000 | 404.2382 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 53067.4 | 10,772.1945 | 636.6185 | 0.0000 | 24,141.1821 |
| **T** | | **15 5 5.3 1** | **21. 4** | **.** | **34 2 . 3 24** |

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 1110.15 | 225.3504 | 13.3178 | 0.0000 | 505.0248 |
| City Park | 1940.68 | 393.9405 | 23.2812 | 0.0000 | 882.8461 |
| Day-Care Center | 246.14 | 49.9642 | 2.9528 | 0.0000 | 111.9730 |
| Elementary School | 2773.96 | 563.0888 | 33.2776 | 0.0000 | 1,261.9183 |
| General Light Industry | 5352.01 | 1,086.4097 | 64.2050 | 0.0000 | 2,434.7141 |
| General Office Building | 4633.65 | 940.5891 | 55.5872 | 0.0000 | 2,107.9207 |
| Golf Course | 536.33 | 108.8701 | 6.4340 | 0.0000 | 243.9850 |
| Government Office Building | 5534.96 | 1,123.5469 | 66.3997 | 0.0000 | 2,517.9409 |
| High School | 694.83 | 141.0442 | 8.3355 | 0.0000 | 316.0892 |
| Junior High School | 888.6 | 180.3778 | 10.6600 | 0.0000 | 404.2382 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 53067.4 | 10,772.1945 | 636.6185 | 0.0000 | 24,141.1821 |
| **T** | | **15 5 5.3 1** | **21. 4** | **.** | **34 2 . 3 24** |

**. O O**

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**1 .**

**_E**

**A D C R**

**O R S**

| Category | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | | | | | | | | | | | | |
| Architectural Coating | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Electricity | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Natural Gas | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Water Indoor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.00 |
| Water Outdoor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**O**

Project Setting:

| Mitigation | Category | Measure | % Reduction | Input Value 1 | Input Value 2 | Input Value 3 |
|---|---|---|---|---|---|---|
| No | Land Use | Increase Density | 0.00 | | | |
| No | Land Use | Increase Diversity | 0.13 | 0.37 | | |
| No | Land Use | Improve Walkability Design | 0.00 | | | |
| No | Land Use | Improve Destination Accessibility | 0.00 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| No | Land Use | Increase Transit Accessibility | 0.25 | | | |
| No | Land Use | Integrate Below Market Rate Housing | 0.00 | | | |
| | Land Use | Land Use SubTotal | 0.00 | | | |
| No | Neighborhood Enhancements | Improve Pedestrian Network | | | | |
| No | Neighborhood Enhancements | Provide Traffic Calming Measures | | | | |
| No | Neighborhood Enhancements | Implement NEV Network | 0.00 | | | |
| | Neighborhood Enhancements | Neighborhood Enhancements Subtotal | 0.00 | | | |
| No | Parking Policy Pricing | Limit Parking Supply | 0.00 | | | |
| No | Parking Policy Pricing | Unbundle Parking Costs | 0.00 | | | |
| No | Parking Policy Pricing | On-street Market Pricing | 0.00 | | | |
| | Parking Policy Pricing | Parking Policy Pricing Subtotal | 0.00 | | | |
| No | Transit Improvements | Provide BRT System | 0.00 | | | |
| No | Transit Improvements | Expand Transit Network | 0.00 | | | |
| No | Transit Improvements | Increase Transit Frequency | 0.00 | | | |
| | Transit Improvements | Transit Improvements Subtotal | 0.00 | | | |
| | | Land Use and Site Enhancement Subtotal | 0.00 | | | |
| No | Commute | Implement Trip Reduction Program | | | | |
| No | Commute | Transit Subsidy | | | | |
| No | Commute | Implement Employee Parking "Cash Out" | | | | |
| No | Commute | Workplace Parking Charge | | | | |
| No | Commute | Encourage Telecommuting and Alternative Work Schedules | 0.00 | | | |
| No | Commute | Market Commute Trip Reduction Option | 0.00 | | | |
| No | Commute | Employee Vanpool/Shuttle | 0.00 | | 2.00 | |
| No | Commute | Provide Ride Sharing Program | | | | |
| | Commute | Commute Subtotal | 0.00 | | | |
| No | School Trip | Implement School Bus Program | 0.00 | | | |
| | | Total VMT Reduction | 0.00 | | | |

**A**

| Measure Implemented | Mitigation Measure | Input Value |
|---|---|---|
| No | Only Natural Gas Hearth | |
| No | No Hearth | |
| No | Use Low VOC Cleaning Supplies | |
| No | Use Low VOC Paint (Residential Interior) | 250.00 |
| No | Use Low VOC Paint (Residential Exterior) | 250.00 |
| No | Use Low VOC Paint (Non-residential Interior) | 250.00 |
| No | Use Low VOC Paint (Non-residential Exterior) | 250.00 |
| No | % Electric Lawnmower | |
| No | % Electric Leafblower | |
| No | % Electric Chainsaw | |

**E**

| Measure Implemented | Mitigation Measure | Input Value 1 | Input Value 2 |
|---|---|---|---|
| No | Exceed Title 24 | | |
| No | Install High Efficiency Lighting | | |
| No | On-site Renewable | | |

| Appliance Type | Land Use Subtype | % Improvement |
|---|---|---|
| ClothWasher | | 30.00 |
| DishWasher | | 15.00 |
| Fan | | 50.00 |
| Refrigerator | | 15.00 |

| Measure Implemented | Mitigation Measure | Input Value 1 | Input Value 2 |
|---|---|---|---|
| No | Apply Water Conservation on Strategy | | |
| No | Use Reclaimed Water | | |
| No | Use Grey Water | | |
| No | Install low-flow bathroom faucet | 32.00 | |
| No | Install low-flow Kitchen faucet | 18.00 | |
| No | Install low-flow Toilet | 20.00 | |
| No | Install low-flow Shower | 20.00 | |
| No | Turf Reduction | | |
| No | Use Water Efficient Irrigation Systems | 6.10 | |
| No | Water Efficient Landscape | | |

**S**

| Mitigation Measures | Input Value |
|---|---|
| Institute Recycling and Composting Services<br>Percent Reduction in Waste Disposed | |

# _N

**A D C**

## 1. C

### 1.1

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 15,629.58 | 1000sqft | 0.00 | 15,629,584.00 | 0 |
| Day-Care Center | 3,047.00 | Student | 0.00 | 335,876.00 | 0 |
| Elementary School | 34,352.00 | Student | 0.00 | 3,788,708.00 | 0 |
| High School | 8,604.00 | Student | 0.00 | 948,839.00 | 0 |
| Junior High School | 11,005.00 | Student | 0.00 | 1,213,936.00 | 0 |
| General Light Industry | 103,981.04 | 1000sqft | 0.00 | 103,981,036.00 | 0 |
| Other Non-Asphalt Surfaces | 30,708.00 | Acre | 30,708.00 | 0.00 | 0 |
| City Park | 3,821.41 | Acre | 3,821.41 | 0.00 | 0 |
| Apartments Low Rise | 2,093.00 | Dwelling Unit | 0.00 | 3,911,117.00 | 7245 |
| Single Family Housing | 79,348.00 | Dwelling Unit | 0.00 | 266,423,552.00 | 304675 |

### 1.2 O C

Urban **S** 2.2 **D** 33

**C** 9 **O** 2035

**C** Southern California Edison

**CO2 I** 630.89 **C 4 I** 0.029 **N2O I** 0.006

### 1.3 E C N D D

Project Characteristics -

Land Use - Based on information provided by the County. For modeling purposes, private/charter schools and elementary school land use information combined as one.

Construction Phase - No construction component for modeling.

Off-road Equipment - No construction component.

Off-road Equipment -

Vehicle Trips - Trip generation rate and average trip distance based on information provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Energy Use -

Water And Wastewater - See Sections 5.17.1 and 5.17.2 of the Draft EIR. Otherwise noted, modeling assumes 40% of existing land uses use septic systems.

Solid Waste - See Section 5.17.4 of the Draft EIR.

Area Mitigation - Per AVAQMD Rule 1113: Architectural Coatings

Energy Mitigation - Assumed that all buildings would be 25% more energy efficient under the 2013 Building Energy Efficiency Standards compared to the 2008 Standards.

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintNonresidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintNonresidentialInteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialInteriorValue | 250 | 100 |
| tblConstructionPhase | NumDays | 10,000.00 | 10.00 |
| tblLandUse | LandUseSquareFeet | 15,629,600.00 | 15,629,584.00 |
| tblLandUse | LandUseSquareFeet | 172,225.08 | 335,876.00 |
| tblLandUse | LandUseSquareFeet | 2,871,942.97 | 3,788,708.00 |
| tblLandUse | LandUseSquareFeet | 1,141,415.05 | 948,839.00 |
| tblLandUse | LandUseSquareFeet | 1,293,766.33 | 1,213,936.00 |

| | | | |
|---|---|---|---|
| tblLandUse | LandUseSquareFeet | 103,981,000.00 | 103,981,036.00 |
| tblLandUse | LandUseSquareFeet | 1,337,640,480.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 166,460,619.60 | 0.00 |
| tblLandUse | LandUseSquareFeet | 2,093,000.00 | 3,911,117.00 |
| tblLandUse | LandUseSquareFeet | 142,826,400.00 | 266,423,552.00 |
| tblLandUse | LotAcreage | 358.81 | 0.00 |
| tblLandUse | LotAcreage | 3.95 | 0.00 |
| tblLandUse | LotAcreage | 65.93 | 0.00 |
| tblLandUse | LotAcreage | 26.20 | 0.00 |
| tblLandUse | LotAcreage | 29.70 | 0.00 |
| tblLandUse | LotAcreage | 2,387.08 | 0.00 |
| tblLandUse | LotAcreage | 130.81 | 0.00 |
| tblLandUse | LotAcreage | 25,762.34 | 0.00 |
| tblLandUse | Population | 5,986.00 | 7,245.00 |
| tblLandUse | Population | 226,935.00 | 304,675.00 |
| tblProjectCharacteristics | OperationalYear | 2014 | 2035 |
| tblSolidWaste | SolidWasteGenerationRate | 962.78 | 881.00 |
| tblSolidWaste | SolidWasteGenerationRate | 328.64 | 301.00 |
| tblSolidWaste | SolidWasteGenerationRate | 556.08 | 509.00 |
| tblSolidWaste | SolidWasteGenerationRate | 6,269.24 | 5,734.00 |
| tblSolidWaste | SolidWasteGenerationRate | 128,936.44 | 117,925.00 |
| tblSolidWaste | SolidWasteGenerationRate | 14,535.53 | 13,294.00 |
| tblSolidWaste | SolidWasteGenerationRate | 1,570.23 | 1,436.00 |
| tblSolidWaste | SolidWasteGenerationRate | 2,008.41 | 1,837.00 |
| tblSolidWaste | SolidWasteGenerationRate | 124,916.75 | 114,249.00 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TTP | 82.30 | 100.00 |
| tblVehicleTrips | CC_TTP | 30.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 17.20 | 100.00 |
| tblVehicleTrips | CC_TTP | 22.20 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 12.70 | 0.00 |
| tblVehicleTrips | CW_TTP | 65.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 77.80 | 0.00 |
| tblVehicleTrips | CW_TTP | 72.80 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 58.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 14.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 4.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 28.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 77.00 | 100.00 |
| tblVehicleTrips | PR_TP | 75.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | ST_TR | 7.16 | 2.43 |
| tblVehicleTrips | ST_TR | 1.59 | 0.00 |
| tblVehicleTrips | ST_TR | 0.39 | 0.14 |
| tblVehicleTrips | ST_TR | 0.00 | 0.14 |
| tblVehicleTrips | ST_TR | 1.32 | 1.30 |
| tblVehicleTrips | ST_TR | 2.37 | 1.30 |
| tblVehicleTrips | ST_TR | 0.61 | 0.14 |
| tblVehicleTrips | ST_TR | 0.00 | 0.14 |
| tblVehicleTrips | ST_TR | 10.08 | 4.36 |
| tblVehicleTrips | SU_TR | 6.07 | 2.43 |
| tblVehicleTrips | SU_TR | 1.59 | 0.00 |
| tblVehicleTrips | SU_TR | 0.37 | 0.14 |
| tblVehicleTrips | SU_TR | 0.00 | 0.14 |
| tblVehicleTrips | SU_TR | 0.68 | 1.30 |
| tblVehicleTrips | SU_TR | 0.98 | 1.30 |
| tblVehicleTrips | SU_TR | 0.25 | 0.14 |
| tblVehicleTrips | SU_TR | 0.00 | 0.14 |
| tblVehicleTrips | SU_TR | 8.77 | 4.36 |
| tblVehicleTrips | WD_TR | 6.59 | 2.43 |
| tblVehicleTrips | WD_TR | 1.59 | 0.00 |
| tblVehicleTrips | WD_TR | 4.48 | 0.14 |
| tblVehicleTrips | WD_TR | 1.29 | 0.14 |
| tblVehicleTrips | WD_TR | 6.97 | 1.30 |
| tblVehicleTrips | WD_TR | 11.01 | 1.30 |
| tblVehicleTrips | WD_TR | 1.71 | 0.14 |
| tblVehicleTrips | WD_TR | 1.62 | 0.14 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | WD_TR | 9.57 | 4.36 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | IndoorWaterUseRate | 136,367,375.63 | 100,131.00 |
| tblWater | IndoorWaterUseRate | 7,386,659.28 | 5,424.00 |
| tblWater | IndoorWaterUseRate | 83,277,492.48 | 61,148.00 |
| tblWater | IndoorWaterUseRate | 24,045,606,250.00 | 17,655,996.00 |
| tblWater | IndoorWaterUseRate | 2,777,907,387.64 | 2,039,737.00 |
| tblWater | IndoorWaterUseRate | 37,900,275.84 | 27,829.00 |
| tblWater | IndoorWaterUseRate | 26,678,761.20 | 19,589.00 |
| tblWater | IndoorWaterUseRate | 5,169,841,625.01 | 3,796,066.00 |

| | | | |
|---|---|---|---|
| tblWater | OutdoorWaterUseRate | 85,970,736.81 | 157,693.00 |
| tblWater | OutdoorWaterUseRate | 4,553,138,744.41 | 8,351,697.00 |
| tblWater | OutdoorWaterUseRate | 18,994,266.72 | 34,841.00 |
| tblWater | OutdoorWaterUseRate | 214,142,123.52 | 392,794.00 |
| tblWater | OutdoorWaterUseRate | 1,702,588,398.88 | 3,123,003.00 |
| tblWater | OutdoorWaterUseRate | 97,457,852.16 | 178,764.00 |
| tblWater | OutdoorWaterUseRate | 68,602,528.80 | 125,835.00 |
| tblWater | OutdoorWaterUseRate | 3,259,247,980.98 | 5,978,333.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |

## 2. E S

### 2.2 O O

O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 136,434.9881 | 1,768.4271 | 160,256.0747 | 60.3288 | | 21,608.6727 | 21,608.6727 | | 21,608.0403 | 21,608.0403 | 2,261,757.5225 | 960,692.5758 | 3,222,450.0983 | 2,098.8627 | 177.9043 | 3,321,676.5490 |
| Energy | 135.6051 | 1,194.1846 | 752.5455 | 7.3966 | | 93.6908 | 93.6908 | | 93.6908 | 93.6908 | | 1,479,328.0336 | 1,479,328.0336 | 28.3538 | 27.1210 | 1,488,330.9775 |
| Mobile | 1,588.7167 | 2,630.1691 | 26,195.3876 | 102.3373 | 8,728.9615 | 73.0064 | 8,801.9679 | 2,316.2094 | 67.6566 | 2,383.8660 | | 6,500,837.4923 | 6,500,837.4923 | 293.3086 | | 6,506,996.9731 |
| **T** | **13 15 .3** | **5 5 2.** | **1 2 4.** | **1 . 2** | **2 . 1 5** | **21 5.3** | **3 5 4.33 13** | **2 31 .2 4** | **21 .3** | **24 5.5 1** | **2 2 1 5 . 5225** | **4 5 . 1 1** | **11 2 2 15 . 242** | **2 42 .525 1** | **2 5. 253** | **11 31 4.4** |

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| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 134,565.0499 | 1,768.4271 | 160,256.0747 | 60.3288 | | 21,608.6727 | 21,608.6727 | | 21,608.0403 | 21,608.0403 | 2,261,757.5225 | 960,692.5758 | 3,222,450.0983 | 2,098.8627 | 177.9043 | 3,321,676.5490 |
| Energy | 108.6901 | 957.2554 | 603.8659 | 5.9286 | | 75.0950 | 75.0950 | | 75.0950 | 75.0950 | | 1,185,709.7227 | 1,185,709.7227 | 22.7261 | 21.7380 | 1,192,925.7545 |
| Mobile | 1,588.7167 | 2,630.1691 | 26,195.3876 | 102.3373 | 8,728.9615 | 73.0064 | 8,801.9679 | 2,316.2094 | 67.6566 | 2,383.8660 | | 6,500,837.4923 | 6,500,837.4923 | 293.3086 | | 6,506,996.9731 |
| **T** | **13 2 2.45** | **5 355. 51** | **1 55.3 2 1** | **1 .5 4** | **2 . 1 5** | **21 5 . 4** | **3 4 5. 3 55** | **2 31 .2 4** | **21 5 . 1** | **24 . 1 2** | **2 2 1 5 . 5225** | **4 23 .** | **1 .3133** | **2 414. 5** | **1 . 423** | **11 21 5 .2 5** |

| | RO | NO | CO | SO2 | 1 | E 1 | 1 T | 2.5 | E 2.5 | 2.5 T | CO2 | N CO2 | T CO2 | C 4 | N2 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **R** | **1.3** | **4.24** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **3.2** | **2. 2** | **.23** | **2. 3** | **2. 1** |

## 4. O D

### 4.1

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 1,588.7167 | 2,630.1691 | 26,195.3876 | 102.3373 | 8,728.9615 | 73.0064 | 8,801.9679 | 2,316.2094 | 67.6566 | 2,383.8660 | | 6,500,837.4923 | 6,500,837.4923 | 293.3086 | | 6,506,996.9731 |
| Unmitigated | 1,588.7167 | 2,630.1691 | 26,195.3876 | 102.3373 | 8,728.9615 | 73.0064 | 8,801.9679 | 2,316.2094 | 67.6566 | 2,383.8660 | | 6,500,837.4923 | 6,500,837.4923 | 293.3086 | | 6,506,996.9731 |

### 4.2 T S I

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 5,085.99 | 5,085.99 | 5085.99 | 41,265,485 | 41,265,485 |
| City Park | 0.00 | 0.00 | 0.00 | | |
| Day-Care Center | 426.58 | 426.58 | 426.58 | 3,461,082 | 3,461,082 |
| Elementary School | 4,809.28 | 4,809.28 | 4809.28 | 39,020,382 | 39,020,382 |
| General Light Industry | 135,175.35 | 135,175.35 | 135175.35 | 1,096,753,329 | 1,096,753,329 |
| General Office Building | 20,318.45 | 20,318.45 | 20318.45 | 164,854,996 | 164,854,996 |
| High School | 1,204.56 | 1,204.56 | 1204.56 | 9,773,270 | 9,773,270 |
| Junior High School | 1,540.70 | 1,540.70 | 1540.70 | 12,500,562 | 12,500,562 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 345,957.28 | 345,957.28 | 345957.28 | 2,806,945,149 | 2,806,945,149 |
| Total | 514,518.20 | 514,518.20 | 514,518.20 | 4,174,574,254 | 4,174,574,254 |

## 4.3 T T I

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| City Park | 9.50 | 7.30 | 7.30 | 33.00 | 48.00 | 19.00 | 66 | 28 | 6 |
| Day-Care Center | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Elementary School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Light Industry | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Office Building | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Other Non-Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |

| LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.611152 | 0.099452 | 0.250731 | 0.007405 | 0.012959 | 0.002042 | 0.000906 | 0.002000 | 0.000197 | 0.000202 | 0.011277 | 0.000103 | 0.001572 |

# 5. E D

## 4.4

Historical Energy Use: N

## 5.1 E

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 108.6901 | 957.2554 | 603.8659 | 5.9286 | | 75.0950 | 75.0950 | | 75.0950 | 75.0950 | | 1,185,709.7227 | 1,185,709.7227 | 22.7261 | 21.7380 | 1,192,925.7545 |
| NaturalGas Unmitigated | 135.6051 | 1,194.1846 | 752.5455 | 7.3966 | | 93.6908 | 93.6908 | | 93.6908 | 93.6908 | | 1,479,328.0336 | 1,479,328.0336 | 28.3538 | 27.1210 | 1,488,330.9775 |

## 5.2 E N

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 81606.2 | 0.8801 | 7.5206 | 3.2002 | 0.0480 | | 0.6081 | 0.6081 | | 0.6081 | 0.6081 | | 9,600.7276 | 9,600.7276 | 0.1840 | 0.1760 | 9,659.1560 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 10021.1 | 0.1081 | 0.9825 | 0.8253 | 5.8900e-003 | | 0.0747 | 0.0747 | | 0.0747 | 0.0747 | | 1,178.9491 | 1,178.9491 | 0.0226 | 0.0216 | 1,186.1240 |
| Elementary School | 113038 | 1.2190 | 11.0822 | 9.3091 | 0.0665 | | 0.8423 | 0.8423 | | 0.8423 | 0.8423 | | 13,298.6399 | 13,298.6399 | 0.2549 | 0.2438 | 13,379.5732 |
| General Light Industry | 5.35858e+006 | 57.7887 | 525.3514 | 441.2952 | 3.1521 | | 39.9267 | 39.9267 | | 39.9267 | 39.9267 | | 630,421.6881 | 630,421.6881 | 12.0831 | 11.5577 | 634,258.3294 |
| General Office Building | 468031 | 5.0474 | 45.8854 | 38.5437 | 0.2753 | | 3.4873 | 3.4873 | | 3.4873 | 3.4873 | | 55,062.4829 | 55,062.4829 | 1.0554 | 1.0095 | 55,397.5840 |
| High School | 28309.2 | 0.3053 | 2.7754 | 2.3314 | 0.0167 | | 0.2109 | 0.2109 | | 0.2109 | 0.2109 | | 3,330.4937 | 3,330.4937 | 0.0638 | 0.0611 | 3,350.7625 |
| Junior High School | 36218.5 | 0.3906 | 3.5508 | 2.9827 | 0.0213 | | 0.2699 | 0.2699 | | 0.2699 | 0.2699 | | 4,261.0034 | 4,261.0034 | 0.0817 | 0.0781 | 4,286.9352 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 6.47848e+006 | 69.8660 | 597.0363 | 254.0580 | 3.8109 | | 48.2710 | 48.2710 | | 48.2710 | 48.2710 | | 762,174.0490 | 762,174.0490 | 14.6083 | 13.9732 | 766,812.5133 |
| **T** | | **135. 51** | **1 1 4.1 4** | **52.5455** | **.3** | | **3.** | **3.** | | **3.** | **3.** | | **1 4 32 . 33** | **1 4 32 . 33** | **2 .353** | **2 .121** | **1 4 33 . 5** |

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 7.76426 | 0.0837 | 0.7612 | 0.6394 | 4.5700e-003 | | 0.0579 | 0.0579 | | 0.0579 | 0.0579 | | 913.4420 | 913.4420 | 0.0175 | 0.0168 | 919.0010 |
| Elementary School | 87.5814 | 0.9445 | 8.5864 | 7.2126 | 0.0515 | | 0.6526 | 0.6526 | | 0.6526 | 0.6526 | | 10,303.6982 | 10,303.6982 | 0.1975 | 0.1889 | 10,366.4048 |
| General Light Industry | 4335.87 | 46.7594 | 425.0850 | 357.0714 | 2.5505 | | 32.3065 | 32.3065 | | 32.3065 | 32.3065 | | 510,101.9719 | 510,101.9719 | 9.7770 | 9.3519 | 513,206.3675 |
| General Office Building | 355.198 | 3.8306 | 34.8234 | 29.2516 | 0.2089 | | 2.6466 | 2.6466 | | 2.6466 | 2.6466 | | 41,788.0417 | 41,788.0417 | 0.8009 | 0.7661 | 42,042.3567 |
| High School | 21.9338 | 0.2365 | 2.1504 | 1.8063 | 0.0129 | | 0.1634 | 0.1634 | | 0.1634 | 0.1634 | | 2,580.4445 | 2,580.4445 | 0.0495 | 0.0473 | 2,596.1487 |
| Apartments Low Rise | 64.9551 | 0.7005 | 5.9861 | 2.5473 | 0.0382 | | 0.4840 | 0.4840 | | 0.4840 | 0.4840 | | 7,641.7707 | 7,641.7707 | 0.1465 | 0.1401 | 7,688.2772 |
| Junior High School | 28.0619 | 0.3026 | 2.7512 | 2.3110 | 0.0165 | | 0.2091 | 0.2091 | | 0.2091 | 0.2091 | | 3,301.3973 | 3,301.3973 | 0.0633 | 0.0605 | 3,321.4890 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 5177.17 | 55.8322 | 477.1119 | 203.0263 | 3.0454 | | 38.5750 | 38.5750 | | 38.5750 | 38.5750 | | 609,078.9565 | 609,078.9565 | 11.6740 | 11.1665 | 612,785.7095 |
| **T** | | **1 . 1** | **5 .2554** | **3. 5** | **5. 2** | | **5. 5** | **5. 5** | | **5. 5** | **5. 5** | | **1 1 5 . 22** | **1 1 5 . 22** | **22. 2 1** | **21. 3** | **1 1 2 25. 545** |

## . A D

### .1 A

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 134,565.0499 | 1,768.4271 | 160,256.0747 | 60.3288 | | 21,608.6727 | 21,608.6727 | | 21,608.0403 | 21,608.0403 | 2,261,757.5225 | 960,692.5758 | 3,222,450.0983 | 2,098.8627 | 177.9043 | 3,321,676.5490 |
| Unmitigated | 136,434.9881 | 1,768.4271 | 160,256.0747 | 60.3288 | | 21,608.6727 | 21,608.6727 | | 21,608.0403 | 21,608.0403 | 2,261,757.5225 | 960,692.5758 | 3,222,450.0983 | 2,098.8627 | 177.9043 | 3,321,676.5490 |

### .2 A S C

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 3,116.5637 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 8,479.3787 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 124,636.8963 | 1,690.9893 | 153,539.2705 | 59.9724 | | 21,571.3363 | 21,571.3363 | | 21,570.7040 | 21,570.7040 | 2,261,757.5225 | 948,548.1177 | 3,210,305.6402 | 2,087.2269 | 177.9043 | 3,309,287.7373 |
| Landscaping | 202.1495 | 77.4378 | 6,716.8042 | 0.3564 | | 37.3363 | 37.3363 | | 37.3363 | 37.3363 | | 12,144.4581 | 12,144.4581 | 11.6359 | | 12,388.8117 |
| **T** | **13 434.1** | **1 .42 1** | **1 25 .4** | **.32** | | **21 .2** | **21 .2** | | **21 .43** | **21 .43** | **2 2 1 5 .5225** | **2.55** | **3 222 45 .3** | **2 .2** | **1 .43** | **3 321 .54** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1,246.6255 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 8,479.3787 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 124,636.8963 | 1,690.9893 | 153,539.2705 | 59.9724 | | 21,571.3363 | 21,571.3363 | | 21,570.7040 | 21,570.7040 | 2,261,757.5225 | 948,548.1177 | 3,210,305.6402 | 2,087.2269 | 177.9043 | 3,309,287.7373 |
| Landscaping | 202.1495 | 77.4378 | 6,716.8042 | 0.3564 | | 37.3363 | 37.3363 | | 37.3363 | 37.3363 | | 12,144.4581 | 12,144.4581 | 11.6359 | | 12,388.8117 |
| **T** | **134 5 5. 4** | **1 .42 1** | **1 25 . 4** | **.32** | | **21 . 2** | **21 . 2** | | **21 . 4 3** | **21 . 4 3** | **2 2 1 5 . 5225** | **2.5 5** | **3 222 45 . 3** | **2 . 2** | **1 . 43** | **3 321 . 54** |

## . D

### .1

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## . D

### .1

## . O O

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**1 .**

# _N

**A D C S**

## 1. C

### 1.1

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 15,629.58 | 1000sqft | 0.00 | 15,629,584.00 | 0 |
| Day-Care Center | 3,047.00 | Student | 0.00 | 335,876.00 | 0 |
| Elementary School | 34,352.00 | Student | 0.00 | 3,788,708.00 | 0 |
| High School | 8,604.00 | Student | 0.00 | 948,839.00 | 0 |
| Junior High School | 11,005.00 | Student | 0.00 | 1,213,936.00 | 0 |
| General Light Industry | 103,981.04 | 1000sqft | 0.00 | 103,981,036.00 | 0 |
| Other Non-Asphalt Surfaces | 30,708.00 | Acre | 30,708.00 | 0.00 | 0 |
| City Park | 3,821.41 | Acre | 3,821.41 | 0.00 | 0 |
| Apartments Low Rise | 2,093.00 | Dwelling Unit | 0.00 | 3,911,117.00 | 7245 |
| Single Family Housing | 79,348.00 | Dwelling Unit | 0.00 | 266,423,552.00 | 304675 |

### 1.2 O C

Urban **S** 2.2 **D** 33

**C** 9 **O** 2035

**C** Southern California Edison

**CO2 I** 630.89 **C 4 I** 0.029 **N2O I** 0.006

### 1.3 E C N D D

Project Characteristics -

Land Use - Based on information provided by the County. For modeling purposes, private/charter schools and elementary school land use information combined as one.

Construction Phase - No construction component for modeling.

Off-road Equipment - No construction component.

Off-road Equipment -

Vehicle Trips - Trip generation rate and average trip distance based on information provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Energy Use -

Water And Wastewater - See Sections 5.17.1 and 5.17.2 of the Draft EIR. Otherwise noted, modeling assumes 40% of existing land uses use septic systems.

Solid Waste - See Section 5.17.4 of the Draft EIR.

Area Mitigation - Per AVAQMD Rule 1113: Architectural Coatings

Energy Mitigation - Assumed that all buildings would be 25% more energy efficient under the 2013 Building Energy Efficiency Standards compared to the 2008 Standards.

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintNonresidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintNonresidentialInteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialInteriorValue | 250 | 100 |
| tblConstructionPhase | NumDays | 10,000.00 | 10.00 |
| tblLandUse | LandUseSquareFeet | 15,629,600.00 | 15,629,584.00 |
| tblLandUse | LandUseSquareFeet | 172,225.08 | 335,876.00 |
| tblLandUse | LandUseSquareFeet | 2,871,942.97 | 3,788,708.00 |
| tblLandUse | LandUseSquareFeet | 1,141,415.05 | 948,839.00 |
| tblLandUse | LandUseSquareFeet | 1,293,766.33 | 1,213,936.00 |

| | | | |
|---|---|---|---|
| tblLandUse | LandUseSquareFeet | 103,981,000.00 | 103,981,036.00 |
| tblLandUse | LandUseSquareFeet | 1,337,640,480.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 166,460,619.60 | 0.00 |
| tblLandUse | LandUseSquareFeet | 2,093,000.00 | 3,911,117.00 |
| tblLandUse | LandUseSquareFeet | 142,826,400.00 | 266,423,552.00 |
| tblLandUse | LotAcreage | 358.81 | 0.00 |
| tblLandUse | LotAcreage | 3.95 | 0.00 |
| tblLandUse | LotAcreage | 65.93 | 0.00 |
| tblLandUse | LotAcreage | 26.20 | 0.00 |
| tblLandUse | LotAcreage | 29.70 | 0.00 |
| tblLandUse | LotAcreage | 2,387.08 | 0.00 |
| tblLandUse | LotAcreage | 130.81 | 0.00 |
| tblLandUse | LotAcreage | 25,762.34 | 0.00 |
| tblLandUse | Population | 5,986.00 | 7,245.00 |
| tblLandUse | Population | 226,935.00 | 304,675.00 |
| tblProjectCharacteristics | OperationalYear | 2014 | 2035 |
| tblSolidWaste | SolidWasteGenerationRate | 962.78 | 881.00 |
| tblSolidWaste | SolidWasteGenerationRate | 328.64 | 301.00 |
| tblSolidWaste | SolidWasteGenerationRate | 556.08 | 509.00 |
| tblSolidWaste | SolidWasteGenerationRate | 6,269.24 | 5,734.00 |
| tblSolidWaste | SolidWasteGenerationRate | 128,936.44 | 117,925.00 |
| tblSolidWaste | SolidWasteGenerationRate | 14,535.53 | 13,294.00 |
| tblSolidWaste | SolidWasteGenerationRate | 1,570.23 | 1,436.00 |
| tblSolidWaste | SolidWasteGenerationRate | 2,008.41 | 1,837.00 |
| tblSolidWaste | SolidWasteGenerationRate | 124,916.75 | 114,249.00 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TTP | 82.30 | 100.00 |
| tblVehicleTrips | CC_TTP | 30.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 17.20 | 100.00 |
| tblVehicleTrips | CC_TTP | 22.20 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 12.70 | 0.00 |
| tblVehicleTrips | CW_TTP | 65.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 77.80 | 0.00 |
| tblVehicleTrips | CW_TTP | 72.80 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 58.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 14.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 4.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 28.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 77.00 | 100.00 |
| tblVehicleTrips | PR_TP | 75.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | ST_TR | 7.16 | 2.43 |
| tblVehicleTrips | ST_TR | 1.59 | 0.00 |
| tblVehicleTrips | ST_TR | 0.39 | 0.14 |
| tblVehicleTrips | ST_TR | 0.00 | 0.14 |
| tblVehicleTrips | ST_TR | 1.32 | 1.30 |
| tblVehicleTrips | ST_TR | 2.37 | 1.30 |
| tblVehicleTrips | ST_TR | 0.61 | 0.14 |
| tblVehicleTrips | ST_TR | 0.00 | 0.14 |
| tblVehicleTrips | ST_TR | 10.08 | 4.36 |
| tblVehicleTrips | SU_TR | 6.07 | 2.43 |
| tblVehicleTrips | SU_TR | 1.59 | 0.00 |
| tblVehicleTrips | SU_TR | 0.37 | 0.14 |
| tblVehicleTrips | SU_TR | 0.00 | 0.14 |
| tblVehicleTrips | SU_TR | 0.68 | 1.30 |
| tblVehicleTrips | SU_TR | 0.98 | 1.30 |
| tblVehicleTrips | SU_TR | 0.25 | 0.14 |
| tblVehicleTrips | SU_TR | 0.00 | 0.14 |
| tblVehicleTrips | SU_TR | 8.77 | 4.36 |
| tblVehicleTrips | WD_TR | 6.59 | 2.43 |
| tblVehicleTrips | WD_TR | 1.59 | 0.00 |
| tblVehicleTrips | WD_TR | 4.48 | 0.14 |
| tblVehicleTrips | WD_TR | 1.29 | 0.14 |
| tblVehicleTrips | WD_TR | 6.97 | 1.30 |
| tblVehicleTrips | WD_TR | 11.01 | 1.30 |
| tblVehicleTrips | WD_TR | 1.71 | 0.14 |
| tblVehicleTrips | WD_TR | 1.62 | 0.14 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | WD_TR | 9.57 | 4.36 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | IndoorWaterUseRate | 136,367,375.63 | 100,131.00 |
| tblWater | IndoorWaterUseRate | 7,386,659.28 | 5,424.00 |
| tblWater | IndoorWaterUseRate | 83,277,492.48 | 61,148.00 |
| tblWater | IndoorWaterUseRate | 24,045,606,250.00 | 17,655,996.00 |
| tblWater | IndoorWaterUseRate | 2,777,907,387.64 | 2,039,737.00 |
| tblWater | IndoorWaterUseRate | 37,900,275.84 | 27,829.00 |
| tblWater | IndoorWaterUseRate | 26,678,761.20 | 19,589.00 |
| tblWater | IndoorWaterUseRate | 5,169,841,625.01 | 3,796,066.00 |

| | | | |
|---|---|---|---|
| tblWater | OutdoorWaterUseRate | 85,970,736.81 | 157,693.00 |
| tblWater | OutdoorWaterUseRate | 4,553,138,744.41 | 8,351,697.00 |
| tblWater | OutdoorWaterUseRate | 18,994,266.72 | 34,841.00 |
| tblWater | OutdoorWaterUseRate | 214,142,123.52 | 392,794.00 |
| tblWater | OutdoorWaterUseRate | 1,702,588,398.88 | 3,123,003.00 |
| tblWater | OutdoorWaterUseRate | 97,457,852.16 | 178,764.00 |
| tblWater | OutdoorWaterUseRate | 68,602,528.80 | 125,835.00 |
| tblWater | OutdoorWaterUseRate | 3,259,247,980.98 | 5,978,333.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |

## 2. E S

### 2.2 O O

O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 136,434.9881 | 1,768.4271 | 160,256.0747 | 60.3288 | | 21,608.6727 | 21,608.6727 | | 21,608.0403 | 21,608.0403 | 2,261,757.5225 | 960,692.5758 | 3,222,450.0983 | 2,098.8627 | 177.9043 | 3,321,676.5490 |
| Energy | 135.6051 | 1,194.1846 | 752.5455 | 7.3966 | | 93.6908 | 93.6908 | | 93.6908 | 93.6908 | | 1,479,328.0336 | 1,479,328.0336 | 28.3538 | 27.1210 | 1,488,330.9775 |
| Mobile | 1,716.2005 | 2,487.7374 | 32,559.6534 | 115.9851 | 8,728.9615 | 72.9948 | 8,801.9563 | 2,316.2094 | 67.6459 | 2,383.8553 | | 7,348,135.0282 | 7,348,135.0282 | 293.2976 | | 7,354,294.2780 |
| **T** | **13 2 . 3** | **5 45 .34 1** | **1 3 5 .2 3** | **1 3. 1** | **2 . 1 5** | **21 5.35 2** | **3 5 4.31** | **2 31 .2 4** | **21 .3** | **24 5.5 4** | **2 2 1 5 . 5225** | **155. 3** | **12 4 13 .1 2** | **2 42 .514 1** | **2 5. 253** | **12 1 4 3 1. 45** |

O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 134,565.0499 | 1,768.4271 | 160,256.0747 | 60.3288 | | 21,608.6727 | 21,608.6727 | | 21,608.0403 | 21,608.0403 | 2,261,757.5225 | 960,692.5758 | 3,222,450.0983 | 2,098.8627 | 177.9043 | 3,321,676.5490 |
| Energy | 108.6901 | 957.2554 | 603.8659 | 5.9286 | | 75.0950 | 75.0950 | | 75.0950 | 75.0950 | | 1,185,709.7227 | 1,185,709.7227 | 22.7261 | 21.7380 | 1,192,925.7545 |
| Mobile | 1,716.2005 | 2,487.7374 | 32,559.6534 | 115.9851 | 8,728.9615 | 72.9948 | 8,801.9563 | 2,316.2094 | 67.6459 | 2,383.8553 | | 7,348,135.0282 | 7,348,135.0282 | 293.2976 | | 7,354,294.2780 |
| **T** | **13 3 . 4 5** | **5 213.41** | **1 3 41 .5 4** | **1 2.2425** | **2 . 1 5** | **21 5 . 24** | **3 4 5. 2 3** | **2 31 .2 4** | **21 5 . 11** | **24 .** | **2 2 1 5 . 5225** | **4 4 53 . 32** | **11 5 2 4 . 4 2** | **2 414. 5** | **1 . 423** | **11 .5 14** |

| | RO | NO | CO | SO2 | 1 | E 1 | 1 T | 2.5 | E 2.5 | 2.5 T | CO2 | N CO2 | T CO2 | C 4 | N2 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **R** | **1.3** | **4.35** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **.** | **3.** | **2.44** | **.23** | **2. 3** | **2.43** |

## 4. O D

### 4.1

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 1,716.2005 | 2,487.7374 | 32,559.6534 | 115.9851 | 8,728.9615 | 72.9948 | 8,801.9563 | 2,316.2094 | 67.6459 | 2,383.8553 | | 7,348,135.0282 | 7,348,135.0282 | 293.2976 | | 7,354,294.2780 |
| Unmitigated | 1,716.2005 | 2,487.7374 | 32,559.6534 | 115.9851 | 8,728.9615 | 72.9948 | 8,801.9563 | 2,316.2094 | 67.6459 | 2,383.8553 | | 7,348,135.0282 | 7,348,135.0282 | 293.2976 | | 7,354,294.2780 |

### 4.2 T S I

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 5,085.99 | 5,085.99 | 5085.99 | 41,265,485 | 41,265,485 |
| City Park | 0.00 | 0.00 | 0.00 | | |
| Day-Care Center | 426.58 | 426.58 | 426.58 | 3,461,082 | 3,461,082 |
| Elementary School | 4,809.28 | 4,809.28 | 4809.28 | 39,020,382 | 39,020,382 |
| General Light Industry | 135,175.35 | 135,175.35 | 135175.35 | 1,096,753,329 | 1,096,753,329 |
| General Office Building | 20,318.45 | 20,318.45 | 20318.45 | 164,854,996 | 164,854,996 |
| High School | 1,204.56 | 1,204.56 | 1204.56 | 9,773,270 | 9,773,270 |
| Junior High School | 1,540.70 | 1,540.70 | 1540.70 | 12,500,562 | 12,500,562 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 345,957.28 | 345,957.28 | 345957.28 | 2,806,945,149 | 2,806,945,149 |
| Total | 514,518.20 | 514,518.20 | 514,518.20 | 4,174,574,254 | 4,174,574,254 |

## 4.3 T T I

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| City Park | 9.50 | 7.30 | 7.30 | 33.00 | 48.00 | 19.00 | 66 | 28 | 6 |
| Day-Care Center | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Elementary School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Light Industry | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Office Building | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Other Non-Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |

| LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.611152 | 0.099452 | 0.250731 | 0.007405 | 0.012959 | 0.002042 | 0.000906 | 0.002000 | 0.000197 | 0.000202 | 0.011277 | 0.000103 | 0.001572 |

## 5. E D

### 4.4

Historical Energy Use: N

### 5.1 E

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 108.6901 | 957.2554 | 603.8659 | 5.9286 | | 75.0950 | 75.0950 | | 75.0950 | 75.0950 | | 1,185,709.7227 | 1,185,709.7227 | 22.7261 | 21.7380 | 1,192,925.7545 |
| NaturalGas Unmitigated | 135.6051 | 1,194.1846 | 752.5455 | 7.3966 | | 93.6908 | 93.6908 | | 93.6908 | 93.6908 | | 1,479,328.0336 | 1,479,328.0336 | 28.3538 | 27.1210 | 1,488,330.9775 |

## 5.2 E N

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 10021.1 | 0.1081 | 0.9825 | 0.8253 | 5.8900e-003 | | 0.0747 | 0.0747 | | 0.0747 | 0.0747 | | 1,178.9491 | 1,178.9491 | 0.0226 | 0.0216 | 1,186.1240 |
| Elementary School | 113038 | 1.2190 | 11.0822 | 9.3091 | 0.0665 | | 0.8423 | 0.8423 | | 0.8423 | 0.8423 | | 13,298.6399 | 13,298.6399 | 0.2549 | 0.2438 | 13,379.5732 |
| General Light Industry | 5.35858e+006 | 57.7887 | 525.3514 | 441.2952 | 3.1521 | | 39.9267 | 39.9267 | | 39.9267 | 39.9267 | | 630,421.6881 | 630,421.6881 | 12.0831 | 11.5577 | 634,258.3294 |
| General Office Building | 468031 | 5.0474 | 45.8854 | 38.5437 | 0.2753 | | 3.4873 | 3.4873 | | 3.4873 | 3.4873 | | 55,062.4829 | 55,062.4829 | 1.0554 | 1.0095 | 55,397.5840 |
| High School | 28309.2 | 0.3053 | 2.7754 | 2.3314 | 0.0167 | | 0.2109 | 0.2109 | | 0.2109 | 0.2109 | | 3,330.4937 | 3,330.4937 | 0.0638 | 0.0611 | 3,350.7625 |
| Apartments Low Rise | 81606.2 | 0.8801 | 7.5206 | 3.2002 | 0.0480 | | 0.6081 | 0.6081 | | 0.6081 | 0.6081 | | 9,600.7276 | 9,600.7276 | 0.1840 | 0.1760 | 9,659.1560 |
| Junior High School | 36218.5 | 0.3906 | 3.5508 | 2.9827 | 0.0213 | | 0.2699 | 0.2699 | | 0.2699 | 0.2699 | | 4,261.0034 | 4,261.0034 | 0.0817 | 0.0781 | 4,286.9352 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 6.47848e+006 | 69.8660 | 597.0363 | 254.0580 | 3.8109 | | 48.2710 | 48.2710 | | 48.2710 | 48.2710 | | 762,174.0490 | 762,174.0490 | 14.6083 | 13.9732 | 766,812.5133 |
| **T** | | **135. 51** | **1 1 4.1 4** | **52.5455** | **.3** | | **3.** | **3.** | | **3.** | **3.** | | **1 4 32 . 33** | **1 4 32 . 33** | **2 .353** | **2 .121** | **1 4 33 . 5** |

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 7.76426 | 0.0837 | 0.7612 | 0.6394 | 4.5700e-003 | | 0.0579 | 0.0579 | | 0.0579 | 0.0579 | | 913.4420 | 913.4420 | 0.0175 | 0.0168 | 919.0010 |
| Elementary School | 87.5814 | 0.9445 | 8.5864 | 7.2126 | 0.0515 | | 0.6526 | 0.6526 | | 0.6526 | 0.6526 | | 10,303.6982 | 10,303.6982 | 0.1975 | 0.1889 | 10,366.4048 |
| General Light Industry | 4335.87 | 46.7594 | 425.0850 | 357.0714 | 2.5505 | | 32.3065 | 32.3065 | | 32.3065 | 32.3065 | | 510,101.9719 | 510,101.9719 | 9.7770 | 9.3519 | 513,206.3675 |
| General Office Building | 355.198 | 3.8306 | 34.8234 | 29.2516 | 0.2089 | | 2.6466 | 2.6466 | | 2.6466 | 2.6466 | | 41,788.0417 | 41,788.0417 | 0.8009 | 0.7661 | 42,042.3567 |
| High School | 21.9338 | 0.2365 | 2.1504 | 1.8063 | 0.0129 | | 0.1634 | 0.1634 | | 0.1634 | 0.1634 | | 2,580.4445 | 2,580.4445 | 0.0495 | 0.0473 | 2,596.1487 |
| Apartments Low Rise | 64.9551 | 0.7005 | 5.9861 | 2.5473 | 0.0382 | | 0.4840 | 0.4840 | | 0.4840 | 0.4840 | | 7,641.7707 | 7,641.7707 | 0.1465 | 0.1401 | 7,688.2772 |
| Junior High School | 28.0619 | 0.3026 | 2.7512 | 2.3110 | 0.0165 | | 0.2091 | 0.2091 | | 0.2091 | 0.2091 | | 3,301.3973 | 3,301.3973 | 0.0633 | 0.0605 | 3,321.4890 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 5177.17 | 55.8322 | 477.1119 | 203.0263 | 3.0454 | | 38.5750 | 38.5750 | | 38.5750 | 38.5750 | | 609,078.9565 | 609,078.9565 | 11.6740 | 11.1665 | 612,785.7095 |
| **T** | | **1 . 1** | **5 .2554** | **3. 5** | **5. 2** | | **5. 5** | **5. 5** | | **5. 5** | **5. 5** | | **1 1 5 . 22** | **1 1 5 . 22** | **22. 2 1** | **21. 3** | **1 1 2 25. 545** |

## . A D

### .1 A

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 134,565.0499 | 1,768.4271 | 160,256.0747 | 60.3288 | | 21,608.6727 | 21,608.6727 | | 21,608.0403 | 21,608.0403 | 2,261,757.5225 | 960,692.5758 | 3,222,450.0983 | 2,098.8627 | 177.9043 | 3,321,676.5490 |
| Unmitigated | 136,434.9881 | 1,768.4271 | 160,256.0747 | 60.3288 | | 21,608.6727 | 21,608.6727 | | 21,608.0403 | 21,608.0403 | 2,261,757.5225 | 960,692.5758 | 3,222,450.0983 | 2,098.8627 | 177.9043 | 3,321,676.5490 |

### .2 A S C

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 3,116.5637 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 8,479.3787 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 124,636.8963 | 1,690.9893 | 153,539.2705 | 59.9724 | | 21,571.3363 | 21,571.3363 | | 21,570.7040 | 21,570.7040 | 2,261,757.5225 | 948,548.1177 | 3,210,305.6402 | 2,087.2269 | 177.9043 | 3,309,287.7373 |
| Landscaping | 202.1495 | 77.4378 | 6,716.8042 | 0.3564 | | 37.3363 | 37.3363 | | 37.3363 | 37.3363 | | 12,144.4581 | 12,144.4581 | 11.6359 | | 12,388.8117 |
| **T** | **13 434.1** | **1 .42 1** | **1 25 .4** | **.32** | | **21 .2** | **21 .2** | | **21 .43** | **21 .43** | **2 2 1 5 .5225** | **2.55** | **3 222 45 .3** | **2 . 2** | **1 . 43** | **3 321 .54** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1,246.6255 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 8,479.3787 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 124,636.8963 | 1,690.9893 | 153,539.2705 | 59.9724 | | 21,571.3363 | 21,571.3363 | | 21,570.7040 | 21,570.7040 | 2,261,757.5225 | 948,548.1177 | 3,210,305.6402 | 2,087.2269 | 177.9043 | 3,309,287.7373 |
| Landscaping | 202.1495 | 77.4378 | 6,716.8042 | 0.3564 | | 37.3363 | 37.3363 | | 37.3363 | 37.3363 | | 12,144.4581 | 12,144.4581 | 11.6359 | | 12,388.8117 |
| **T** | **134 5 5. 4** | **1 .42 1** | **1 25 . 4** | **.32** | | **21 . 2** | **21 . 2** | | **21 . 4 3** | **21 . 4 3** | **2 2 1 5 . 5225** | **2.5 5** | **3 222 45 . 3** | **2 . 2** | **1 . 43** | **3 321 . 54** |

## . D

### .1

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## . D

### .1

### . O O

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

### 1 .

# _N

**A D C A**

## 1. C

### 1.1

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 15,629.58 | 1000sqft | 0.00 | 15,629,584.00 | 0 |
| Day-Care Center | 3,047.00 | Student | 0.00 | 335,876.00 | 0 |
| Elementary School | 34,352.00 | Student | 0.00 | 3,788,708.00 | 0 |
| High School | 8,604.00 | Student | 0.00 | 948,839.00 | 0 |
| Junior High School | 11,005.00 | Student | 0.00 | 1,213,936.00 | 0 |
| General Light Industry | 103,981.04 | 1000sqft | 0.00 | 103,981,036.00 | 0 |
| Other Non-Asphalt Surfaces | 30,708.00 | Acre | 30,708.00 | 0.00 | 0 |
| City Park | 3,821.41 | Acre | 3,821.41 | 0.00 | 0 |
| Apartments Low Rise | 2,093.00 | Dwelling Unit | 0.00 | 3,911,117.00 | 7245 |
| Single Family Housing | 79,348.00 | Dwelling Unit | 0.00 | 266,423,552.00 | 304675 |

### 1.2 O C

Urban **S** 2.2 **D** 33

**C** 9 **O** 2035

**C** Southern California Edison

**CO2 I** 630.89 **C 4 I** 0.029 **N2O I** 0.006

### 1.3 E C N D D

Project Characteristics -

Land Use - Based on information provided by the County. For modeling purposes, private/charter schools and elementary school land use information combined as one.

Construction Phase - No construction component for modeling.

Off-road Equipment - No construction component.

Off-road Equipment -

Vehicle Trips - Trip generation rate and average trip distance based on information provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Vechicle Emission Factors - Based on fleet mix data provided by Fehr & Peers.

Energy Use -

Water And Wastewater - See Sections 5.17.1 and 5.17.2 of the Draft EIR. Otherwise noted, modeling assumes 40% of existing land uses use septic systems.

Solid Waste - See Section 5.17.4 of the Draft EIR.

Area Mitigation - Per AVAQMD Rule 1113: Architectural Coatings

Energy Mitigation - Assumed that all buildings would be 25% more energy efficient under the 2013 Building Energy Efficiency Standards compared to the 2008 Standards.

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintNonresidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintNonresidentialInteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialInteriorValue | 250 | 100 |
| tblConstructionPhase | NumDays | 10,000.00 | 10.00 |
| tblLandUse | LandUseSquareFeet | 15,629,600.00 | 15,629,584.00 |
| tblLandUse | LandUseSquareFeet | 172,225.08 | 335,876.00 |
| tblLandUse | LandUseSquareFeet | 2,871,942.97 | 3,788,708.00 |
| tblLandUse | LandUseSquareFeet | 1,141,415.05 | 948,839.00 |
| tblLandUse | LandUseSquareFeet | 1,293,766.33 | 1,213,936.00 |

| | | | |
|---|---|---|---|
| tblLandUse | LandUseSquareFeet | 103,981,000.00 | 103,981,036.00 |
| tblLandUse | LandUseSquareFeet | 1,337,640,480.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 166,460,619.60 | 0.00 |
| tblLandUse | LandUseSquareFeet | 2,093,000.00 | 3,911,117.00 |
| tblLandUse | LandUseSquareFeet | 142,826,400.00 | 266,423,552.00 |
| tblLandUse | LotAcreage | 358.81 | 0.00 |
| tblLandUse | LotAcreage | 3.95 | 0.00 |
| tblLandUse | LotAcreage | 65.93 | 0.00 |
| tblLandUse | LotAcreage | 26.20 | 0.00 |
| tblLandUse | LotAcreage | 29.70 | 0.00 |
| tblLandUse | LotAcreage | 2,387.08 | 0.00 |
| tblLandUse | LotAcreage | 130.81 | 0.00 |
| tblLandUse | LotAcreage | 25,762.34 | 0.00 |
| tblLandUse | Population | 5,986.00 | 7,245.00 |
| tblLandUse | Population | 226,935.00 | 304,675.00 |
| tblProjectCharacteristics | OperationalYear | 2014 | 2035 |
| tblSolidWaste | SolidWasteGenerationRate | 962.78 | 881.00 |
| tblSolidWaste | SolidWasteGenerationRate | 328.64 | 301.00 |
| tblSolidWaste | SolidWasteGenerationRate | 556.08 | 509.00 |
| tblSolidWaste | SolidWasteGenerationRate | 6,269.24 | 5,734.00 |
| tblSolidWaste | SolidWasteGenerationRate | 128,936.44 | 117,925.00 |
| tblSolidWaste | SolidWasteGenerationRate | 14,535.53 | 13,294.00 |
| tblSolidWaste | SolidWasteGenerationRate | 1,570.23 | 1,436.00 |
| tblSolidWaste | SolidWasteGenerationRate | 2,008.41 | 1,837.00 |
| tblSolidWaste | SolidWasteGenerationRate | 124,916.75 | 114,249.00 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |

| | | | |
|---|---|---|---|
| tblVehicleEF | HHD | 0.01 | 2.0000e-003 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDA | 0.45 | 0.61 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT1 | 0.07 | 0.10 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LDT2 | 0.18 | 0.25 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD1 | 0.08 | 0.01 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | LHD2 | 0.01 | 2.0420e-003 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MCY | 8.2250e-003 | 0.01 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MDV | 0.17 | 7.4050e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MH | 9.3730e-003 | 1.5720e-003 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |

| | | | |
|---|---|---|---|
| tblVehicleEF | MHD | 5.4020e-003 | 9.0600e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | OBUS | 1.1770e-003 | 1.9700e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | SBUS | 6.1300e-004 | 1.0300e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleEF | UBUS | 1.2070e-003 | 2.0200e-004 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TL | 7.30 | 22.29 |
| tblVehicleTrips | CC_TTP | 82.30 | 100.00 |
| tblVehicleTrips | CC_TTP | 30.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 17.20 | 100.00 |
| tblVehicleTrips | CC_TTP | 22.20 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 12.70 | 0.00 |
| tblVehicleTrips | CW_TTP | 65.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 77.80 | 0.00 |
| tblVehicleTrips | CW_TTP | 72.80 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 58.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 25.00 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TL | 7.50 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HO_TTP | 40.60 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TL | 7.30 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HS_TTP | 19.20 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TL | 10.80 | 22.29 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | HW_TTP | 40.20 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 14.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 4.00 | 0.00 |
| tblVehicleTrips | PB_TP | 6.00 | 0.00 |
| tblVehicleTrips | PB_TP | 12.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 28.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 77.00 | 100.00 |
| tblVehicleTrips | PR_TP | 75.00 | 100.00 |
| tblVehicleTrips | PR_TP | 63.00 | 100.00 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | ST_TR | 7.16 | 2.43 |
| tblVehicleTrips | ST_TR | 1.59 | 0.00 |
| tblVehicleTrips | ST_TR | 0.39 | 0.14 |
| tblVehicleTrips | ST_TR | 0.00 | 0.14 |
| tblVehicleTrips | ST_TR | 1.32 | 1.30 |
| tblVehicleTrips | ST_TR | 2.37 | 1.30 |
| tblVehicleTrips | ST_TR | 0.61 | 0.14 |
| tblVehicleTrips | ST_TR | 0.00 | 0.14 |
| tblVehicleTrips | ST_TR | 10.08 | 4.36 |
| tblVehicleTrips | SU_TR | 6.07 | 2.43 |
| tblVehicleTrips | SU_TR | 1.59 | 0.00 |
| tblVehicleTrips | SU_TR | 0.37 | 0.14 |
| tblVehicleTrips | SU_TR | 0.00 | 0.14 |
| tblVehicleTrips | SU_TR | 0.68 | 1.30 |
| tblVehicleTrips | SU_TR | 0.98 | 1.30 |
| tblVehicleTrips | SU_TR | 0.25 | 0.14 |
| tblVehicleTrips | SU_TR | 0.00 | 0.14 |
| tblVehicleTrips | SU_TR | 8.77 | 4.36 |
| tblVehicleTrips | WD_TR | 6.59 | 2.43 |
| tblVehicleTrips | WD_TR | 1.59 | 0.00 |
| tblVehicleTrips | WD_TR | 4.48 | 0.14 |
| tblVehicleTrips | WD_TR | 1.29 | 0.14 |
| tblVehicleTrips | WD_TR | 6.97 | 1.30 |
| tblVehicleTrips | WD_TR | 11.01 | 1.30 |
| tblVehicleTrips | WD_TR | 1.71 | 0.14 |
| tblVehicleTrips | WD_TR | 1.62 | 0.14 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | WD_TR | 9.57 | 4.36 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 100.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AerobicPercent | 87.46 | 60.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | AnaerobicandFacultativeLagoonsPercent | 2.21 | 0.00 |
| tblWater | IndoorWaterUseRate | 136,367,375.63 | 100,131.00 |
| tblWater | IndoorWaterUseRate | 7,386,659.28 | 5,424.00 |
| tblWater | IndoorWaterUseRate | 83,277,492.48 | 61,148.00 |
| tblWater | IndoorWaterUseRate | 24,045,606,250.00 | 17,655,996.00 |
| tblWater | IndoorWaterUseRate | 2,777,907,387.64 | 2,039,737.00 |
| tblWater | IndoorWaterUseRate | 37,900,275.84 | 27,829.00 |
| tblWater | IndoorWaterUseRate | 26,678,761.20 | 19,589.00 |
| tblWater | IndoorWaterUseRate | 5,169,841,625.01 | 3,796,066.00 |

| | | | |
|---|---|---|---|
| tblWater | OutdoorWaterUseRate | 85,970,736.81 | 157,693.00 |
| tblWater | OutdoorWaterUseRate | 4,553,138,744.41 | 8,351,697.00 |
| tblWater | OutdoorWaterUseRate | 18,994,266.72 | 34,841.00 |
| tblWater | OutdoorWaterUseRate | 214,142,123.52 | 392,794.00 |
| tblWater | OutdoorWaterUseRate | 1,702,588,398.88 | 3,123,003.00 |
| tblWater | OutdoorWaterUseRate | 97,457,852.16 | 178,764.00 |
| tblWater | OutdoorWaterUseRate | 68,602,528.80 | 125,835.00 |
| tblWater | OutdoorWaterUseRate | 3,259,247,980.98 | 5,978,333.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 0.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |
| tblWater | SepticTankPercent | 10.33 | 40.00 |

## 2. E S

### 2.2 O O

O

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 7,244.5657 | 76.3000 | 6,899.6225 | 2.4909 | | 887.7851 | 887.7851 | | 887.7591 | 887.7591 | 84,125.1083 | 36,272.3975 | 120,397.5058 | 78.5836 | 6.6171 | 124,099.0534 |
| Energy | 24.7479 | 217.9387 | 137.3396 | 1.3499 | | 17.0986 | 17.0986 | | 17.0986 | 17.0986 | 0.0000 | 848,360.1114 | 848,360.1114 | 32.4325 | 10.2291 | 852,212.2266 |
| Mobile | 286.7503 | 503.8921 | 5,102.5271 | 19.1773 | 1,557.4834 | 13.2701 | 1,570.7536 | 413.8950 | 12.2977 | 426.1927 | 0.0000 | 1,104,250.0544 | 1,104,250.0544 | 48.3688 | 0.0000 | 1,105,265.7997 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 51,999.3830 | 0.0000 | 51,999.3830 | 3,073.0755 | 0.0000 | 116,533.9684 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 7.5310 | 146.6505 | 154.1815 | 0.5823 | 0.0196 | 172.4963 |
| **T** | **55 . 3** | **.13** | **12 13 .4 2** | **23. 1 1** | **1 55 .4 3 4** | **1 .153** | **2 4 5. 3 2** | **413. 5** | **1 .1554** | **1 331. 5 4** | **13 132. 223** | **1 2 . 213** | **2 125 1 1. 23 2** | **3 233. 42** | **1 . 5** | **2 1 2 3. 544** |

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| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 6,903.3020 | 76.3000 | 6,899.6225 | 2.4909 | | 887.7851 | 887.7851 | | 887.7591 | 887.7591 | 84,125.1083 | 36,272.3975 | 120,397.5058 | 78.5836 | 6.6171 | 124,099.0534 |
| Energy | 19.8359 | 174.6991 | 110.2055 | 1.0820 | | 13.7048 | 13.7048 | | 13.7048 | 13.7048 | 0.0000 | 768,630.6058 | 768,630.6058 | 30.0704 | 9.0420 | 772,065.0980 |
| Mobile | 286.7503 | 503.8921 | 5,102.5271 | 19.1773 | 1,557.4834 | 13.2701 | 1,570.7536 | 413.8950 | 12.2977 | 426.1927 | 0.0000 | 1,104,250.0544 | 1,104,250.0544 | 48.3688 | 0.0000 | 1,105,265.7997 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 51,999.3830 | 0.0000 | 51,999.3830 | 3,073.0755 | 0.0000 | 116,533.9684 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 6.0248 | 125.4266 | 131.4514 | 0.4661 | 0.0158 | 146.1254 |
| **T** | **2 . 2** | **54. 12** | **12 112.3551** | **22. 5 2** | **1 55 .4 3 4** | **14.** | **2 4 2.2435** | **413. 5** | **13. 1** | **1 32 . 5** | **13 13 .5 1 1** | **1 2 . 4 44** | **2 45 4 . 5** | **3 23 .5 4 4** | **15. 4** | **2 11 11 . 45** |

| | RO | NO | CO | SO2 | 1 | E 1 | 1 T | 2.5 | E 2.5 | 2.5 T | CO2 | N CO2 | T CO2 | C 4 | N2 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R | **4.5** | **5.42** | **.22** | **1.1** | **.** | **.3** | **.14** | **.** | **.3** | **.25** | **.** | **4. 1** | **3. 5** | **.** | **.** | **3. 5** |

## 4. O D

### 4.1

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 286.7503 | 503.8921 | 5,102.5271 | 19.1773 | 1,557.4834 | 13.2701 | 1,570.7536 | 413.8950 | 12.2977 | 426.1927 | 0.0000 | 1,104,250.0544 | 1,104,250.0544 | 48.3688 | 0.0000 | 1,105,265.7997 |
| Unmitigated | 286.7503 | 503.8921 | 5,102.5271 | 19.1773 | 1,557.4834 | 13.2701 | 1,570.7536 | 413.8950 | 12.2977 | 426.1927 | 0.0000 | 1,104,250.0544 | 1,104,250.0544 | 48.3688 | 0.0000 | 1,105,265.7997 |

### 4.2 T S I

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 5,085.99 | 5,085.99 | 5085.99 | 41,265,485 | 41,265,485 |
| City Park | 0.00 | 0.00 | 0.00 | | |
| Day-Care Center | 426.58 | 426.58 | 426.58 | 3,461,082 | 3,461,082 |
| Elementary School | 4,809.28 | 4,809.28 | 4809.28 | 39,020,382 | 39,020,382 |
| General Light Industry | 135,175.35 | 135,175.35 | 135175.35 | 1,096,753,329 | 1,096,753,329 |
| General Office Building | 20,318.45 | 20,318.45 | 20318.45 | 164,854,996 | 164,854,996 |
| High School | 1,204.56 | 1,204.56 | 1204.56 | 9,773,270 | 9,773,270 |
| Junior High School | 1,540.70 | 1,540.70 | 1540.70 | 12,500,562 | 12,500,562 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 345,957.28 | 345,957.28 | 345957.28 | 2,806,945,149 | 2,806,945,149 |
| Total | 514,518.20 | 514,518.20 | 514,518.20 | 4,174,574,254 | 4,174,574,254 |

## 4.3 T T I

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| City Park | 9.50 | 7.30 | 7.30 | 33.00 | 48.00 | 19.00 | 66 | 28 | 6 |
| Day-Care Center | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Elementary School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Light Industry | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| General Office Building | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior High School | 0.00 | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Other Non-Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 22.29 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |

| LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.611152 | 0.099452 | 0.250731 | 0.007405 | 0.012959 | 0.002042 | 0.000906 | 0.002000 | 0.000197 | 0.000202 | 0.011277 | 0.000103 | 0.001572 |

## 5. E D

### 4.4

Historical Energy Use: N

### 5.1 E

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 572,323.0634 | 572,323.0634 | 26.3079 | 5.4430 | 574,562.8606 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 603,440.7647 | 603,440.7647 | 27.7383 | 5.7390 | 605,802.3416 |
| NaturalGas Mitigated | 19.8359 | 174.6991 | 110.2055 | 1.0820 | | 13.7048 | 13.7048 | | 13.7048 | 13.7048 | 0.0000 | 196,307.5424 | 196,307.5424 | 3.7626 | 3.5990 | 197,502.2374 |
| NaturalGas Unmitigated | 24.7479 | 217.9387 | 137.3396 | 1.3499 | | 17.0986 | 17.0986 | | 17.0986 | 17.0986 | 0.0000 | 244,919.3467 | 244,919.3467 | 4.6943 | 4.4902 | 246,409.8850 |

## 5.2 E N

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 3.65769e+006 | 0.0197 | 0.1793 | 0.1506 | 1.0800e-003 | | 0.0136 | 0.0136 | | 0.0136 | 0.0136 | 0.0000 | 195.1883 | 195.1883 | 3.7400e-003 | 3.5800e-003 | 196.3761 |
| Elementary School | 4.1259e+007 | 0.2225 | 2.0225 | 1.6989 | 0.0121 | | 0.1537 | 0.1537 | | 0.1537 | 0.1537 | 0.0000 | 2,201.7390 | 2,201.7390 | 0.0422 | 0.0404 | 2,215.1384 |
| General Light Industry | 1.95588e+009 | 10.5464 | 95.8766 | 80.5364 | 0.5753 | | 7.2866 | 7.2866 | | 7.2866 | 7.2866 | 0.0000 | 104,373.3807 | 104,373.3807 | 2.0005 | 1.9135 | 105,008.5797 |
| General Office Building | 1.70831e+008 | 0.9212 | 8.3741 | 7.0342 | 0.0502 | | 0.6364 | 0.6364 | | 0.6364 | 0.6364 | 0.0000 | 9,116.2116 | 9,116.2116 | 0.1747 | 0.1671 | 9,171.6913 |
| High School | 1.03329e+007 | 0.0557 | 0.5065 | 0.4255 | 3.0400e-003 | | 0.0385 | 0.0385 | | 0.0385 | 0.0385 | 0.0000 | 551.4006 | 551.4006 | 0.0106 | 0.0101 | 554.7563 |
| Apartments Low Rise | 2.97863e+007 | 0.1606 | 1.3725 | 0.5840 | 8.7600e-003 | | 0.1110 | 0.1110 | | 0.1110 | 0.1110 | 0.0000 | 1,589.5081 | 1,589.5081 | 0.0305 | 0.0291 | 1,599.1816 |
| Junior High School | 1.32198e+007 | 0.0713 | 0.6480 | 0.5443 | 3.8900e-003 | | 0.0493 | 0.0493 | | 0.0493 | 0.0493 | 0.0000 | 705.4569 | 705.4569 | 0.0135 | 0.0129 | 709.7502 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 2.36464e+009 | 12.7505 | 108.9591 | 46.3656 | 0.6955 | | 8.8095 | 8.8095 | | 8.8095 | 8.8095 | 0.0000 | 126,186.4616 | 126,186.4616 | 2.4186 | 2.3134 | 126,954.4114 |
| **T** | | **24. 4** | **21 . 3** | **13 .33** | **1.34** | | **1 .** | **1 .** | | **1 .** | **1 .** | **.** | **244 1 .34** | **244 1 .34** | **4. 43** | **4.4 2** | **24 4 . 5** |

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 2.83395e+006 | 0.0153 | 0.1389 | 0.1167 | 8.3000e-004 | | 0.0106 | 0.0106 | | 0.0106 | 0.0106 | 0.0000 | 151.2306 | 151.2306 | 2.9000e-003 | 2.7700e-003 | 152.1509 |
| Elementary School | 3.19672e+007 | 0.1724 | 1.5670 | 1.3163 | 9.4000e-003 | | 0.1191 | 0.1191 | | 0.1191 | 0.1191 | 0.0000 | 1,705.8928 | 1,705.8928 | 0.0327 | 0.0313 | 1,716.2746 |
| General Light Industry | 1.58259e+009 | 8.5336 | 77.5780 | 65.1655 | 0.4655 | | 5.8959 | 5.8959 | | 5.8959 | 5.8959 | 0.0000 | 84,453.1023 | 84,453.1023 | 1.6187 | 1.5483 | 84,967.0698 |
| General Office Building | 1.29647e+008 | 0.6991 | 6.3553 | 5.3384 | 0.0381 | | 0.4830 | 0.4830 | | 0.4830 | 0.4830 | 0.0000 | 6,918.4790 | 6,918.4790 | 0.1326 | 0.1268 | 6,960.5837 |
| High School | 8.00583e+006 | 0.0432 | 0.3924 | 0.3297 | 2.3500e-003 | | 0.0298 | 0.0298 | | 0.0298 | 0.0298 | 0.0000 | 427.2215 | 427.2215 | 8.1900e-003 | 7.8300e-003 | 429.8215 |
| Junior High School | 1.02426e+007 | 0.0552 | 0.5021 | 0.4218 | 3.0100e-003 | | 0.0382 | 0.0382 | | 0.0382 | 0.0382 | 0.0000 | 546.5833 | 546.5833 | 0.0105 | 0.0100 | 549.9098 |
| Apartments Low Rise | 2.37086e+007 | 0.1278 | 1.0925 | 0.4649 | 6.9700e-003 | | 0.0883 | 0.0883 | | 0.0883 | 0.0883 | 0.0000 | 1,265.1808 | 1,265.1808 | 0.0243 | 0.0232 | 1,272.8805 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 1.88967e+009 | 10.1894 | 87.0729 | 37.0523 | 0.5558 | | 7.0399 | 7.0399 | | 7.0399 | 7.0399 | 0.0000 | 100,839.8521 | 100,839.8521 | 1.9328 | 1.8487 | 101,453.5466 |
| **T** | | **1 . 35** | **1 4. 1** | **11 .2 55** | **1. 1** | | **13. 4** | **13. 4** | | **13. 4** | **13. 4** | **.** | **1 3 .54 24** | **1 3 .5 424** | **3. 2** | **3.5** | **1 5 2.2 3 4** |

## 5.3 E E

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 7.68378e+006 | 2,198.8434 | 0.1011 | 0.0209 | 2,207.4486 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 2.25037e+006 | 643.9812 | 0.0296 | 6.1200e-003 | 646.5014 |
| Elementary School | 2.53843e+007 | 7,264.1587 | 0.3339 | 0.0691 | 7,292.5871 |
| General Light Industry | 1.25297e+009 | 358,558.9532 | 16.4818 | 3.4100 | 359,962.1804 |
| General Office Building | 2.27098e+008 | 64,987.8871 | 2.9873 | 0.6181 | 65,242.2184 |
| High School | 6.35722e+006 | 1,819.2263 | 0.0836 | 0.0173 | 1,826.3458 |
| Junior High School | 8.13337e+006 | 2,327.5015 | 0.1070 | 0.0221 | 2,336.6103 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 5.78824e+008 | 165,640.2135 | 7.6140 | 1.5753 | 166,288.4496 |
| **T** | | **3 44 . 4** | **2 . 3 2** | **5. 3** | **5 2.3 41** |

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 7.56346e+006 | 2,164.4129 | 0.0995 | 0.0206 | 2,172.8833 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Day-Care Center | 2.07152e+006 | 592.7991 | 0.0273 | 5.6400e-003 | 595.1190 |
| Elementary School | 2.33669e+007 | 6,686.8207 | 0.3074 | 0.0636 | 6,712.9897 |
| General Light Industry | 1.18148e+009 | 338,101.7515 | 15.5415 | 3.2155 | 339,424.9191 |
| General Office Building | 2.05138e+008 | 58,703.7865 | 2.6984 | 0.5583 | 58,933.5249 |
| High School | 5.85196e+006 | 1,674.6385 | 0.0770 | 0.0159 | 1,681.1922 |
| Junior High School | 7.48695e+006 | 2,142.5173 | 0.0985 | 0.0204 | 2,150.9021 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 5.66999e+008 | 162,256.3370 | 7.4584 | 1.5431 | 162,891.3303 |
| **T** | | **5 2 323.34** | **2 .3** | **5.443** | **5 4 5 2.** |

## . A D

### .1 A

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 6,903.3020 | 76.3000 | 6,899.6225 | 2.4909 | | 887.7851 | 887.7851 | | 887.7591 | 887.7591 | 84,125.1083 | 36,272.3975 | 120,397.5058 | 78.5836 | 6.6171 | 124,099.0534 |
| Unmitigated | 7,244.5657 | 76.3000 | 6,899.6225 | 2.4909 | | 887.7851 | 887.7851 | | 887.7591 | 887.7591 | 84,125.1083 | 36,272.3975 | 120,397.5058 | 78.5836 | 6.6171 | 124,099.0534 |

### .2 A S C

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 568.7729 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 1,547.4866 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 5,110.1128 | 69.3306 | 6,295.1101 | 2.4589 | | 884.4248 | 884.4248 | | 884.3989 | 884.3989 | 84,125.1083 | 35,280.8435 | 119,405.9518 | 77.6335 | 6.6171 | 123,087.5488 |
| Landscaping | 18.1935 | 6.9694 | 604.5124 | 0.0321 | | 3.3603 | 3.3603 | | 3.3603 | 3.3603 | 0.0000 | 991.5540 | 991.5540 | 0.9500 | 0.0000 | 1,011.5047 |
| **T** | **244.5 5** | **.3** | **. 22 5** | **2.4 1** | | **. 51** | **. 51** | | **. 5 1** | **. 5 1** | **4 125.1 3** | **3 2 2.3 5** | **12 3 .5 5** | **.5 35** | **. 1 1** | **124 . 534** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 227.5092 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 1,547.4866 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 5,110.1128 | 69.3306 | 6,295.1101 | 2.4589 | | 884.4248 | 884.4248 | | 884.3989 | 884.3989 | 84,125.1083 | 35,280.8435 | 119,405.9518 | 77.6335 | 6.6171 | 123,087.5488 |
| Landscaping | 18.1935 | 6.9694 | 604.5124 | 0.0321 | | 3.3603 | 3.3603 | | 3.3603 | 3.3603 | 0.0000 | 991.5540 | 991.5540 | 0.9500 | 0.0000 | 1,011.5047 |
| **T** | **3.3 2** | **.3** | **. 22 5** | **2.4 1** | | **. 51** | **. 51** | | **. 5 1** | **. 5 1** | **4 125.1 3** | **3 2 2.3 5** | **12 3 .5 5** | **.5 35** | **. 1 1** | **124 . 534** |

## . D

### .1

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 131.4514 | 0.4661 | 0.0158 | 146.1254 |
| Unmitigated | 154.1815 | 0.5823 | 0.0196 | 172.4963 |

**.2**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 0.100131 / 0.157693 | 0.8957 | 9.2100e-003 | 9.0000e-005 | 1.1156 |
| City Park | 0 / 8.3517 | 26.5527 | 1.2200e-003 | 2.5000e-004 | 26.6566 |
| Day-Care Center | 0.005424 / 0.034841 | 0.1321 | 5.0000e-004 | 1.0000e-005 | 0.1444 |
| Elementary School | 0.061148 / 0.392794 | 1.4896 | 5.6700e-003 | 6.0000e-005 | 1.6276 |
| General Light Industry | 17.656 / 0 | 72.0361 | 0.0245 | 0.0142 | 76.9563 |
| General Office Building | 2.03974 / 3.123 | 17.9624 | 0.1876 | 1.7400e-003 | 22.4403 |
| High School | 0.027829 / 0.178764 | 0.6780 | 2.5800e-003 | 3.0000e-005 | 0.7407 |
| Junior High School | 0.019589 / 0.125835 | 0.4772 | 1.8200e-003 | 2.0000e-005 | 0.5214 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 3.79607 / 5.97833 | 33.9577 | 0.3492 | 3.2400e-003 | 42.2934 |
| **T** | | **154.1 15** | **.5 23** | **. 1** | **1 2.4 3** |

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 0.0801048 / 0.148074 | 0.7863 | 7.3700e-003 | 7.0000e-005 | 0.9624 |
| City Park | 0 / 7.84224 | 24.9330 | 1.1500e-003 | 2.4000e-004 | 25.0305 |
| Day-Care Center | 0.0043392 / 0.0227157 | 0.1211 | 4.0000e-004 | 0.0000 | 0.1310 |
| Elementary School | 0.0489184 / 0.368834 | 1.3653 | 4.5400e-003 | 5.0000e-005 | 1.4763 |
| General Light Industry | 14.1248 / 0 | 57.6289 | 0.0195 | 0.0114 | 61.5571 |
| General Office Building | 1.63179 / 2.9325 | 15.7501 | 0.1501 | 1.4000e-003 | 19.3373 |
| High School | 0.0222632 / 0.167859 | 0.6214 | 2.0700e-003 | 2.0000e-005 | 0.6719 |
| Junior High School | 0.0156712 / 0.118159 | 0.4374 | 1.4600e-003 | 2.0000e-005 | 0.4730 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 3.03685 / 5.61365 | 29.8081 | 0.2794 | 2.6100e-003 | 36.4860 |
| **T** | | **131.4515** | **.4 1** | **. 15** | **14 .1254** |

## . D

### .1

**C**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Unmitigated | 51,999.3830 | 3,073.0755 | 0.0000 | 116,533.9684 |
| Mitigated | 51,999.3830 | 3,073.0755 | 0.0000 | 116,533.9684 |

### .2

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 881 | 178.8350 | 10.5689 | 0.0000 | 400.7809 |
| City Park | 301 | 61.1003 | 3.6109 | 0.0000 | 136.9297 |
| Day-Care Center | 509 | 103.3224 | 6.1062 | 0.0000 | 231.5522 |
| Elementary School | 5734 | 1,163.9502 | 68.7875 | 0.0000 | 2,608.4874 |
| General Light Industry | 117925 | 23,937.7093 | 1,414.6781 | 0.0000 | 53,645.9492 |
| General Office Building | 13294 | 2,698.5619 | 159.4804 | 0.0000 | 6,047.6510 |
| High School | 1436 | 291.4950 | 17.2269 | 0.0000 | 653.2591 |
| Junior High School | 1837 | 372.8944 | 22.0374 | 0.0000 | 835.6804 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 114249 | 23,191.5145 | 1,370.5792 | 0.0000 | 51,973.6786 |
| **T** | | **51 .3 3 3 3. 5 5** | | **.** | **11 533. 4** |

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 881 | 178.8350 | 10.5689 | 0.0000 | 400.7809 |
| City Park | 301 | 61.1003 | 3.6109 | 0.0000 | 136.9297 |
| Day-Care Center | 509 | 103.3224 | 6.1062 | 0.0000 | 231.5522 |
| Elementary School | 5734 | 1,163.9502 | 68.7875 | 0.0000 | 2,608.4874 |
| General Light Industry | 117925 | 23,937.7093 | 1,414.6781 | 0.0000 | 53,645.9492 |
| General Office Building | 13294 | 2,698.5619 | 159.4804 | 0.0000 | 6,047.6510 |
| High School | 1436 | 291.4950 | 17.2269 | 0.0000 | 653.2591 |
| Junior High School | 1837 | 372.8944 | 22.0374 | 0.0000 | 835.6804 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 114249 | 23,191.5145 | 1,370.5792 | 0.0000 | 51,973.6786 |
| **T** | | **51 .3 3 3** | **3. 5 5** | **.** | **11 533. 4** |

**. O O**

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**1 .**

**_N**

**A D C R**

**O R S**

| Category | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | | | | | | | | | | | | |
| Architectural Coating | 60.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Consumer Products | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Electricity | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.16 | 5.16 | 5.16 | 5.16 | 5.16 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Natural Gas | 19.85 | 19.84 | 19.76 | 19.85 | 19.85 | 19.85 | 0.00 | 19.85 | 19.85 | 19.85 | 19.85 | 19.85 |
| Water Indoor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 14.47 | 14.74 | 19.96 | 19.80 | 15.29 |
| Water Outdoor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**O**

Project Setting:

| Mitigation | Category | Measure | % Reduction | Input Value 1 | Input Value 2 | Input Value 3 |
|---|---|---|---|---|---|---|
| No | Land Use | Increase Density | 0.00 | | | |
| No | Land Use | Increase Diversity | 0.21 | 0.50 | | |
| No | Land Use | Improve Walkability Design | 0.00 | | | |
| No | Land Use | Improve Destination Accessibility | 0.00 | | | |
| No | Land Use | Increase Transit Accessibility | 0.25 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| No | Land Use | Integrate Below Market Rate Housing | 0.00 | | | |
| | Land Use | Land Use SubTotal | 0.00 | | | |
| No | Neighborhood Enhancements | Improve Pedestrian Network | | | | |
| No | Neighborhood Enhancements | Provide Traffic Calming Measures | | | | |
| No | Neighborhood Enhancements | Implement NEV Network | 0.00 | | | |
| | Neighborhood Enhancements | Neighborhood Enhancements Subtotal | 0.00 | | | |
| No | Parking Policy Pricing | Limit Parking Supply | 0.00 | | | |
| No | Parking Policy Pricing | Unbundle Parking Costs | 0.00 | | | |
| No | Parking Policy Pricing | On-street Market Pricing | 0.00 | | | |
| | Parking Policy Pricing | Parking Policy Pricing Subtotal | 0.00 | | | |
| No | Transit Improvements | Provide BRT System | 0.00 | | | |
| No | Transit Improvements | Expand Transit Network | 0.00 | | | |
| No | Transit Improvements | Increase Transit Frequency | 0.00 | | | |
| | Transit Improvements | Transit Improvements Subtotal | 0.00 | | | |
| | | Land Use and Site Enhancement Subtotal | 0.00 | | | |
| No | Commute | Implement Trip Reduction Program | | | | |
| No | Commute | Transit Subsidy | | | | |
| No | Commute | Implement Employee Parking "Cash Out" | | | | |
| No | Commute | Workplace Parking Charge | | | | |
| No | Commute | Encourage Telecommuting and Alternative Work Schedules | 0.00 | | | |
| No | Commute | Market Commute Trip Reduction Option | 0.00 | | | |
| No | Commute | Employee Vanpool/Shuttle | 0.00 | | 2.00 | |
| No | Commute | Provide Ride Sharing Program | | | | |
| | Commute | Commute Subtotal | 0.00 | | | |
| No | School Trip | Implement School Bus Program | 0.00 | | | |
| | | Total VMT Reduction | 0.00 | | | |

**A**

| Measure Implemented | Mitigation Measure | Input Value |
|---|---|---|
| No | Only Natural Gas Hearth | |
| No | No Hearth | |
| No | Use Low VOC Cleaning Supplies | |
| Yes | Use Low VOC Paint (Residential Interior) | 100.00 |
| Yes | Use Low VOC Paint (Residential Exterior) | 100.00 |
| Yes | Use Low VOC Paint (Non-residential Interior) | 100.00 |
| Yes | Use Low VOC Paint (Non-residential Exterior) | 100.00 |
| No | % Electric Lawnmower | 0.00 |
| No | % Electric Leafblower | 0.00 |
| No | % Electric Chainsaw | 0.00 |

**E**

| Measure Implemented | Mitigation Measure | Input Value 1 | Input Value 2 |
|---|---|---|---|
| Yes | Exceed Title 24 | 25.00 | |
| No | Install High Efficiency Lighting | 0.00 | |
| No | On-site Renewable | 0.00 | 0.00 |

| Appliance Type | Land Use Subtype | % Improvement |
|---|---|---|
| ClothWasher | | 30.00 |
| DishWasher | | 15.00 |
| Fan | | 50.00 |
| Refrigerator | | 15.00 |

| Measure Implemented | Mitigation Measure | Input Value 1 | Input Value 2 |
|---|---|---|---|
| No | Apply Water Conservation on Strategy | 0.00 | 0.00 |
| No | Use Reclaimed Water | 0.00 | 0.00 |
| No | Use Grey Water | 0.00 | |
| Yes | Install low-flow bathroom faucet | 32.00 | |
| Yes | Install low-flow Kitchen faucet | 18.00 | |
| Yes | Install low-flow Toilet | 20.00 | |
| Yes | Install low-flow Shower | 20.00 | |
| No | Turf Reduction | 0.00 | |
| Yes | Use Water Efficient Irrigation Systems | 6.10 | |
| No | Water Efficient Landscape | 0.00 | 0.00 |

**S**

| Mitigation Measures | Input Value |
|---|---|
| Institute Recycling and Composting Services<br>Percent Reduction in Waste Disposed | |